

INDIAN HEALTH SERVICE VISION CARE

2018 EDITION



U.S. Department of Health and Human Services
Indian Health Service
Office of Public Health Support
Division of Program Statistics

INDIAN HEALTH SERVICE VISION CARE

Indian Health Service

RADM Michael D. Weahkee, MBA, MHSA
Assistant Surgeon General, USPHS
Principal Deputy Director

RADM Michael Toedt, MD, FAAFP
Chief Medical Officer

Office of Clinical and Preventative Services

Darrell LaRoche
Director

Lead Clinicians, Eye Care Program

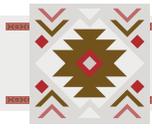
Dawn Clary, OD, *Chief Clinical Consultant Optometry*
Dara L. Shahon, MD, *Chief Clinical Consultant Ophthalmology*
Mark Horton, MD, OD, *Teleophthalmology*
Michael Candreva, OD, *Optometry*

Office of Public Health Support

RADM Francis Frazier
Director

Division of Program Statistics

Kirk Greenway
Director



PREFACE

The Indian Health Service (IHS) has upheld since 1955 the Federal Government's obligation to promote healthy American Indian and Alaska Native (AI/AN) communities and cultures, while honoring and protecting each Tribe's inherent sovereign rights. Our mission is to raise the physical, mental, social, and spiritual health of American Indians and Alaska Natives to the highest level.

Recently, in 2015, the U.S. Census's American Community Survey asked this question of its sample of approximately three million people, "Is this person blind or does he/she have serious difficulty seeing even when wearing glasses?" 2.3 percent of the All Races population were estimated to respond "Yes", yet 4 percent of American Indians or Alaskan Natives (102,500) were estimated to respond similarly in a sample of 33,453 such individuals.¹ In 2014, the National Health Interview Survey estimated that 239,000 American Indians or Alaskan Natives over 18 years of age identified themselves as individuals who reported that they have trouble seeing, even when wearing glasses or contact lenses, as well as to individuals who reported that they are blind or unable to see at all.² The problem of blindness or low vision (meaning severe visual impairment) is a daily reality for many IHS patients, their families, and their community. Indeed, even in the All Races population, low vision ranks only behind arthritis and heart disease as the third most common chronic cause of impaired functioning in people over 70.³

This first edition of "Indian Health Service Vision Care" describes IHS vision care programs and provides tables and charts detailing the vision health status of AI/AN people. This report presents a complete overview of the eye conditions found in the Service's patients and outlines several activities which have been pursued to care for the sight of its patients. Comparisons are also provided to the U.S. population at large.

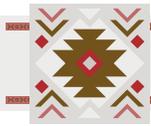
The IHS remains committed to ensuring that comprehensive, culturally acceptable personal and public health services are available and accessible to AI/AN people. The data contained within this report advances our ongoing efforts to achieve this vital health care goal.

/ Michael D. Weahkee /
RADM Michael Weahkee, MBA, MHSA
Assistant Surgeon General, USPHS
Principal Deputy Director

¹ Erickson, W., Lee, C., von Schrader, S. (2017). Disability Statistics from the American Community Survey (ACS). Ithaca, NY: Cornell University Yang-Tan Institute (YTI). Retrieved from Cornell University Disability Statistics website: www.disabilitystatistics.org accessed February 22, 2017.

² National Center for Health Statistics, National Health Interview Survey (NHIS), 2014, www.cdc.gov/nchs/nhis.htm

³ Rosenberg, E. and Sperazza, C. "The Visually Impaired Patient". Am Fam Physician. 2008;77(10):1431-1436, 1437-1438.



ACKNOWLEDGMENTS

Overall production of *Indian Health Service Vision Care* was managed by the Division of Program Statistics (DPS), Office of Public Health Support (OPHS), Indian Health Service (IHS) under the direction of Kirk Greenway, Director, and with Program Analyst assistance of Priscilla Sandoval.

Production was provided by Program Support Center, Publications Division and the IHS Office of Information Technology, National Data Warehouse staff.

Technical and editorial review was provided by Michael Toedt, Kirk Greenway, Mark Horton, Michael Candreva, Dawn Clary (Chief Clinical Consultant, Optometry), Dara L. Shahon (Chief Clinical Consultant, Ophthalmology), Ying Zhang, John M. Hayes, James Cox, Mary Frances Cotch (NIH NEI), and Priscilla Sandoval.

Graphics (charts and tables) were created and compiled by Program Support Center, Publications Division. Some analytical support was provided by Hanh Nguyen of Program Support Center, Financial Reporting Division. NIH Medical Arts provided an original illustration of the interior structures of the eye. Blausen provided many illustrations and animations shown or cited in the report.

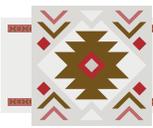
Administrative support was provided by Jennifer Joseph, DPS staff assistant.

This report was designed and prepared for publication by NIH Medical Arts.

We would also like to recognize the contributions of the Vision Care Report review committee and express our appreciation to them for providing data and reviewing information contained in this publication. The report would not have been possible without the efforts of many dedicated individuals across the entire IHS vision care program as well as the agency itself.

CONTENTS

Preface	iii
Acknowledgments	iv
Anatomy of the Eye	x
Overview	1
Introduction	2
Scope and Organization of this Report	2
Summary of Demographic Data	3
Table 1. IHS User Population by Sex and Age in Years, FY 2012 to 2014	3
Denominators used to calculate rates	3
Table 2. Population by Sex and Age in Years, Standard Millions, 2000	4
Diagnostic Prevalence Rate of Eye Disease	5
Measuring Clinical Activity of the Vision Care Programs	6
Encounters	6
Provider Types	6
Clinic Types	6
Examinations	7
Surgical Procedures	8
Medications	8
Sources and Limitations of Data	9
The National Data Warehouse of IHS (NDW)	9
Resource Patient Management System (RPMS)	9
International Classification of Diseases, Ninth Edition (ICD-9), Clinical Modification (CM)	9
Current Procedural Terminology (CPT)	10
Coding Electronic Medical Records	10
Sampling Coded Electronic Medical Records	10
Probabilistic sampling and unduplication	10
Error and Significance in Coded Electronic Medical Records	11
Sources of Additional Information	12

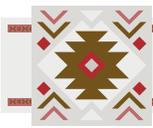


CONTENTS

PART I: Diagnostic Prevalence of Eye Diseases and Related Conditions	13
Diagnostic Prevalence for Blindness	14
Chart 1.1a Diagnostic Prevalence Rates for Blindness by Age and Gender	14
Chart 1.1b Diagnostic Prevalence Rates for Blindness by Age and Gender (Age 40 and Older)	14
Table 1.1 Estimated Prevalence Rate of Blindness by Age and Gender	15
Comorbidities of Blind or Severely Visually Impaired	16
Chart 1.2 Comorbidities of Blind or Severely Visually Impaired	16
Table 1.2 Comorbidity of Blind or Severely Visually Impaired (BSVI) in IHS compared to its patient population	17
Myopia with Astigmatism	18
Chart 1.3a Diagnostic Prevalence Rates for Myopia with Astigmatism by Age and Gender	18
Chart 1.3b Diagnostic Prevalence Rates for Myopia with Astigmatism by Age and Gender (Age 40 and Older)	18
Table 1.3 Estimated Diagnostic Prevalence Rates of Myopia with Astigmatism by Age and Gender	19
Astigmatism	20
Chart 1.4a Diagnostic Prevalence Rates for Astigmatism by Age and Gender	20
Chart 1.4b Diagnostic Prevalence Rates for Astigmatism by Age and Gender (Age 40 and Older)	20
Table 1.4 Estimated Diagnostic Prevalence Rates of Astigmatism ¹ by Age and Gender	21
Myopia	22
Chart 1.5a Diagnostic Prevalence Rates for Myopia by Age and Gender	22
Chart 1.5b Diagnostic Prevalence Rates for Myopia by Age and Gender (Age 40 and Older)	22
Table 1.5 Estimated Diagnostic Prevalence Rates of Myopia ¹ by Age and Gender	23
Hypermetropia	24
Chart 1.6a Diagnostic Prevalence Rates for Hypermetropia by Age and Gender	24
Chart 1.6b Diagnostic Prevalence Rates for Hypermetropia by Age and Gender (Age 40 and Older)	24
Table 1.6 Estimated Diagnostic Prevalence Rates of Hypermetropia by Age and Gender	25
Anisometropia	26
Chart 1.7a Diagnostic Prevalence Rates for Anisometropia by Age and Gender	26
Chart 1.7b Diagnostic Prevalence Rates for Anisometropia by Age and Gender (Age 40 and Older)	26
Table 1.7 Estimated Diagnostic Prevalence Rates of Anisometropia by Age and Gender	27
Low Vision Diagnosis	28
Chart 1.8a Diagnostic Prevalence Rates for Low Vision Diagnosis by Age and Gender	28
Chart 1.8b Diagnostic Prevalence Rates for Low Vision Diagnosis by Age and Gender (Age 40 and Older)	28
Table 1.8 Estimated Diagnostic Prevalence Rates of Low Vision Diagnosis by Age and Gender	29

CONTENTS

Amblyopia	30
Chart 1.9a Diagnostic Prevalence Rates for Amblyopia by Age and Gender	30
Chart 1.9b Diagnostic Prevalence Rates for Amblyopia by Age and Gender (Age 40 and Older)	30
Table 1.9 Estimated Diagnostic Prevalence Rates of Amblyopia by Age and Gender	31
Strabismus	32
Chart 1.10a Diagnostic Prevalence Rates for Strabismus by Age and Gender	32
Chart 1.10b Diagnostic Prevalence Rates for Strabismus by Age and Gender (Age 40 and Older)	32
Table 1.10 Estimated Diagnostic Prevalence Rates of Strabismus by Age and Gender	33
Cataract (Age 40 and Older)	34
Chart 1.11 Diagnostic Prevalence Rates for Cataract by Age and Gender	34
Table 1.11 Estimated Diagnostic Prevalence Rates of Cataract by Age and Gender	35
Diabetes in the IHS patient population (Age 40 and Older)	36
Chart 1.12 Diagnostic Prevalence Rates in the IHS Patient Population for Diabetes by Age and Gender	36
Table 1.12 Estimated Prevalence Rates in the IHS Patient Population of Diabetes by Age and Gender	37
Diabetic Retinopathy in the IHS patient population (Age 40 and Older)	38
Chart 1.13 Diagnostic Prevalence Rates in the IHS Patient Population for Diabetic Retinopathy by Age and Gender	38
Table 1.13 Estimated Prevalence Rates in the IHS Patient Population of Diabetic Retinopathy by Age and Gender	39
Diabetic Retinopathy in living IHS diabetic patients (Age 40 and Older)	40
Chart 1.14 Diagnostic Prevalence Rates in Living IHS Diabetic Patients for Diabetic Retinopathy by Age and Gender	40
Table 1.14 Estimated Prevalence Rates in Living IHS Diabetic Patients of Diabetic Retinopathy by Age and Gender	41
Diabetic Macular Edema in the IHS patient population (Age 40 and Older)	42
Chart 1.15 Diagnostic Prevalence Rates in the IHS Patient Population for Diabetic Macular Edema by Age and Gender	42
Table 1.15 Estimated Prevalence Rates in the IHS Patient Population of Diabetic Macular Edema by Age and Gender	43
Diabetic Macular Edema in living IHS diabetic patients (Age 40 and Older)	44
Chart 1.16 Diagnostic Prevalence Rates for Diabetic Macular Edema in living IHS Diabetic Patients by Age and Gender	44
Table 1.16 Estimated Prevalence Rates in Living IHS Diabetic Macular Edema by Age and Gender	45

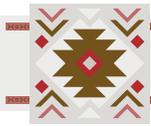


CONTENTS

Retinal Detachment (Age 40 and Older)	46
Chart 1.17 Diagnostic Prevalence Rates for Retinal Detachment by Age and Gender	46
Table 1.17 Estimated Diagnostic Prevalence Rates of Retinal Detachment by Age and Gender	47
Macular Degeneration	48
Chart 1.18a Diagnostic Prevalence Rates for Macular Degeneration by Age and Gender	48
Chart 1.18b Diagnostic Prevalence Rates for Macular Degeneration by Age and Gender (Age 40 and Older)	48
Table 1.18 Estimated Diagnostic Prevalence Rates of Macular Degeneration by Age and Gender	49
Glaucoma (Age 40 and Older)	50
Chart 1.19 Diagnostic Prevalence Rates for Glaucoma by Age and Gender	50
Table 1.19 Estimated Diagnostic Prevalence Rates of Glaucoma by Age and Gender	51
Tear Film Insufficiency (Age 40 and Older)	52
Chart 1.20 Diagnostic Prevalence Rates for Tear Film Insufficiency by Age and Gender	52
Table 1.20 Estimated Diagnostic Prevalence Rates of Tear Film Insufficiency by Age and Gender	53
Conjunctivitis	54
Chart 1.21a Diagnostic Prevalence Rates for Conjunctivitis by Age and Gender	54
Chart 1.21b Diagnostic Prevalence Rates for Conjunctivitis by Age and Gender (Age 40 and Older)	54
Table 1.21 Estimated Diagnostic Prevalence Rates of Conjunctivitis by Age and Gender	55
Pterygium	56
Chart 1.22a Diagnostic Prevalence Rates for Pterygium by Age and Gender	56
Chart 1.22b Diagnostic Prevalence Rates for Pterygium by Age and Gender (Age 40 and Older)	56
Table 1.22 Estimated Diagnostic Prevalence Rates of Pterygium by Age and Gender	57
Iridocyclitis	58
Chart 1.23a Diagnostic Prevalence Rates for Iridocyclitis by Age and Gender	58
Chart 1.23b Diagnostic Prevalence Rates for Iridocyclitis by Age and Gender (Age 40 and Older)	58
Table 1.23 Estimated Diagnostic Prevalence Rates of Iridocyclitis by Age and Gender	59

CONTENTS

PART II: Surgical Procedures and Ophthalmic Medications Prescribed, FY 2010-FY 2013, and FY 2012-FY 2014, Frequency, Rate	61
Chart 2.1 Spectacle Dispense Encounters – by Age	62
Table 2.1 Spectacle Dispense Encounters - Summary Data	63
Chart 2.2 Eye Care Encounters – by Age	64
Table 2.2 Eye Care Encounters - Summary Data	65
Table 2.3 Patient Counts and Rates of Capsulotomy by Age	66
Table 2.4 Patient Counts and Rates of Cataract Surgery by Age	67
Table 2.5 Patient Counts and Rates of Intravitreal Injection by Age	68
Table 2.6 Patient Counts and Rates of Photocoagulation by Age	69
Table 2.7 Patient Counts and Rates of Photocoagulation by Age	70
Table 2.8 Patient Counts and Rates of Removal Foreign Body_CPT-DX-PROC by Age	71
Table 2.9 Patient Counts and Rates of Trabeculectomy by Age	72
Table 2.10 Top 25 Ophthalmic Medications Prescribed, American Indians and Alaska Natives, FY 2010 to FY 2013	73
Glossary of Acronyms and Definitions	75
Glossary of ICD-9 and CPT codes used in this report	83
APPENDIX: Prevalence of Adult Vision Impairment and Age Related Eye Diseases in the United States	87
A Estimated Diagnostic Prevalence Rates of Macular Degeneration by Age and Gender (55+, 65+ and 75+)	88
B Population Based Prevalence of Selected Diagnosed Eye Conditions, FY 2010	88



ANATOMY OF THE EYE

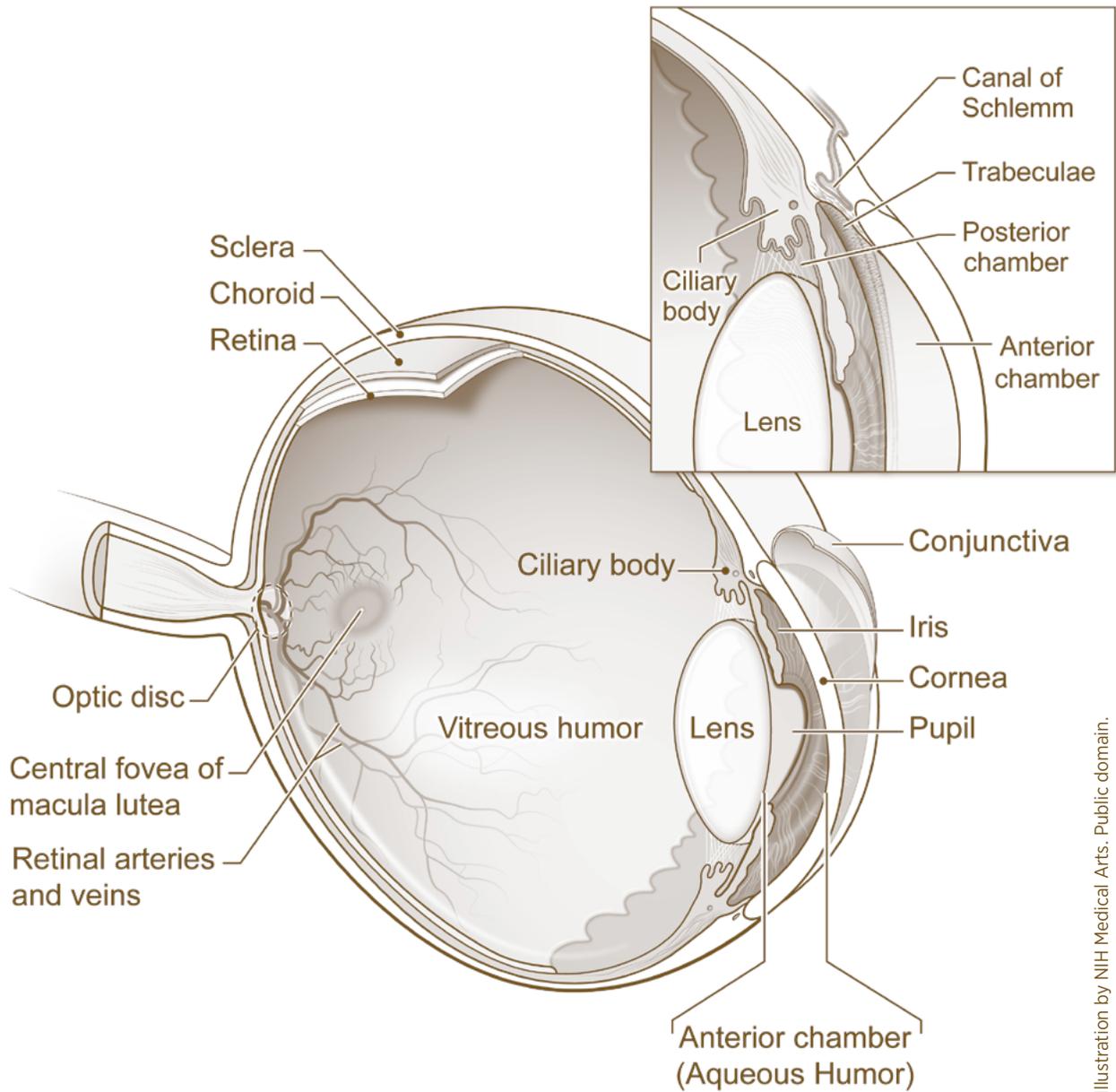


Illustration by NIH Medical Arts. Public domain.

OVERVIEW

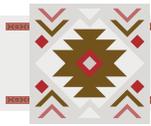
The Indian Health Service (IHS), an agency within the Department of Health and Human Services (HHS), is responsible for providing federal health services to American Indian and Alaska Native (AI/AN) people. The Indian Health program became a primary responsibility of the HHS under P.L. 83-568, the Transfer Act, on August 5, 1954. This Act provides “that all functions, responsibilities, authorities, and duties . . . relating to the maintenance and operation of hospital and health facilities for Indians, and the conservation of Indian health . . . shall be administered by the Surgeon General of the United States Public Health Service.”

The IHS is the federal health care provider and health advocate for AI/AN people and its goal is to assure that comprehensive, culturally-acceptable personal and public health services are available and accessible to AI/AN people. The mission of the IHS, in partnership with AI/AN people, is to raise their physical, mental, social, and spiritual health to the highest level. It is also the responsibility of the IHS to work with the people involved in the health delivery programs so they may be cognizant of entitlements of AI/AN people, as American citizens, to all federal, state, and local health programs, in addition to IHS and Tribal services.

The IHS has carried out its responsibilities through developing and operating a health services delivery system designed to provide a broad-spectrum program of primary, specialty, rehabilitative, and environmental services. This system integrates health services delivered directly through IHS facilities, purchased by IHS through contractual arrangements with providers in the private sector, and delivered through Tribally operated programs (P.L. 93-638) and urban Indian health programs.

The operation of the IHS health services delivery system is managed through local administrative units called service units. A service unit is the primary level of health organization for a geographic area served by the IHS program, just as a county or city health department in a state health department.

A few service units cover a number of small reservations; some large reservations are divided into a number of service units. The service units are grouped into larger cultural-demographic-geographic management jurisdictions administered by Area Offices.



INTRODUCTION

Indian Health Service Vision Care provides basic statistical information to the IHS and its programs, Tribes, other federal and state government agencies, as well as other stakeholders and interested parties of the IHS. This publication uses narrative, charts, and tables to describe the IHS vision care programs and the vision health status of AI/AN people residing in the IHS service area. The IHS service area consists of counties on and near federal Indian reservations. The Indians residing in the service area comprise about 58 percent of all AI/AN people residing in the U.S. Information pertaining to the IHS organizational structure, AI/AN demographic and economic facts, as well as patient vision care is included. Current regional differences are presented where relevant, and comparisons to the general population are made when appropriate. Broader historical trend information can be found in the IHS companion publications, *Trends in Indian Health* and *Regional Differences in Indian Health*.

SCOPE AND ORGANIZATION OF THIS REPORT

Narrative, charts, and tables are grouped into three major categories:

- » Diagnostic prevalence of eye disease and related conditions
- » Frequency of surgical procedures provided, and
- » Frequency of ophthalmic medications prescribed.

The tables provide detailed data, while the charts further depict significant relationships. Throughout this report each table and its corresponding chart appear next to each other. However, some self-explanatory charts do not have a corresponding table. In other instances, a table may have more than one chart associated with it.

SUMMARY OF DEMOGRAPHIC DATA

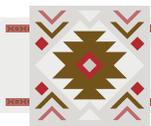
Table 1. IHS User Population by Sex and Age in Years, FY 2012 to 2014

FISCAL YEAR	2012	2012	2012	2013	2013	2013	2014	2014	2014
GENDER	FEMALE	MALE	TOTAL	FEMALE	MALE	TOTAL	FEMALE	MALE	TOTAL
AGE 0-1	9,363	9,861	19,224	9,148	9,768	18,916	9,278	9,869	19,147
AGE 1	11,896	12,779	24,675	11,877	12,405	24,282	11,638	12,440	24,078
AGE 2-4	43,074	44,296	87,370	41,409	43,058	84,467	40,426	41,990	82,416
AGE 5	15,035	15,493	30,528	15,090	15,431	30,521	14,674	15,170	29,844
AGE 6-8	43,275	44,472	87,747	44,007	45,158	89,165	44,507	45,926	90,433
AGE 9	13,465	13,808	27,273	13,702	14,078	27,780	14,292	14,332	28,624
AGE 10-11	26,697	26,981	53,678	26,633	27,220	53,853	27,022	27,756	54,778
AGE 12-14	40,009	40,782	80,791	39,967	40,603	80,570	40,154	40,647	80,801
AGE 15-17	38,845	38,629	77,474	39,231	38,881	78,112	39,734	39,704	79,438
AGE 18-19	27,989	26,861	54,850	26,793	25,907	52,700	26,370	25,484	51,854
AGE 20-24	75,899	69,003	144,902	75,204	67,949	143,153	73,594	66,379	139,973
AGE 25-29	66,780	60,513	127,293	68,031	61,396	129,427	69,709	62,310	132,019
AGE 30-34	56,649	51,841	108,490	58,933	53,687	112,620	60,829	55,010	115,839
AGE 35-39	47,623	43,435	91,058	48,617	44,326	92,943	49,824	45,464	95,288
AGE 40-44	45,618	40,874	86,492	46,298	41,126	87,424	46,504	41,707	88,211
AGE 45-49	47,536	42,728	90,264	46,400	41,630	88,030	45,424	40,653	86,077
AGE 50-54	46,750	40,424	87,174	48,087	41,798	89,885	48,885	42,541	91,426
AGE 55-59	39,474	32,686	72,160	40,989	34,229	75,218	42,762	35,983	78,745
AGE 60-64	31,260	25,251	56,511	32,791	26,573	59,364	34,270	27,747	62,017
AGE 65-69	22,867	18,148	41,015	24,154	19,117	43,271	25,879	20,547	46,426
AGE 70-74	16,746	13,096	29,842	17,469	13,720	31,189	18,081	14,293	32,374
AGE 75-79	12,001	8,996	20,997	12,498	9,430	21,928	13,033	9,819	22,852
AGE 80-84	8,046	5,387	13,433	8,461	5,603	14,064	8,774	5,788	14,562
AGE 85+	8,027	4,173	12,200	8,268	4,371	12,639	8,408	4,592	13,000
TOTAL	794,924	730,517	1,525,441	804,057	737,464	1,541,521	814,071	746,151	1,560,222

DENOMINATORS USED TO CALCULATE RATES

In fiscal year (FY) 2014, the IHS user population was approximately 1.6 million.

The population of countable active Indian registrants used for this report is virtually identical to the IHS user population except that it does not include manually adjusted figures due to negotiated settlements with newly added Tribal entities to IHS (these amount to less than 0.1% of the user population). The IHS user population is defined as the number of Indian registrants, residing within a service delivery area with at least one face-to-face, direct or contract, inpatient stay, ambulatory care visit, or dental visit during the prior three fiscal years at a Federal or Tribal facility. The service delivery area for the user population is called a "Patient Referred Care Delivery Area", or PRCDA, and only users who live inside one can be counted as a user. A user is essentially an individual IHS patient seen at a Federal or Tribal facility.



The AI/AN population in general is younger, faster growing, less educated and poorer than the overall U.S. population (all races). For the IHS user population in FY 2012, 10.6 percent of the persons were under age 5 compared to 6.3 percent for the U.S. all races population (U.S. Census Bureau American Community Survey 2012). The total U.S. population which was not American Indian or Alaska Native grew by 9.5 percent, from 277.3 million in 2000 to 303.5 million in 2010. In comparison, the American Indian and Alaska Native (alone) population increased almost twice as fast as the total U.S. population, growing by 18 percent from 2.5 million to 2.9 million.

In general, this publication will use the IHS User Population as given in Table 1 population as the denominator in calculating crude and adjusted rates from IHS data taken from electronic medical records present in its data repository, the National Data Warehouse. This population originates from passively collected medical records of patients seen in IHS and Tribal facilities, is distributed in a manner which approximates a binomial distribution and is described as being “hypergeometric”.

When age adjustment is performed, a standard million for age and sex will be used, constructed from the 2000 population (see Table 2). To ensure the most precise estimates were constructed, this publication used a population developed in house for this purpose.

Table 2. Population by Sex and Age in Years, Standard Millions, 2000

FISCAL YEAR GENDER	2000 FEMALE	2000 MALE	2000 TOTAL
AGE 0-1	1,853	1,938	3,791
AGE 1	1,836	1,922	3,758
AGE 2-4	5,584	5,849	11,433
AGE 5	1,902	1,994	3,896
AGE 6-8	5,761	6,039	11,800
AGE 9	2,059	2,165	4,224
AGE 10-11	4,025	4,233	8,258
AGE 12-14	5,760	6,040	11,800
AGE 15-17	5,745	6,073	11,818
AGE 18-19	3,920	4,082	8,002
AGE 20-24	9,001	9,258	18,259
AGE 25-29	8,880	8,842	17,722
AGE 30-34	9,818	9,694	19,512
AGE 35-39	11,138	11,042	22,180
AGE 40-44	11,340	11,140	22,480
AGE 45-49	10,087	9,717	19,804
AGE 50-54	8,850	8,374	17,224
AGE 55-59	6,914	6,393	13,307
AGE 60-64	5,615	5,040	10,655
AGE 65-69	5,089	4,321	9,410
AGE 70-74	4,867	3,859	8,726
AGE 75-79	4,323	3,092	7,415
AGE 80-84	3,055	1,846	4,901
AGE 85+	3,031	1,228	4,259
TOTAL	140,453	134,181	274,634

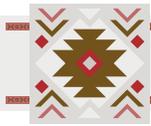
(<http://www.census.gov/prod/1/pop/p25-1130/p251130.pdf>). Current Population Reports, Population Projections of the United States by Age, Sex, Race, and Hispanic Origin: 1995 to 2050, P25-1130, U.S. Bureau of the Census, p. 52; p.60 in pdf)

This method will provide accurate age and sex adjustment for purposes of this report.

DIAGNOSTIC PREVALENCE RATE OF EYE DISEASE

The results presented in this study of the IHS vision care programs are based on prevalence rates obtained from electronic medical records. This is why we use this term, emergent from the literature, “diagnostic prevalence rate”. A majority of the records in this sample are from outpatient clinics where clinical impressions were noted as accurately as possible using clinical physical exam, patient symptoms, diagnostic testing, medication(s) prescribed, and/or the interpretation of medical imaging.

When possible, this report will provide detailed definitions and visual aids to help the reader to know as precisely as possible which conditions are being described. For example, given the difficulty of differential diagnosis of some eye diseases, it might not be possible to distinguish subtypes. Consequently, the code as given in the medical record is used in this report. Similarly problematic is that the data here do not come from a systematic vision examination survey with a standard ophthalmic or optometric examination technique(s) which were ideally honed by field based formative research prior to the survey itself. Hence, comparison to norms developed from surveys of this type should be done with caution because the data presented here are based on the clinical impressions of multiple vision care practitioners who did not use a common, highly rigorous examination rubric. Yet, one can expect that since the academic and clinical training of the providers who coded the records used in the report is comparable to those in vision care practices within the U.S., the coded records here will be consistent in the reliability of their findings and will reflect actual clinical practice.



MEASURING CLINICAL ACTIVITY OF THE VISION CARE PROGRAMS

ENCOUNTERS

Encounters are a focal point linking provider and clinical workload with patient care information. A standard definition for a clinical encounter is from ASTM E1384-02a – Standard Guide for Content and Structure of the Electronic Health Record: “(1) an instance of direct provider/practitioner to patient interaction, regardless of the setting, between a patient and a practitioner vested with primary responsibility for diagnosing, evaluating or treating the patient’s condition, or both, or providing social worker services. (2) A contact between a patient and a practitioner who has primary responsibility for assessing and treating the patient at a given contact, exercising independent judgment.” Encounters can occur in many different settings – ambulatory care, inpatient care, emergency-care, home health care, field, and telemedicine. The ASTM definition provided here excludes an ancillary service visit, which is defined as “the appearance of an outpatient in a unit of a hospital or outpatient facility to receive service(s), test(s), or procedures.” The standard definition also excludes practitioner actions that are performed independently of a patient such as practitioner-to-practitioner interaction and practitioner-to-records interaction. This includes the sub-domains of admission information, transfer (patient movement) information, discharge information, provider information, accident information, and death and autopsy information. There may be clinical information and decision making involved in these excluded actions, however, they are not focused on a patient and conducted in the patient’s presence (See this URL for more details: <http://bit.ly/2vv1yX1>, accessed July 17, 2017)

The IHS system currently measures “outpatient visits” and “inpatient stays.” What counts as an outpatient or ambulatory visit is based on specific criteria. A patient contact with a licensed, credentialed health care provider in an Indian Health Service health facility or field health location where the patient or their personal representative is physically present and services are not part of an inpatient stay. Only certain clinics, service categories, locations, are programmed to count as being workload reportable, and those definitions are based on guidance from the Centers for Medicare and Medicaid Studies. IHS counts encounters as different visits if the clinics in those encounters are different, the primary providers in them is different, and the diagnosis/reason is different. An inpatient stay is a more clearly defined item based on a hospitalization of over 24 hours duration in an IHS inpatient facility or a contract (purchased referred care) hospital. A table of clinics considered to have workload reportability is given in the Clinic table of the IHS Standard Code Book on the IHS Standard Code Book website (<http://bit.ly/2uB5TM1>).

PROVIDER TYPES

A list of types of providers (aka practitioners) coded in the IHS electronic medical record can be found in the Services Rendered By (Provider) table of the IHS Standard Code Book tables on the IHS Standard Code Book website (<http://bit.ly/2vuCSxK>). The IHS Standard Code Book is a uniform listing of descriptive terms and identifying codes for recording and reporting medical information collected during the provision of health care services. A standard set of codes provides the means for reliable communication between IHS providers, patients, and third parties (e.g., contract health service providers). A definition of each provider type is given in the table. For optometrist, not coded as a primary care provider, hence a specialist, the definition is: “An individual who is a specialist in optometry. The profession of examining the eyes and measuring errors in refraction and of prescribing glasses to correct the defects.” For ophthalmologist, the definition given is “A medical practitioner specializing in the diagnosis and treatment of eye diseases.” Other active provider types of interest to this report are: contract optometrist, optometric assistant, optometry student, and ocularist. An orthoptist is not an IHS provider type with filled positions in IHS facilities as of the writing of this report.

CLINIC TYPES

As mentioned earlier, clinics coded in IHS electronic medical records can be found in the Clinic table of the Standard Code Book tables on the IHS Standard Code Book website (<http://bit.ly/2uB5TM1>). A definition of each clinic type is given in this table. The date the definition was approved is also given. For the clinics of greatest interest to this report, all were approved on February 18, 2005, well in advance of the data presented here. For optometry, not coded as a

primary care clinic like all of the other clinics of interest (ophthalmology, retinopathy, diabetic retinopathy), the definition is: “An organized clinic that provides diagnosis and treatment of conditions in of the eye by an optometrist.” For ophthalmology, the definition given is “An organized clinic that provides diagnosis and treatment of conditions of the eye by an ophthalmologist.” A diabetic retinopathy clinic is defined as: “An organized clinic that provides for identification of diabetic retinopathy or annual diabetic retinopathy exam via validated telemedicine.” For the purposes of this report, the retinopathy and diabetic retinopathy clinics have been combined.

EXAMINATIONS

When one has an eye examination performed in the U.S., one could be reading an eye chart such as the Snellen eye chart illustrated below.

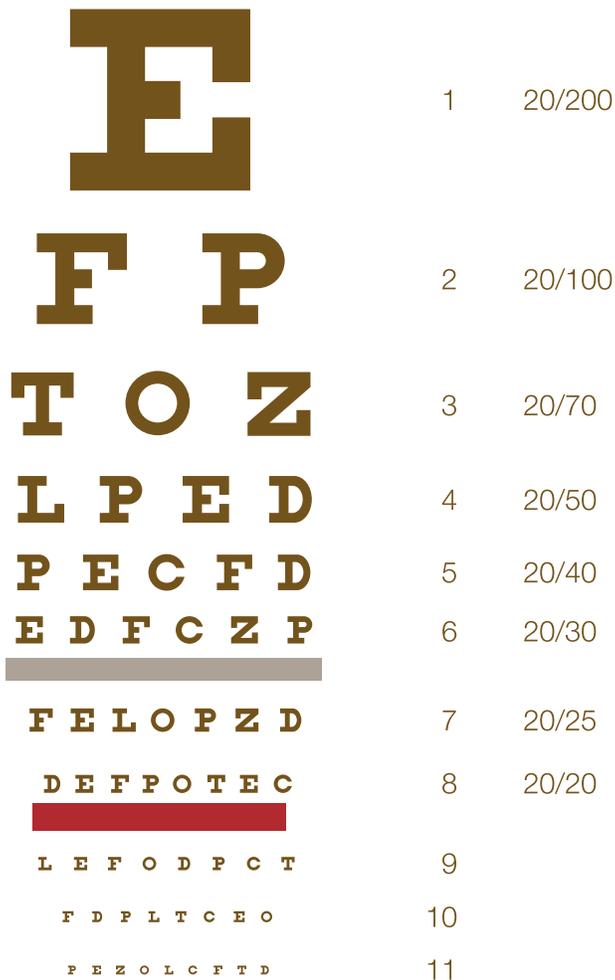


Figure 1. Snellen eye chart
 (source: http://en.wikipedia.org/wiki/Snellen_chart#mediaviewer/File:Snellen_chart.svg)

Wall-mounted Snellen charts are inexpensive and are sometimes used for approximate assessment of vision, e.g. in a primary-care physician’s office.

The traditional Snellen chart is printed with eleven lines of block letters. A person taking the test stands 20 ft. away (or if metric is used 6 meters) covers one eye, and reads aloud the letters of each row, beginning at the top using the uncovered eye. The smallest row that can be read accurately indicates the visual acuity in that eye. Actually some expect not all letters need to be read correctly just most of them.



Visual acuity (“sharpness”) , the eye’s ability to detect fine details, is often measured with a Snellen chart. The standard definition of normal visual acuity (20/20 or 6/6 [metric] vision) is the ability to resolve a spatial pattern separated by a visual angle of one minute of arc. The terms 20/20 and 6/6 are derived from standardized sized objects that can be seen by a “person of normal vision” at the specified distance. For example, if one can see at a distance of 20 feet an object that normally can be seen at 40 feet, then one has 20/40 vision. If one can see at 20 feet what a normal person can see at 20 feet, then one has 20/20 vision. The 6/6 terminology is rarely used in the U.S., and represents the distance in meters.

Other measurements which may be included in an eye examination include: refraction (to determine if lenses are needed to correct vision), pupil function, proper ocular muscle movement, binocular visual acuity, focusing skill (to test for convergence insufficiency), visual field extent (peripheral vision), contrast sensitivity, slit lamp tests, external exam, intraocular pressure or tonometry, and a fundus (or retinal) exam. Roughly 75% of all eye exams in the general population performed in a year are general ones (ICD 9 code: V72.0). Specialized eye examinations cover more in depth issues related to specific problems. These exams are performed much more infrequently and typically are for cataract or other age-related conditions (V80.2), or rarely, an exam focused entirely on glaucoma or diabetic retinopathy (apparently per previous section) (V80.1). See also this animation concerning detection of diabetic retinopathy (<http://bit.ly/2u21gcm>).

SURGICAL PROCEDURES

Current Procedural Terminology (CPT) codes are used in the IHS Electronic Medical Records to describe clinical impressions of procedures performed by vision care practitioners, including surgery. ICD 9 procedure codes were not used in place of these as in some cases wherein they were not specific to the surgical procedure of interest or they were not used in any record in the database where the CPT code was used.

MEDICATIONS

There are many possible methods to classify and code drug dispensing information by providers such as the American Hospital Formulary System. Many drugs can fit more than one category, so they are commonly classified by therapeutic indication (for example, cardiovascular drugs for use in treating conditions such as hypertension, congestive heart failure, and cardiac arrhythmias). Classification of drugs and drug classes is a complicated subject. Many possible schema exist and can be found in such sources as The Physicians’ Desk Reference, Drug Facts and Comparisons, American Hospital Formulary System, or Drug Information for the Health Care Professional. Information can also be found on-line at www.ditonline.com, and www.intelihealth.com. In IHS data, only one such listing and definitions of drug classes and class members is used which would allow for differentiating those medications used by the vision care providers of IHS, the Veteran’s Administration (VA) Drug Class Codes. (<http://bit.ly/2us3OBn>).

VA Drug Class codes were used to differentiate the “ophthalmic drugs”, most likely to be prescribed by IHS vision care professionals. The VA Drug Class Codes are a drug classification system used by the VA which separates drugs into different categories based upon their characteristics. Ophthalmic drugs are clearly the most useful to know specifically for this report. The IHS National Supply Service Center as well as the IHS NDW contains data on drug invoicing (medication & dosage), expenditures, and the frequency of ophthalmic drugs associated with encounters in the electronic health records.

The VA Drug Class Codes contain only those drugs in the VA formulary. A modern formulary is a continually revised compilation of pharmaceuticals that meet pharmacopoeial standards. As a practical matter, most modern hospital settings use formularies and formulary systems. As of this writing, formularies and formulary systems affect most of the 76.6 million Americans enrolled in Health Maintenance Organizations (HMOs) and the more than 230 million covered by Pharmacy Based Management (PBM) systems and other such drug management systems. They should be considered, then, as operational components of organized health care delivery systems. As care is increasingly managed and more attention is paid to quality and cost, formularies and evolving formulary systems have played important roles in the pharmacy benefits of delivery systems, whether they are hospitals, clinics, HMOs, PBMs, or IHS. A formulary system is a method whereby the medical management or administration of an organization objectively evaluates, appraises, and selects from among numerous available drug entities and drug products, those that are considered most useful in patient care. Hence, the ophthalmic drug class has already gone through exhaustive expert review and is a reliable set of such medications used in the treatment of vision care problems and diseases. The top ten ophthalmic drugs purchased through the VA contract are given in this report.

SOURCES AND LIMITATIONS OF DATA

THE NATIONAL DATA WAREHOUSE OF IHS (NDW)

The National Patient Information Reporting System (NPIRS) initially produced the NDW in 2006. The NDW is a state-of-the-art, enterprise-wide data warehouse environment for the Indian Health Service's (IHS) national data repository with data records going back to 2001 for all reporting IHS facilities.

NPIRS produces various reports that are required by statute or regulation and provides a broad range of clinical and administrative information to managers at all levels of the Indian health system, allowing better management of individual patients, local facilities, and regional and national programs

This repository of data (NDW) and the team which manages it (NPIRS, the IHS Area Statisticians, site administrators) were used to prepare this report.

RESOURCE PATIENT MANAGEMENT SYSTEM (RPMS)

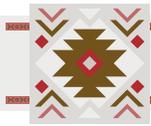
The RPMS is a decentralized integrated solution for management of both clinical and administrative information in these healthcare facilities. Flexible hardware configurations, over 50 software applications, and network communication components combine to create a comprehensive clinical, financial, and administrative solution, one which can stand alone or function in concert with other components. Professionals in American Indian, Alaska Native, and private sector health facilities use RPMS every day to efficiently manage programs, maximize revenue generation, and most importantly, provide high-quality care for patients. Several other commercial off the shelf packages perform the same functions as RPMS and are implemented in Tribal facilities in the Indian Health System. As long as such systems can send an encrypted file in one of the two standard formats, Health Level Seven (HL 7) or "simplified" (SF), a unique IHS file type, the files are accepted by the NDW and their contents can be successfully added to its databases.

INTERNATIONAL CLASSIFICATION OF DISEASES, NINTH EDITION (ICD-9), CLINICAL MODIFICATION (CM)

The International Classification of Diseases Clinical Modification (ICD CM) is the official system used in the United States to classify and assign codes to health conditions and related information. The use of standardized codes improves consistency among providers of patient care in recording patient symptoms and diagnoses. The Ninth Revision Edition was used for this report.

The United States Department of Health & Human Services and the Centers for Medicare and Medicaid Services created ICD-9-CM as an extension of the Ninth Revision, International Classification of Diseases (ICD-9), which the World Health Organization (WHO) established to track diseases and clinical activities globally.

The ICD-9-CM contains a list of alphanumeric codes which correspond to diagnoses and procedures recorded in conjunction with hospital care in the United States. For example, a patient with unspecified conjunctivitis will be assigned a code of 372.30. This code may be entered onto a patient's electronic medical record (EMR) and used for diagnostic, billing and reporting purposes. Related information also classified and codified in the system includes symptoms, patient complaints, causes of injury, and mental disorders.



CURRENT PROCEDURAL TERMINOLOGY (CPT)

The Current Procedural Terminology (CPT) code set is a medical code set maintained by the American Medical Association (AMA) through the CPT Editorial Panel. The CPT code set (copyright protected by the AMA) describes medical, surgical, and diagnostic services and is designed to communicate uniform information about medical services and procedures among physicians, coders, patients, accreditation organizations, and payers for administrative, financial, and analytical purposes. In the IHS NDW, CPT codes are used to characterize the procedures performed in providing care to patients.

CODING ELECTRONIC MEDICAL RECORDS

The majority of people whose principal professional responsibility is health information management specialists responsible for coding medical records in IHS are American Health Information Management Association (AHIMA) certified or are similarly trained. AHIMA is a professional organization dedicated to helping health care professionals manage personal health information in their effort to provide quality health care to the public. Though medical records have traditionally been physical, paper documents, AHIMA is working toward the implementation of electronic health record (EHR) systems as an attempt to standardize and make more efficient the movement of patient information between medical professionals.

Coding medical records in the Indian health system is a complex task with many responsibilities. Coders are often in short supply relative to the workload, and they often have to balance this with clinical responsibilities as a provider of patient care. Since IHS depends on reimbursement for a significant portion of the operating revenue of its health care facilities, the importance of proper, accurate, and timely coding of records is well known to all those who enter such data into RPMS or similar systems.

SAMPLING CODED ELECTRONIC MEDICAL RECORDS

In order to perform the analyses in this report, the IHS had to examine NDW contents linking over one hundred million encounter records linked to patient identity characteristics in its registration files. The heterogeneous character of records was ensured through the application of medical records coding conventions successfully executed by those who locally documented these outpatient visits and inpatient stays. Unlike an epidemiologic study or an examination survey, where the method of sampling with regard to a known sampling frame can be tightly recording instruments and clinical examination procedures can be rigorously described and standardized, the report here utilizes data from an extensive, automated chart review.

PROBABILISTIC SAMPLING AND UNDUPLICATION

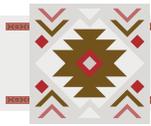
The IHS NDW used IBM Quality Stage Ascentia Software version 8.5 were used to assign unique patient identities in its database which are given identity numbers. These are idiosyncratic to the database and do not represent scrambled versions of any other identifier (social security number, date of birth, patient name, etc.). To determine if a unique identity of an individual patient is present, a process called unduplication is performed. This process occurs in two stages, blocking and then matching. The first stage, blocking, is where records are sorted into categories by one or more reliable fields (social security number, last-- or first name of patient, date of birth, or sex). Blocking reduces the number of comparisons between potentially matching pairs. In the second phase, a matching is performed between pairs of matching variables.

The unduplication software contains proprietary algorithms for determining the degree of fit in the comparison of the contents of an identical data element in two blocked records based on the matching probability settings. Algorithms in this context are essentially linkage rules, and their probabilities, μ and λ , go back to the classic treatment of the subject by Fellegi and Sunter, "A Theory for Record Linkage" (Journal of the American Statistical Association, 1969(Dec); 64 (328): 1183-1210). Matching records to assign a common patient identity is performed in the IHS NDW environment using these methods with the Quality Stage software within the admissible pair of error levels (μ and λ) using a four step routine of blocking and comparisons. The identity number from the software as implemented, the integrity ID, results in unique patient identity number assignments as close as technically possible.

ERROR AND SIGNIFICANCE IN CODED ELECTRONIC MEDICAL RECORDS

The majority of records used in this report originated in IHS and Tribal outpatient clinics. For example, in FY 2013, there were approximately 13.2 million outpatient visits, and 20,476 inpatient stays.

For each eye disease of interest, the prevalence was estimated by the number of diagnosed cases over the user population by age and gender for each fiscal year. The 95% confidence interval for the prevalence was estimated using Clopper-Pearson exact method (Clopper C, Pearson E S (1934). "The use of confidence or fiducial limits illustrated in the case of the binomial". Biometrika 1934; 26: 404-413.) Age-adjusted prevalence was calculated using the U.S. 2000 standard population (See Table 2 above) together with the 95% confidence interval were also reported for all and for those aged 40 or older, separately.



SOURCES OF ADDITIONAL INFORMATION

Additional AI/AN health status information can be obtained from the IHS Division of Program Statistics. Specific responsibilities are as follows:

General Information

Kirk Greenway, Principal Statistician and Director, Division of Program Statistics
Priscilla Sandoval, Program Analyst
Jennifer Joseph, Staff Assistant

Demographic Statistics

Jo Ann Glakas Pappalardo, Senior Health Statistician
Alan Friedman, Health Statistician

Patient Care Statistics

Ying Zhang, Senior Health Statistician

The Division of Program Statistics mailing address:

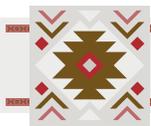
Indian Health Service
Office of Public Health Support
Division of Program Statistics
5600 Fishers Lane, Mailstop: 09E10D
Rockville, Maryland 20857
Phone: 301-443-1180
Email: DPS.Publications@ihs.gov



PART I

DIAGNOSTIC PREVALENCE OF EYE DISEASES AND RELATED CONDITIONS

INDIAN HEALTH SERVICE VISION CARE
2018 EDITION



DIAGNOSTIC PREVALENCE FOR BLINDNESS

In Fiscal Year 2014, the estimated age-adjusted diagnostic prevalence of severe visual impairment or blindness for both sexes was 0.042 percent for all ages, and 0.081 percent for ages forty and above. In fiscal year 2014, the estimated age-adjusted diagnostic prevalence of severe visual impairment or blindness for all ages in females was 0.045 percent and 0.039 percent in males. For ages 40 and above in fiscal year 2014, the estimated age-adjusted diagnostic prevalence of the conditions in females was 0.088 percent and 0.074 percent in males.

CHART 1.1A Diagnostic Prevalence Rates for Blindness by Age and Gender
American Indian and Alaska Native, FY 2014

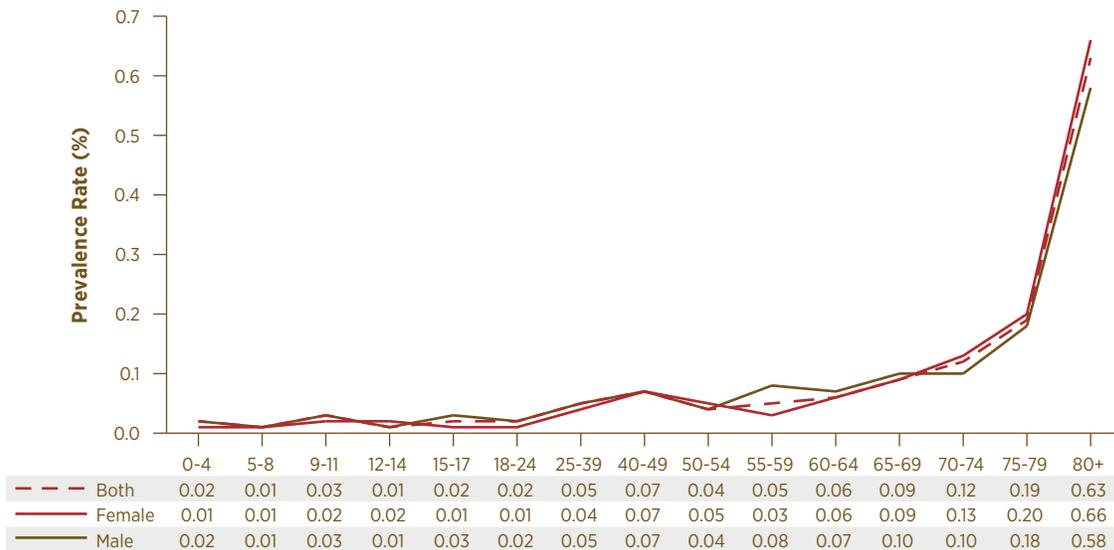


CHART 1.1B Diagnostic Prevalence Rates for Blindness by Age and Gender (Age 40 and Older)
American Indian and Alaska Native, FY 2014

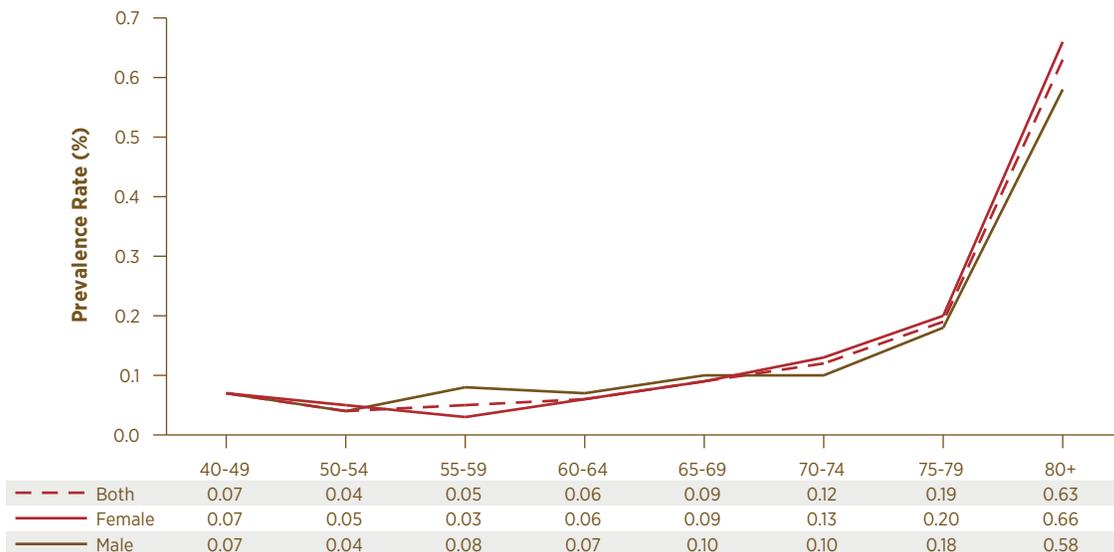


TABLE 1.1 Estimated Prevalence Rate of Blindness¹ by Age and Gender
American Indians and Alaska Natives, IHS Service Area, 2012–2014. (Rate and 95% CIs² per 100 Population)

Age Group	American Indian and Alaska Native								
	Both Sexes			Male			Female		
	FY 2012	FY 2013	FY 2014	FY 2012	FY 2013	FY 2014	FY 2012	FY 2013	FY 2014
Under 1 year	0.016 (0.0, 0.046)	0 (0, 0.019)	0.005 (0, 0.029)	0.02 (0, 0.073)	0 (0, 0.038)	0 (0, 0.037)	0.011 (0, 0.059)	0 (0, 0.04)	0.011 (0, 0.06)
1 year	0.008 (0.001, 0.029)	0.004 (0, 0.023)	0.008 (0, 0.03)	0 (0, 0.029)	0.008 (0, 0.045)	0.016 (0, 0.058)	0.017 (0.002, 0.061)	0 (0, 0.031)	0 (0, 0.032)
2–4 years	0.007 (0.003, 0.015)	0.005 (0.001, 0.012)	0.002 (0, 0.009)	0.007 (0.001, 0.02)	0.007 (0, 0.02)	0.005 (0, 0.017)	0.007 (0.001, 0.02)	0.002 (0, 0.013)	0 (0, 0.009)
5 years	0.003 (0, 0.018)	0.007 (0.001, 0.024)	0.007 (0.001, 0.024)	0 (0, 0.024)	0.013 (0.002, 0.047)	0.007 (0, 0.037)	0.007 (0, 0.037)	0 (0, 0.024)	0.007 (0, 0.038)
6–8 years	0.01 (0.005, 0.019)	0.007 (0.002, 0.015)	0.004 (0.001, 0.011)	0.011 (0.004, 0.026)	0.009 (0.002, 0.023)	0.004 (0.001, 0.016)	0.009 (0.003, 0.024)	0.005 (0.001, 0.016)	0.004 (0.001, 0.016)
9 years	0.011 (0.002, 0.032)	0 (0, 0.013)	0.021 (0.008, 0.046)	0.007 (0, 0.04)	0 (0, 0.026)	0.028 (0.008, 0.071)	0.015 (0.002, 0.054)	0 (0, 0.027)	0.014 (0, 0.051)
10–11 years	0.013 (0.005, 0.027)	0.017 (0.008, 0.032)	0.004 (0, 0.013)	0.015 (0.004, 0.038)	0.022 (0.008, 0.048)	0.004 (0, 0.02)	0.011 (0.002, 0.033)	0.011 (0.002, 0.033)	0.004 (0, 0.021)
12–14 years	0.012 (0.006, 0.023)	0.01 (0.004, 0.02)	0.012 (0.006, 0.023)	0.02 (0.008, 0.039)	0.01 (0.003, 0.025)	0.01 (0.003, 0.025)	0.005 (0.001, 0.018)	0.01 (0.003, 0.026)	0.015 (0.005, 0.033)
15–17 years	0.015 (0.008, 0.027)	0.013 (0.006, 0.024)	0.018 (0.01, 0.03)	0.021 (0.009, 0.041)	0.015 (0.006, 0.034)	0.028 (0.014, 0.05)	0.01 (0.003, 0.026)	0.01 (0.003, 0.026)	0.008 (0.002, 0.022)
18–19 years	0.009 (0.003, 0.021)	0.002 (0, 0.011)	0.006 (0.001, 0.017)	0.019 (0.006, 0.043)	0.004 (0, 0.022)	0.012 (0.002, 0.034)	0 (0, 0.013)	0 (0, 0.014)	0 (0, 0.014)
20–24 years	0.018 (0.012, 0.026)	0.008 (0.004, 0.014)	0.011 (0.006, 0.018)	0.017 (0.009, 0.03)	0.006 (0.002, 0.015)	0.012 (0.005, 0.024)	0.018 (0.01, 0.031)	0.009 (0.004, 0.019)	0.01 (0.004, 0.02)
25–29 years	0.011 (0.006, 0.018)	0.01 (0.005, 0.017)	0.011 (0.006, 0.018)	0.01 (0.004, 0.022)	0.011 (0.005, 0.023)	0.01 (0.004, 0.021)	0.012 (0.005, 0.024)	0.009 (0.003, 0.019)	0.011 (0.005, 0.023)
30–34 years	0.017 (0.01, 0.026)	0.013 (0.007, 0.022)	0.014 (0.008, 0.022)	0.019 (0.009, 0.035)	0.019 (0.009, 0.034)	0.016 (0.007, 0.031)	0.014 (0.006, 0.028)	0.008 (0.003, 0.02)	0.012 (0.005, 0.024)
35–39 years	0.019 (0.011, 0.03)	0.015 (0.008, 0.025)	0.022 (0.014, 0.034)	0.023 (0.011, 0.042)	0.023 (0.011, 0.041)	0.026 (0.014, 0.046)	0.015 (0.006, 0.03)	0.008 (0.002, 0.021)	0.018 (0.008, 0.034)
40–44 years	0.028 (0.018, 0.041)	0.03 (0.019, 0.044)	0.028 (0.018, 0.042)	0.027 (0.013, 0.048)	0.039 (0.022, 0.063)	0.026 (0.013, 0.047)	0.028 (0.015, 0.049)	0.022 (0.01, 0.04)	0.03 (0.016, 0.051)
45–49 years	0.047 (0.034, 0.063)	0.041 (0.029, 0.057)	0.038 (0.026, 0.054)	0.059 (0.038, 0.086)	0.034 (0.018, 0.056)	0.042 (0.024, 0.067)	0.036 (0.021, 0.057)	0.047 (0.03, 0.072)	0.035 (0.02, 0.057)
50–54 years	0.07 (0.054, 0.09)	0.053 (0.039, 0.071)	0.044 (0.031, 0.06)	0.064 (0.042, 0.094)	0.072 (0.048, 0.102)	0.042 (0.025, 0.067)	0.075 (0.052, 0.104)	0.037 (0.022, 0.059)	0.045 (0.028, 0.068)
55–59 years	0.073 (0.055, 0.096)	0.082 (0.063, 0.106)	0.053 (0.038, 0.072)	0.07 (0.045, 0.106)	0.079 (0.052, 0.115)	0.078 (0.052, 0.112)	0.076 (0.051, 0.108)	0.085 (0.059, 0.119)	0.033 (0.018, 0.055)
60–64 years	0.113 (0.087, 0.145)	0.081 (0.06, 0.107)	0.061 (0.043, 0.084)	0.127 (0.087, 0.179)	0.083 (0.052, 0.125)	0.065 (0.038, 0.103)	0.102 (0.07, 0.144)	0.079 (0.052, 0.116)	0.058 (0.036, 0.09)
65–69 years	0.144 (0.11, 0.186)	0.104 (0.076, 0.139)	0.09 (0.065, 0.122)	0.143 (0.094, 0.21)	0.099 (0.06, 0.155)	0.097 (0.059, 0.15)	0.144 (0.099, 0.203)	0.108 (0.07, 0.158)	0.085 (0.053, 0.129)
70–74 years	0.198 (0.151, 0.255)	0.176 (0.133, 0.229)	0.117 (0.083, 0.161)	0.176 (0.111, 0.263)	0.182 (0.118, 0.269)	0.098 (0.054, 0.164)	0.215 (0.151, 0.297)	0.172 (0.116, 0.245)	0.133 (0.085, 0.197)
75–79 years	0.248 (0.185, 0.325)	0.155 (0.107, 0.217)	0.193 (0.14, 0.258)	0.311 (0.207, 0.45)	0.138 (0.073, 0.236)	0.183 (0.109, 0.29)	0.2 (0.128, 0.297)	0.168 (0.104, 0.257)	0.199 (0.13, 0.292)
80–84 years	0.261 (0.182, 0.362)	0.206 (0.138, 0.296)	0.185 (0.122, 0.27)	0.297 (0.17, 0.482)	0.25 (0.137, 0.419)	0.19 (0.095, 0.34)	0.236 (0.142, 0.369)	0.177 (0.099, 0.292)	0.182 (0.104, 0.296)
85 years +	0.262 (0.179, 0.37)	0.475 (0.362, 0.611)	0.446 (0.339, 0.576)	0.24 (0.115, 0.44)	0.48 (0.298, 0.733)	0.392 (0.232, 0.619)	0.274 (0.172, 0.415)	0.472 (0.336, 0.644)	0.476 (0.34, 0.647)
Crude Total (All)	0.04 (0.037, 0.044)	0.035 (0.032, 0.038)	0.032 (0.029, 0.035)	0.04 (0.036, 0.045)	0.035 (0.031, 0.04)	0.032 (0.028, 0.036)	0.04 (0.036, 0.045)	0.035 (0.031, 0.039)	0.032 (0.028, 0.036)
Age-adj ³ (All)	0.052 (0.048, 0.056)	0.046 (0.042, 0.05)	0.042 (0.038, 0.045)	0.051 (0.045, 0.057)	0.044 (0.038, 0.049)	0.039 (0.034, 0.043)	0.054 (0.048, 0.06)	0.048 (0.042, 0.053)	0.045 (0.04, 0.05)
Crude Total (40+)	0.094 (0.086, 0.103)	0.085 (0.077, 0.093)	0.072 (0.065, 0.08)	0.095 (0.083, 0.108)	0.085 (0.073, 0.097)	0.071 (0.061, 0.082)	0.094 (0.083, 0.106)	0.085 (0.074, 0.096)	0.073 (0.064, 0.084)
Age-adj ³ (40+)	0.104 (0.094, 0.113)	0.094 (0.085, 0.102)	0.081 (0.073, 0.09)	0.102 (0.088, 0.115)	0.089 (0.077, 0.101)	0.074 (0.063, 0.085)	0.105 (0.092, 0.118)	0.098 (0.085, 0.11)	0.088 (0.077, 0.1)

¹ Codes used are given in the glossary of ICD-9 and CPT codes used in this report. Determined at clinical level and cannot be disambiguated by plus minus cylinder considerations.
² Confidence intervals (CIs) are calculated by Clopper Pearson Exact method.
³ Age adjustment was based on projected U.S. population by Bureau of the Census for the year 2000.

COMORBIDITIES OF BLIND OR SEVERELY VISUALLY IMPAIRED

In Fiscal Year 2014, twelve years of clinical impressions were pooled from FY 2001 to 2012 to construct estimates of the comorbidities present among all IHS patients including those who are blind or severely visually impaired (BSVI). The most prevalent comorbidity in both all IHS patients and those classified as VI BSVI was hypertension with a diagnostic prevalence of 23.5 and 69.3 percent, respectively. All IHS. Renal failure was found to be 9.48 more prevalent in BSVI as compared to All IHS (22.7%, 2.4%). Most I.H.S. pts w/BSVI had at least one comorbidity. No comorbidity codes were found in 6.3 percent of BSVI compared to 39.2 percent of All IHS. The absence of comorbid codes in the diagnostic records amounted to a ratio of 0.16 BSVI compared to 1 All IHS patients.

CHART 1.2 Comorbidities of Blind or Severely Visually Impaired

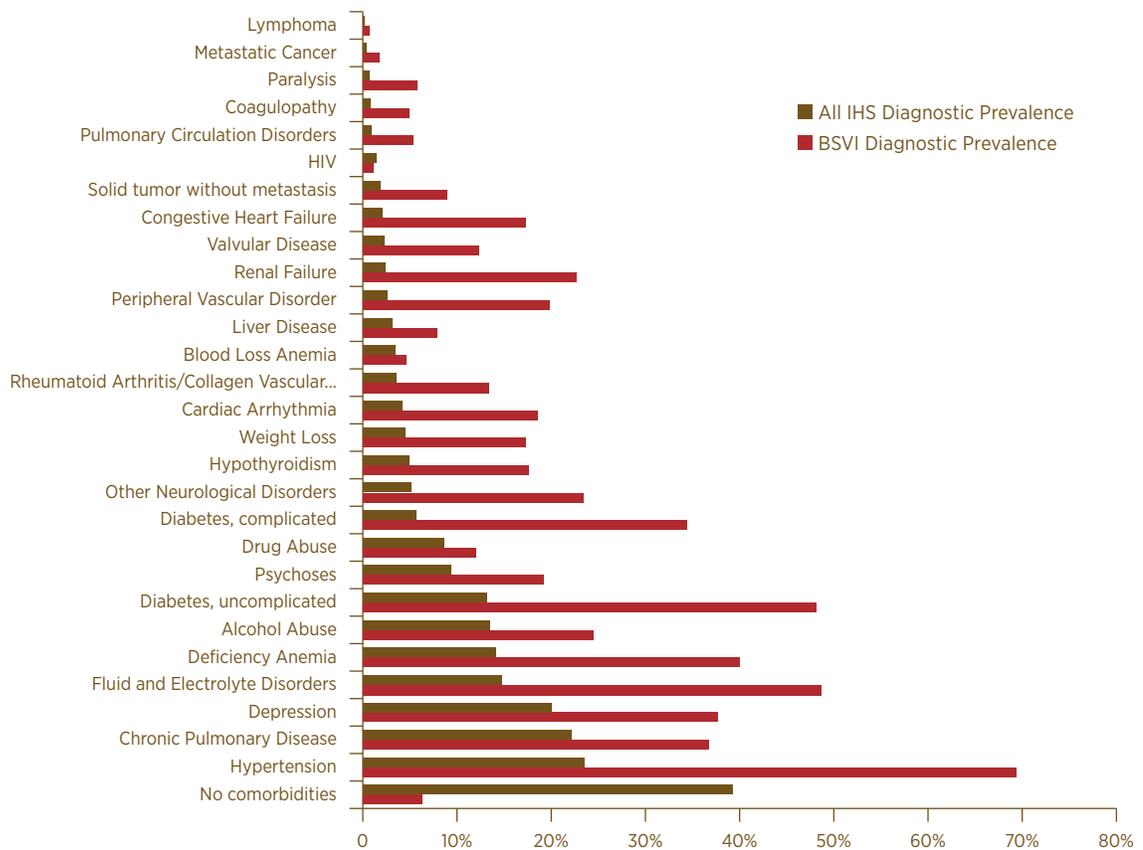


TABLE 1.2 Comorbidity of Blind or Severely Visually Impaired (BSVI) in IHS compared to its patient population
FY 2001-2012 (Pooled as of FY 2014)

Comorbidity ¹	All IHS		Blind or Severely Visually Impaired (BSVI)		BSVI to All IHS Prevalence Ratio
	Patients	Diagnostic Prevalence	Patients	Diagnostic Prevalence	
No comorbidities	611,543	39.2%	333	6.3%	0.16
Hypertension	366,130	23.5%	3,658	69.3%	2.96
Chronic pulmonary disease	345,096	22.1%	1,936	36.7%	1.66
Depression	312,133	20.0%	1,989	37.7%	1.88
Fluid and electrolyte disorders	229,601	14.7%	2,563	48.6%	3.30
Deficiency anemia	219,662	14.1%	2,108	40.0%	2.84
Alcohol abuse	210,352	13.5%	1,291	24.5%	1.82
Diabetes, uncomplicated	205,809	13.2%	2,536	48.1%	3.64
Psychoses	145,534	9.3%	1,015	19.2%	2.06
Drug abuse	133,617	8.6%	633	12.0%	1.40
Diabetes, complicated	88,181	5.7%	1,816	34.4%	6.09
Other neurological disorders	80,334	5.1%	1,232	23.4%	4.54
Hypothyroidism	77,116	4.9%	930	17.6%	3.57
Weight loss	70,826	4.5%	915	17.3%	3.82
Cardiac arrhythmia	65,202	4.2%	978	18.5%	4.44
Rheumatoid arthritis/collagen vascular diseases	54,542	3.5%	707	13.4%	3.83
Blood Loss anemia	53,081	3.4%	243	4.6%	1.35
Liver disease	47,676	3.1%	417	7.9%	2.59
Peripheral vascular disorder	40,771	2.6%	1,046	19.8%	7.59
Renal Failure	37,330	2.4%	1,196	22.7%	9.48
Valvular disease	35,145	2.3%	651	12.3%	5.48
Congestive Heart Failure	32,039	2.1%	912	17.3%	8.42
Solid tumor without metastasis	30,395	1.9%	468	8.9%	4.55
HIV	21,343	1.4%	58	1.1%	0.80
Pulmonary circulation disorders	13,358	0.9%	278	5.3%	6.16
Coagulopathy	12,408	0.8%	261	4.9%	6.22
Paralysis	11,430	0.7%	306	5.8%	7.92
Metastatic cancer	5,475	0.4%	90	1.7%	4.86
Lymphoma	3,268	0.2%	37	0.7%	3.35
Total Patients in All Categories	1,560,296		5,275		

¹ Quan et al., "Coding Algorithms for Defining Comorbidities in ICD-9-CM and ICD-10 Administrative Data", Table 2, p. 1134, Medical Care, 22(5);43(11). Codes used are given in the glossary of ICD-9 and CPT codes used in this report.

Note: diagnosis is as given in the medical record; categories are each unduplicated and do not sum to the total number the total number of patients in all categories. Rate of blindness in the population is not calculable using this data as only mention in the medical record is used, and not all blindness is coded into it.

MYOPIA WITH ASTIGMATISM

In Fiscal Year 2014, the estimated age-adjusted diagnostic prevalence of myopia with astigmatism for both sexes is 21.468 percent for all ages, and 27.347 percent for ages forty and above. In fiscal year 2014, the estimated age-adjusted diagnostic prevalence of myopia with astigmatism for all ages in females is 24.614 percent and 17.905 percent in males. For ages 40 and above in fiscal year 2014, the estimated age-adjusted diagnostic prevalence of the conditions in females is 30.498 percent and 23.416 percent in males.

CHART 1.3A Diagnostic Prevalence Rates for Myopia with Astigmatism by Age and Gender
American Indian and Alaska Native, FY 2014

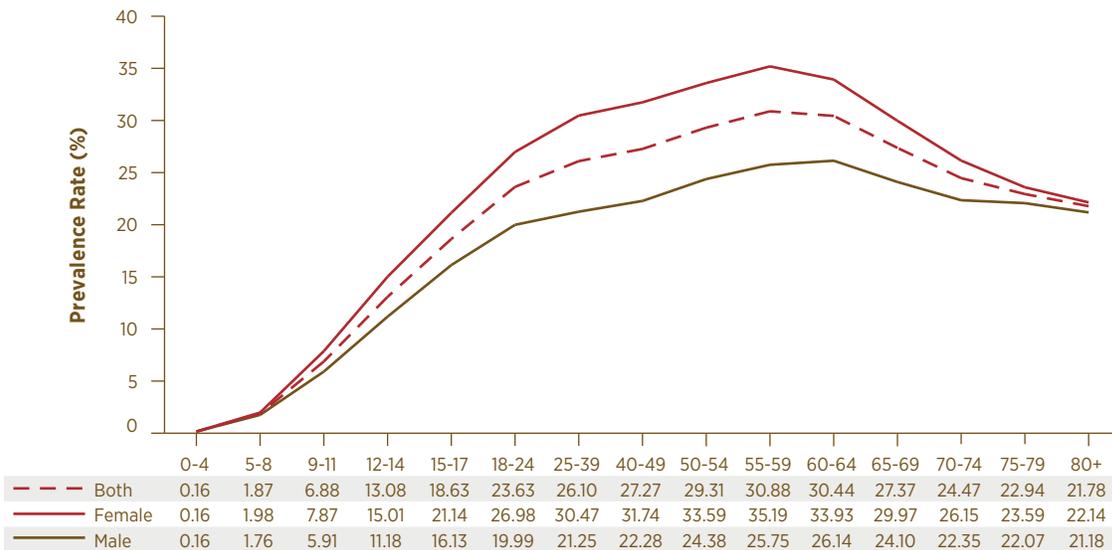


CHART 1.3B Diagnostic Prevalence Rates for Myopia with Astigmatism by Age and Gender (Age 40 and Older)
American Indian and Alaska Native, FY 2014

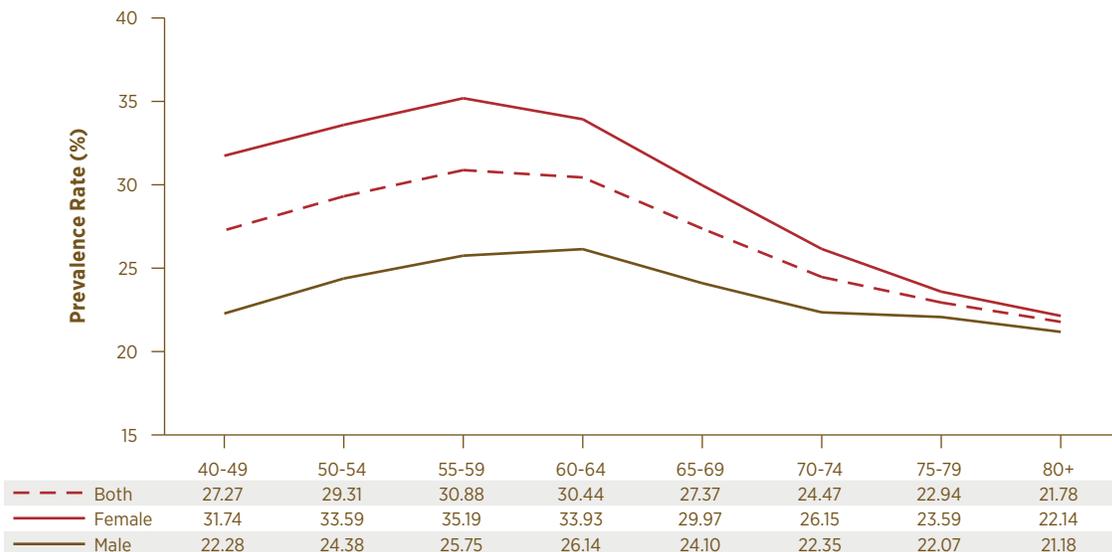


TABLE 1.3 Estimated Diagnostic Prevalence Rates of Myopia with Astigmatism¹ by Age and Gender
American Indians and Alaska Natives, IHS Service Area, 2012–2014. (Rate and 95% CIs² per 100 Population)

Age Group	American Indian and Alaska Native								
	Both Sexes			Male			Female		
	FY 2012	FY 2013	FY 2014	FY 2012	FY 2013	FY 2014	FY 2012	FY 2013	FY 2014
Under 1 year	0 (0, 0.019)	0.011 (0.001, 0.038)	0 (0, 0.019)	0 (0, 0.037)	0.020 (0.002, 0.074)	0 (0, 0.037)	0 (0, 0.039)	0 (0, 0.040)	0 (0, 0.040)
1 year	0.024 (0.009, 0.053)	0.016 (0.004, 0.042)	0.046 (0.023, 0.082)	0.064 (0.028, 0.127)	0.016 (0.002, 0.058)	0.064 (0.028, 0.127)	0.034 (0.009, 0.086)	0.017 (0.002, 0.061)	0.026 (0.005, 0.075)
2–4 years	0.209 (0.180, 0.242)	0.202 (0.173, 0.235)	0.232 (0.200, 0.267)	0.231 (0.187, 0.282)	0.202 (0.162, 0.249)	0.231 (0.187, 0.282)	0.209 (0.168, 0.257)	0.203 (0.162, 0.251)	0.233 (0.188, 0.284)
5 years	0.763 (0.669, 0.867)	0.767 (0.672, 0.871)	0.794 (0.697, 0.901)	0.784 (0.650, 0.938)	0.784 (0.651, 0.936)	0.784 (0.650, 0.938)	0.778 (0.644, 0.932)	0.749 (0.618, 0.900)	0.804 (0.666, 0.962)
6–8 years	2.201 (2.105, 2.300)	2.258 (2.161, 2.357)	2.224 (2.129, 2.322)	2.086 (1.957, 2.221)	2.042 (1.913, 2.176)	2.086 (1.957, 2.221)	2.336 (2.196, 2.483)	2.479 (2.336, 2.629)	2.366 (2.227, 2.511)
9 years	4.965 (4.710, 5.229)	4.723 (4.476, 4.979)	5.010 (4.760, 5.269)	4.235 (3.911, 4.578)	4.276 (3.948, 4.624)	4.235 (3.911, 4.578)	5.719 (5.332, 6.124)	5.182 (4.816, 5.566)	5.786 (5.409, 6.182)
10–11 years	7.698 (7.474, 7.926)	7.738 (7.513, 7.967)	7.855 (7.631, 8.084)	6.770 (6.477, 7.072)	6.587 (6.295, 6.888)	6.770 (6.477, 7.072)	9.001 (8.660, 9.351)	8.914 (8.574, 9.262)	8.970 (8.632, 9.317)
12–14 years	12.660 (12.431, 12.891)	12.803 (12.573, 13.035)	13.083 (12.851, 13.317)	11.179 (10.874, 11.490)	10.970 (10.667, 11.278)	11.179 (10.874, 11.490)	14.369 (14.027, 14.717)	14.665 (14.319, 15.015)	15.010 (14.662, 15.363)
15–17 years	18.303 (18.031, 18.577)	18.292 (18.021, 18.565)	18.635 (18.364, 18.907)	16.129 (15.769, 16.495)	15.944 (15.581, 16.311)	16.129 (15.769, 16.495)	20.981 (20.577, 21.389)	20.619 (20.219, 21.023)	21.138 (20.737, 21.543)
18–19 years	20.622 (20.284, 20.963)	21.019 (20.672, 21.369)	21.684 (21.330, 22.041)	17.833 (17.369, 18.305)	17.833 (17.369, 18.305)	18.690 (18.213, 19.174)	23.266 (22.772, 23.766)	24.100 (23.588, 24.616)	24.577 (24.058, 25.102)
20–24 years	22.962 (22.746, 23.180)	23.501 (23.282, 23.722)	24.355 (24.131, 24.581)	19.222 (18.929, 19.518)	19.797 (19.498, 20.099)	20.485 (20.179, 20.794)	26.363 (26.049, 26.678)	26.848 (26.532, 27.167)	27.846 (27.522, 28.171)
25–29 years	23.404 (23.172, 23.638)	24.826 (24.590, 25.062)	26.019 (25.782, 26.257)	18.955 (18.643, 19.269)	20.377 (20.000, 20.658)	21.338 (21.017, 21.662)	27.436 (27.098, 27.776)	28.894 (28.554, 29.236)	30.203 (29.862, 30.545)
30–34 years	23.644 (23.391, 23.898)	24.598 (24.346, 24.850)	25.859 (25.607, 26.112)	18.773 (18.437, 19.112)	19.597 (19.262, 19.935)	20.805 (20.467, 21.147)	28.101 (27.731, 28.473)	29.153 (28.781, 29.522)	30.430 (30.064, 30.797)
35–39 years	24.086 (23.808, 24.365)	25.292 (25.013, 25.573)	26.489 (26.209, 26.771)	19.457 (19.085, 19.832)	20.568 (20.193, 20.947)	21.654 (21.277, 22.036)	28.308 (27.903, 28.715)	29.599 (29.193, 30.007)	30.901 (30.495, 31.309)
40–44 years	24.033 (23.749, 24.320)	25.119 (24.832, 25.408)	26.335 (26.044, 26.627)	19.289 (18.907, 19.674)	20.500 (20.111, 20.894)	21.565 (21.171, 21.963)	28.285 (27.872, 28.701)	29.222 (28.808, 29.638)	30.612 (30.194, 31.034)
45–49 years	25.984 (25.698, 26.271)	26.941 (26.648, 27.235)	28.231 (27.930, 28.533)	21.007 (20.622, 21.397)	21.806 (21.411, 22.206)	23.012 (22.603, 23.424)	30.457 (30.043, 30.873)	31.547 (31.125, 31.972)	32.901 (32.469, 33.335)
50–54 years	27.761 (27.463, 28.059)	28.552 (28.257, 28.849)	29.306 (29.011, 29.602)	22.917 (22.508, 23.330)	23.748 (23.340, 24.159)	24.379 (23.971, 24.790)	31.949 (31.526, 32.374)	32.728 (32.309, 33.150)	33.593 (33.174, 34.014)
55–59 years	28.764 (28.434, 29.096)	29.928 (29.601, 30.256)	30.877 (30.554, 31.201)	23.998 (23.536, 24.465)	24.988 (24.530, 25.450)	25.748 (25.297, 26.203)	32.710 (32.247, 33.175)	34.053 (33.594, 34.514)	35.192 (34.740, 35.647)
60–64 years	27.358 (26.990, 27.727)	28.804 (28.440, 29.170)	30.445 (30.083, 30.809)	23.595 (23.072, 24.124)	24.694 (24.177, 25.217)	26.136 (25.620, 26.657)	30.397 (29.887, 30.910)	32.134 (31.628, 32.642)	33.933 (33.432, 34.438)
65–69 years	23.448 (23.038, 23.861)	25.389 (24.979, 25.802)	27.368 (26.963, 27.776)	20.834 (20.245, 21.433)	22.640 (22.048, 23.240)	24.096 (23.512, 24.687)	25.521 (24.957, 26.092)	27.565 (27.002, 28.133)	29.966 (29.409, 30.529)
70–74 years	21.037 (20.576, 21.504)	22.790 (22.325, 23.260)	24.473 (24.006, 24.945)	19.601 (18.924, 20.292)	21.042 (20.363, 21.734)	22.354 (21.673, 23.046)	22.161 (21.533, 22.797)	24.163 (23.529, 24.805)	26.149 (25.510, 26.796)
75–79 years	19.936 (19.398, 20.483)	21.489 (20.946, 22.038)	22.929 (22.395, 23.490)	19.097 (18.290, 19.925)	20.424 (19.614, 21.252)	22.069 (21.252, 22.903)	20.565 (19.845, 21.299)	22.292 (21.564, 23.032)	23.594 (22.867, 24.333)
80–84 years	19.177 (18.514, 19.853)	20.670 (20.003, 21.349)	22.353 (21.678, 23.038)	19.215 (18.168, 20.291)	19.829 (18.792, 20.897)	21.406 (20.356, 22.486)	19.152 (18.298, 20.030)	21.227 (20.360, 22.114)	22.977 (22.100, 23.872)
85 years +	18.287 (17.604, 18.984)	19.820 (19.128, 20.525)	21.138 (20.439, 21.851)	17.925 (16.772, 19.123)	19.904 (18.729, 21.119)	20.906 (19.738, 22.111)	18.475 (17.631, 19.342)	19.775 (18.921, 20.650)	21.265 (20.395, 22.156)
Crude Total (All)	18.601 (18.540, 18.663)	19.444 (19.382, 19.507)	20.371 (20.308, 20.434)	16.006 (15.922, 16.090)	16.006 (15.922, 16.090)	16.794 (16.710, 16.879)	21.676 (21.585, 21.767)	22.597 (22.506, 22.689)	23.649 (23.557, 23.742)
Age-adjust³ (All)	19.689 (19.617, 19.762)	20.533 (20.460, 20.607)	21.468 (21.394, 21.543)	16.346 (16.250, 16.442)	17.002 (17.004, 17.199)	17.905 (17.805, 18.004)	22.637 (22.550, 22.744)	23.560 (23.452, 23.668)	24.614 (24.504, 24.724)
Crude Total (40+)	25.397 (25.277, 25.516)	26.609 (26.489, 26.729)	27.888 (27.768, 28.008)	21.477 (21.310, 21.644)	22.590 (22.421, 22.758)	23.700 (23.531, 23.869)	28.661 (28.493, 28.829)	29.955 (29.787, 30.123)	31.382 (31.214, 31.551)
Age-adjust³ (40+)	24.802 (24.667, 24.937)	26.045 (25.908, 26.181)	27.347 (27.208, 27.485)	21.186 (21.000, 21.372)	22.297 (22.108, 22.486)	23.416 (23.225, 23.607)	27.682 (27.490, 27.874)	29.035 (28.840, 29.229)	30.498 (30.301, 30.695)

¹ Codes used are given in the glossary of ICD-9 and CPT codes used in this report. Determined at clinical level and cannot be disambiguated by plus minus cylinder considerations.
² Confidence intervals (CIs) are calculated by Clopper Pearson Exact method.
³ Age adjustment was based on projected U.S. population by Bureau of the Census for the year 2000.

ASTIGMATISM

In Fiscal Year 2014, the estimated age-adjusted diagnostic prevalence of astigmatism for both sexes is 12.821 percent for all ages, and 17.741 percent for ages forty and above. In fiscal year 2014, the estimated age-adjusted diagnostic prevalence of astigmatism for all ages in females is 13.499 percent and 12.093 percent in males. For ages 40 and above in fiscal year 2014, the estimated age-adjusted diagnostic prevalence of the condition in females is 18.552 percent and 16.795 percent in males.

CHART 1.4A Diagnostic Prevalence Rates for Astigmatism by Age and Gender
American Indian and Alaska Native, FY 2014

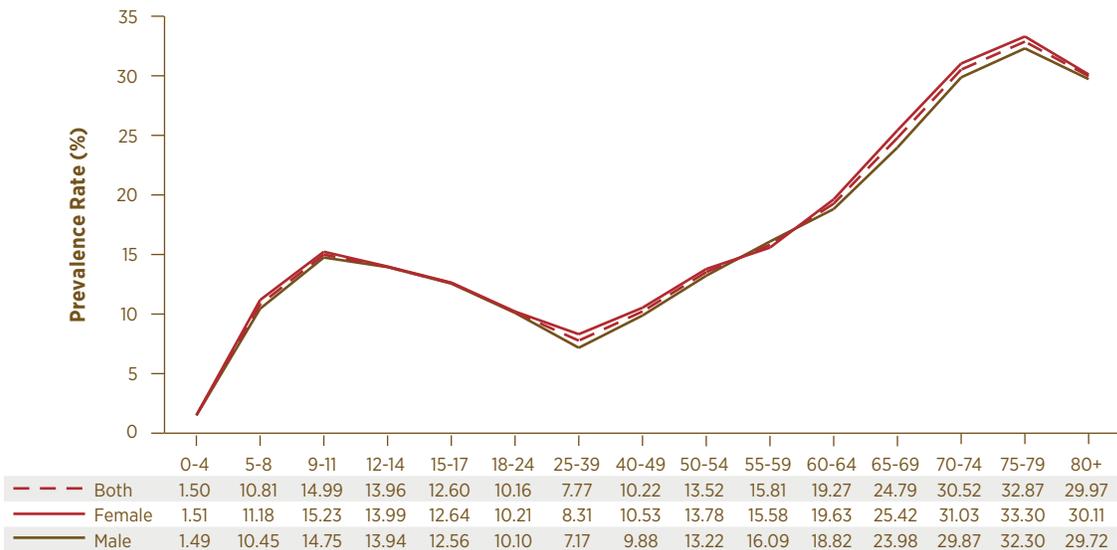


CHART 1.4B Diagnostic Prevalence Rates for Astigmatism by Age and Gender (Age 40 and Older)
American Indian and Alaska Native, FY 2014

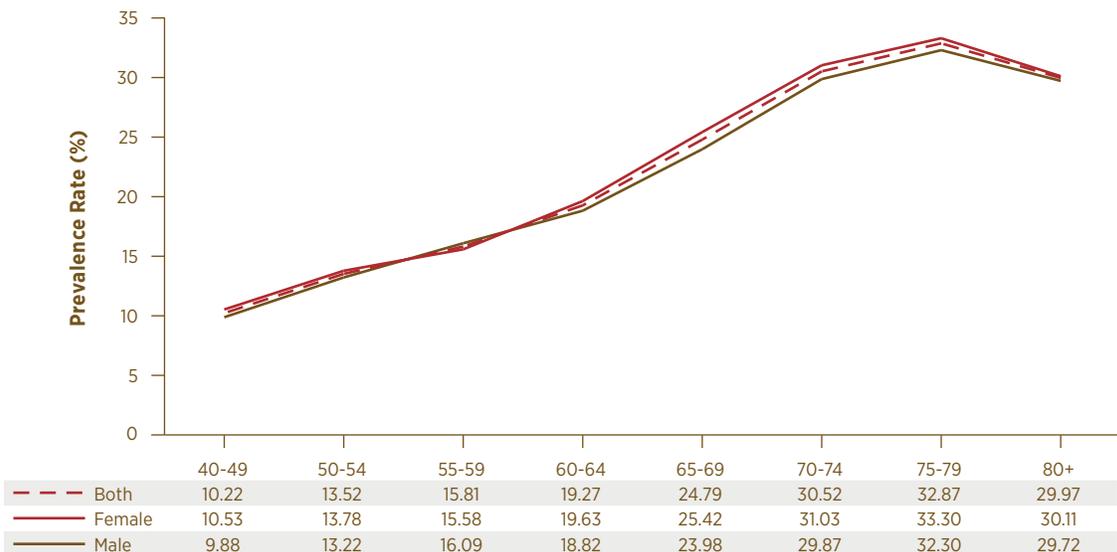


TABLE 1.4 Estimated Diagnostic Prevalence Rates of Astigmatism¹ by Age and Gender
American Indians and Alaska Natives, IHS Service Area, 2012–2014. (Rate and 95% CIs² per 100 Population)

Age Group	American Indian and Alaska Native								
	Both Sexes			Male			Female		
	FY 2012	FY 2013	FY 2014	FY 2012	FY 2013	FY 2014	FY 2012	FY 2013	FY 2014
Under 1 year	0.016 (0.003, 0.046)	0.058 (0.029, 0.104)	0.052 (0.025, 0.096)	0.020 (0.002, 0.073)	0.041 (0.01, 0.105)	0.051 (0.016, 0.118)	0.011 (0, 0.059)	0.077 (0.031, 0.158)	0.054 (0.018, 0.126)
1 year	0.170 (0.123, 0.230)	0.152 (0.107, 0.210)	0.266 (0.205, 0.339)	0.164 (0.102, 0.251)	0.129 (0.074, 0.209)	0.225 (0.150, 0.325)	0.177 (0.109, 0.270)	0.177 (0.109, 0.270)	0.309 (0.217, 0.428)
2–4 years	1.985 (1.893, 2.079)	2.109 (2.013, 2.208)	2.201 (2.102, 2.304)	1.851 (1.728, 1.981)	1.986 (1.856, 2.122)	2.210 (2.072, 2.355)	2.122 (1.988, 2.262)	2.236 (2.096, 2.383)	2.192 (2.051, 2.339)
5 years	6.754 (6.475, 7.042)	6.461 (6.188, 6.743)	6.996 (6.709, 7.292)	6.480 (6.098, 6.879)	6.241 (5.864, 6.634)	6.572 (6.183, 6.978)	7.037 (6.633, 7.457)	6.687 (6.293, 7.097)	7.435 (7.016, 7.871)
6–8 years	11.583 (11.372, 11.797)	11.803 (11.592, 12.016)	12.064 (11.853, 12.278)	11.319 (11.026, 11.618)	11.491 (11.198, 11.788)	11.730 (11.437, 12.028)	11.854 (11.551, 12.163)	12.123 (11.819, 12.432)	12.409 (12.104, 12.719)
9 years	13.581 (13.177, 13.993)	14.323 (13.913, 14.741)	14.949 (14.538, 15.367)	13.297 (12.734, 13.874)	14.150 (13.578, 14.736)	14.618 (14.043, 15.207)	13.873 (13.293, 14.468)	14.502 (13.916, 15.102)	15.281 (14.695, 15.882)
10–11 years	13.920 (13.628, 14.216)	14.371 (14.075, 14.670)	15.012 (14.713, 15.313)	13.932 (13.521, 14.351)	14.247 (13.834, 14.668)	14.826 (14.409, 15.249)	13.908 (13.495, 14.329)	14.497 (14.076, 14.926)	15.202 (14.776, 15.636)
12–14 years	13.001 (12.770, 13.235)	13.499 (13.264, 13.737)	13.964 (13.726, 14.205)	12.699 (12.378, 13.026)	13.368 (13.039, 13.703)	13.940 (13.604, 14.280)	13.310 (12.978, 13.646)	13.631 (13.296, 13.972)	13.989 (13.651, 14.332)
15–17 years	11.710 (11.484, 11.938)	12.151 (11.922, 12.382)	12.604 (12.373, 12.836)	11.577 (11.259, 11.900)	11.978 (11.656, 12.304)	12.563 (12.238, 12.893)	11.842 (11.522, 12.167)	12.322 (11.998, 12.651)	12.644 (12.319, 12.975)
18–19 years	10.323 (10.069, 10.580)	10.694 (10.432, 10.961)	11.490 (11.217, 11.768)	10.320 (9.958, 10.690)	10.800 (10.425, 11.184)	11.376 (10.988, 11.772)	10.325 (9.971, 10.688)	10.592 (10.226, 10.967)	11.600 (11.216, 11.993)
20–24 years	8.587 (8.443, 8.733)	9.120 (8.971, 9.270)	9.662 (9.508, 9.818)	8.323 (8.118, 8.531)	8.920 (8.707, 9.137)	9.607 (9.384, 9.834)	8.828 (8.627, 9.032)	9.300 (9.093, 9.510)	9.711 (9.498, 9.928)
25–29 years	7.340 (7.197, 7.484)	7.677 (7.532, 7.823)	8.154 (8.007, 8.303)	6.723 (6.524, 6.925)	7.092 (6.890, 7.298)	7.622 (7.414, 7.833)	7.899 (7.696, 8.106)	8.205 (8.000, 8.414)	8.630 (8.423, 8.841)
30–34 years	6.844 (6.694, 6.996)	7.015 (6.866, 7.165)	7.357 (7.207, 7.509)	6.159 (5.954, 6.370)	6.273 (6.070, 6.482)	6.633 (6.427, 6.845)	7.471 (7.255, 7.690)	7.690 (7.476, 7.908)	8.011 (7.796, 8.230)
35–39 years	7.519 (7.349, 7.693)	7.651 (7.481, 7.824)	7.724 (7.555, 7.895)	7.022 (6.783, 7.266)	7.059 (6.822, 7.301)	7.190 (6.954, 7.432)	7.973 (7.731, 8.220)	8.191 (7.948, 8.438)	8.211 (7.971, 8.455)
40–44 years	8.929 (8.740, 9.121)	9.082 (8.892, 9.275)	9.215 (9.025, 9.408)	8.377 (8.110, 8.650)	8.515 (8.247, 8.789)	8.747 (8.477, 9.022)	9.424 (9.157, 9.696)	9.586 (9.319, 9.858)	9.636 (9.369, 9.908)
45–49 years	11.011 (10.808, 11.217)	11.133 (10.926, 11.342)	11.256 (11.046, 11.469)	10.527 (10.238, 10.822)	10.793 (10.496, 11.095)	11.042 (10.739, 11.351)	11.446 (11.161, 11.736)	11.438 (11.149, 11.731)	11.448 (11.156, 11.744)
50–54 years	12.932 (12.710, 13.156)	13.217 (12.996, 13.440)	13.518 (13.297, 13.741)	12.849 (12.524, 13.179)	13.010 (12.689, 13.336)	13.220 (12.900, 13.546)	13.003 (12.700, 13.311)	13.397 (13.093, 13.704)	13.777 (13.473, 14.086)
55–59 years	15.381 (15.119, 15.646)	15.524 (15.266, 15.785)	15.814 (15.560, 16.071)	15.377 (14.987, 15.772)	15.583 (15.201, 15.972)	16.094 (15.715, 16.478)	15.385 (15.030, 15.745)	15.475 (15.126, 15.829)	15.579 (15.237, 15.926)
60–64 years	19.448 (19.122, 19.776)	19.215 (18.899, 19.535)	19.266 (18.956, 19.578)	18.914 (18.433, 19.403)	18.756 (18.288, 19.231)	18.820 (18.362, 19.285)	19.878 (19.437, 20.325)	19.588 (19.159, 20.021)	19.626 (19.207, 20.051)
65–69 years	25.591 (25.169, 26.016)	25.303 (24.894, 25.716)	24.786 (24.393, 25.181)	24.460 (23.856, 25.092)	24.366 (23.759, 24.981)	23.984 (23.401, 24.574)	26.488 (25.917, 27.065)	26.045 (25.493, 26.604)	25.422 (24.893, 25.957)
70–74 years	30.698 (30.175, 31.225)	30.306 (29.796, 30.819)	30.518 (30.017, 31.023)	29.780 (28.998, 30.572)	29.563 (28.800, 30.334)	29.868 (29.118, 30.626)	31.416 (30.714, 32.126)	30.889 (30.204, 31.580)	31.033 (30.359, 31.713)
75–79 years	31.919 (31.288, 32.554)	32.461 (31.841, 33.085)	32.872 (32.263, 33.486)	31.258 (30.301, 32.228)	31.951 (31.010, 32.903)	32.305 (31.380, 33.240)	32.414 (31.571, 33.260)	32.845 (32.022, 33.677)	33.300 (32.491, 34.117)
80–84 years	30.224 (29.448, 31.009)	31.705 (30.936, 32.481)	32.138 (31.380, 32.904)	30.165 (28.941, 31.411)	31.840 (30.621, 33.078)	31.721 (30.523, 32.937)	30.263 (29.261, 31.281)	31.616 (30.625, 32.619)	32.414 (31.435, 33.405)
85 years +	25.516 (24.745, 26.300)	26.394 (25.628, 27.172)	27.551 (26.764, 28.307)	26.264 (24.934, 27.628)	26.676 (25.369, 28.014)	27.199 (25.916, 28.512)	25.128 (24.182, 26.092)	26.246 (25.300, 27.208)	27.712 (26.757, 28.682)
Crude Total (All)	11.212 (11.162, 11.262)	11.551 (11.501, 11.602)	11.957 (11.906, 12.008)	10.642 (10.572, 10.713)	11.000 (10.929, 11.071)	11.443 (11.371, 11.515)	11.736 (11.665, 11.807)	12.057 (11.986, 12.128)	12.427 (12.356, 12.499)
Age-adj³ (All)	12.292 (12.234, 12.350)	12.528 (12.470, 12.586)	12.821 (12.763, 12.879)	11.515 (11.434, 11.596)	11.767 (11.686, 11.848)	12.093 (12.012, 12.174)	13.009 (12.925, 13.092)	13.232 (13.148, 13.315)	13.499 (13.416, 13.582)
Crude Total (40+)	16.577 (16.475, 16.679)	16.829 (16.728, 16.931)	17.125 (17.024, 17.226)	15.874 (15.725, 16.023)	16.174 (16.026, 16.322)	16.509 (16.362, 16.657)	17.162 (17.022, 17.303)	17.375 (17.236, 17.514)	17.639 (17.500, 17.777)
Age-adj³ (40+)	17.393 (17.276, 17.511)	17.555 (17.439, 17.671)	17.741 (17.626, 17.856)	16.398 (16.230, 16.565)	16.588 (16.423, 16.754)	16.795 (16.631, 16.960)	18.233 (18.070, 18.397)	18.373 (18.211, 18.534)	18.552 (18.392, 18.712)

¹ Codes used are given in the glossary of ICD-9 and CPT codes used in this report. Determined at clinical level and cannot be disambiguated by plus minus cylinder considerations.
² Confidence intervals (CIs) are calculated by Clopper Pearson Exact method.
³ Age adjustment was based on projected U.S. population by Bureau of the Census for the year 2000.

MYOPIA

In Fiscal Year 2014, the estimated age-adjusted diagnostic prevalence of myopia for both sexes is 5.473 percent for all ages, and 5.321 percent for ages forty and above. In fiscal year 2014, the estimated age-adjusted diagnostic prevalence of myopia for all ages in females is 6.196 percent and 4.646 percent in males. For ages 40 and above in fiscal year 2014, the estimated age-adjusted diagnostic prevalence of the condition in females is 5.897 percent and 4.594 percent in males.

CHART 1.5A Diagnostic Prevalence Rates for Myopia by Age and Gender
American Indian and Alaska Native, FY 2014

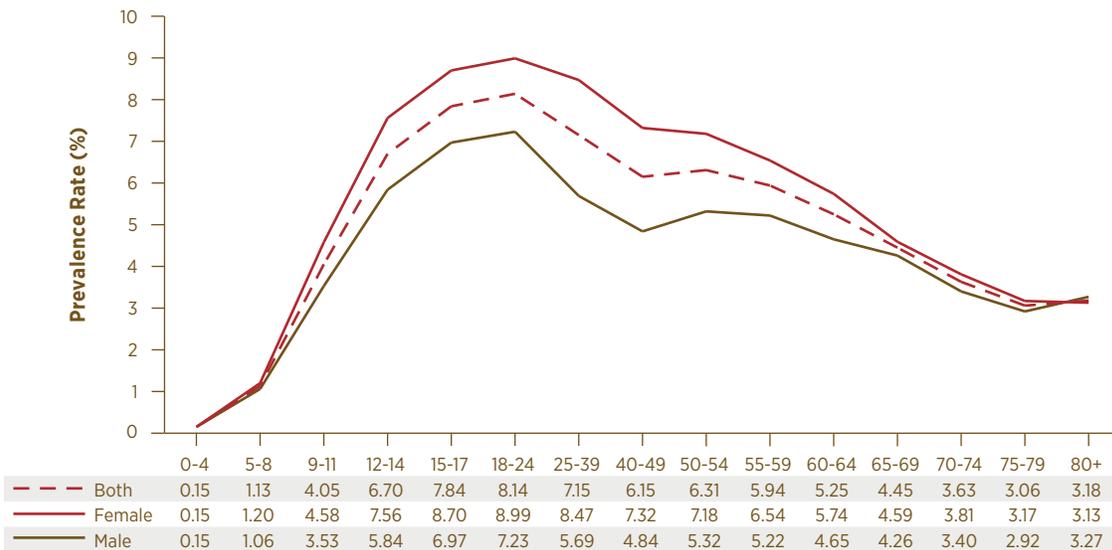


CHART 1.5B Diagnostic Prevalence Rates for Myopia by Age and Gender (Age 40 and Older)
American Indian and Alaska Native, FY 2014



TABLE 1.5 Estimated Diagnostic Prevalence Rates of Myopia¹ by Age and Gender
American Indians and Alaska Natives, IHS Service Area, 2012-2014. (Rate and 95% CI² per 100 Population)

Age Group	Both Sexes						Male			Female		
	American Indian and Alaska Native											
	FY 2012	FY 2013	FY 2014	FY 2012	FY 2013	FY 2014	FY 2012	FY 2013	FY 2014	FY 2012	FY 2013	FY 2014
Under 1 year	0.016 (0.003, 0.046)	0 (0, 0.019)	0.026 (0.008, 0.061)	0.030 (0.006, 0.089)	0 (0, 0.038)	0.030 (0.006, 0.089)	0 (0, 0.040)	0.030 (0.006, 0.089)	0 (0, 0.040)	0 (0, 0.039)	0 (0, 0.040)	0.022 (0.003, 0.078)
1 year	0.012 (0.003, 0.036)	0.041 (0.020, 0.076)	0.037 (0.017, 0.071)	0.016 (0.002, 0.057)	0.040 (0.013, 0.094)	0.016 (0.002, 0.058)	0.008 (0, 0.047)	0.016 (0.002, 0.058)	0.008 (0, 0.047)	0.008 (0, 0.047)	0.042 (0.014, 0.098)	0.060 (0.024, 0.124)
2-4 years	0.169 (0.143, 0.199)	0.154 (0.129, 0.183)	0.212 (0.182, 0.246)	0.160 (0.125, 0.202)	0.130 (0.098, 0.169)	0.214 (0.172, 0.263)	0.179 (0.141, 0.223)	0.130 (0.098, 0.169)	0.179 (0.141, 0.223)	0.179 (0.141, 0.223)	0.179 (0.140, 0.224)	0.210 (0.168, 0.260)
5 years	0.468 (0.395, 0.552)	0.478 (0.404, 0.562)	0.489 (0.413, 0.575)	0.381 (0.290, 0.491)	0.428 (0.331, 0.544)	0.396 (0.302, 0.509)	0.559 (0.446, 0.691)	0.428 (0.331, 0.544)	0.559 (0.446, 0.691)	0.559 (0.446, 0.691)	0.530 (0.421, 0.659)	0.586 (0.469, 0.723)
6-8 years	1.413 (1.336, 1.493)	1.349 (1.274, 1.427)	1.341 (1.267, 1.418)	1.288 (1.186, 1.398)	1.187 (1.089, 1.291)	1.285 (1.184, 1.392)	1.541 (1.427, 1.662)	1.187 (1.089, 1.291)	1.541 (1.427, 1.662)	1.541 (1.427, 1.662)	1.516 (1.404, 1.634)	1.400 (1.293, 1.513)
9 years	3.252 (3.045, 3.470)	2.912 (2.718, 3.117)	3.19 (2.989, 3.400)	2.817 (2.548, 3.107)	2.586 (2.330, 2.861)	2.665 (2.408, 2.942)	3.698 (3.386, 4.031)	2.586 (2.330, 2.861)	3.698 (3.386, 4.031)	3.698 (3.386, 4.031)	3.248 (2.957, 3.558)	3.715 (3.411, 4.039)
10-11 years	4.736 (4.557, 4.919)	4.616 (4.441, 4.797)	4.500 (4.328, 4.677)	4.158 (3.923, 4.404)	3.905 (3.678, 4.142)	3.981 (3.754, 4.218)	5.319 (5.053, 5.595)	3.905 (3.678, 4.142)	5.319 (5.053, 5.595)	5.319 (5.053, 5.595)	5.343 (5.076, 5.620)	5.033 (4.775, 5.300)
12-14 years	6.618 (6.448, 6.792)	6.552 (6.382, 6.725)	6.698 (6.527, 6.872)	5.892 (5.666, 6.125)	5.867 (5.640, 6.100)	5.843 (5.617, 6.075)	7.358 (7.104, 7.619)	5.867 (5.640, 6.100)	7.358 (7.104, 7.619)	7.358 (7.104, 7.619)	7.248 (6.996, 7.507)	7.563 (7.307, 7.826)
15-17 years	8.044 (7.853, 8.238)	8.049 (7.859, 8.242)	7.838 (7.652, 8.027)	7.083 (6.829, 7.343)	7.042 (6.790, 7.301)	6.974 (6.725, 7.229)	9.000 (8.717, 9.289)	7.042 (6.790, 7.301)	9.000 (8.717, 9.289)	9.000 (8.717, 9.289)	9.046 (8.764, 9.335)	8.700 (8.425, 8.982)
18-19 years	8.222 (7.994, 8.455)	8.150 (7.918, 8.387)	8.156 (7.921, 8.394)	7.252 (6.945, 7.569)	7.396 (7.080, 7.721)	7.283 (6.967, 7.609)	9.154 (8.818, 9.497)	7.396 (7.080, 7.721)	9.154 (8.818, 9.497)	9.154 (8.818, 9.497)	8.879 (8.541, 9.226)	8.999 (8.656, 9.351)
20-24 years	8.376 (8.234, 8.520)	8.356 (8.213, 8.501)	8.140 (7.997, 8.285)	7.255 (7.062, 7.451)	7.254 (7.060, 7.452)	7.209 (7.013, 7.408)	9.395 (9.189, 9.605)	7.255 (7.062, 7.451)	9.395 (9.189, 9.605)	9.395 (9.189, 9.605)	9.352 (9.145, 9.562)	8.980 (8.775, 9.189)
25-29 years	7.488 (7.344, 7.634)	7.719 (7.575, 7.866)	7.831 (7.687, 7.978)	6.012 (5.824, 6.204)	6.333 (6.141, 6.528)	6.537 (6.344, 6.734)	8.826 (8.612, 9.044)	6.333 (6.141, 6.528)	8.826 (8.612, 9.044)	8.826 (8.612, 9.044)	8.971 (8.757, 9.188)	8.989 (8.777, 9.204)
30-34 years	6.662 (6.515, 6.812)	6.827 (6.681, 6.976)	6.935 (6.789, 7.082)	5.147 (4.958, 5.340)	5.241 (5.054, 5.433)	5.335 (5.149, 5.526)	8.050 (7.827, 8.277)	5.241 (5.054, 5.433)	8.050 (7.827, 8.277)	8.050 (7.827, 8.277)	8.272 (8.051, 8.497)	8.381 (8.162, 8.604)
35-39 years	6.057 (5.903, 6.213)	6.249 (6.094, 6.407)	6.470 (6.314, 6.628)	4.487 (4.294, 4.686)	4.686 (4.491, 4.887)	4.945 (4.747, 5.148)	7.488 (7.253, 7.728)	4.686 (4.491, 4.887)	7.488 (7.253, 7.728)	7.488 (7.253, 7.728)	7.674 (7.439, 7.914)	7.862 (7.627, 8.101)
40-44 years	5.906 (5.750, 6.065)	5.951 (5.796, 6.110)	6.055 (5.898, 6.214)	4.502 (4.303, 4.707)	4.596 (4.395, 4.802)	4.666 (4.465, 4.873)	7.164 (6.929, 7.404)	4.596 (4.395, 4.802)	7.164 (6.929, 7.404)	7.164 (6.929, 7.404)	7.156 (6.923, 7.394)	7.300 (7.066, 7.544)
45-49 years	6.205 (6.049, 6.364)	6.238 (6.079, 6.399)	6.244 (6.084, 6.408)	5.044 (4.838, 5.255)	5.092 (4.883, 5.308)	5.023 (4.813, 5.240)	7.249 (7.018, 7.486)	5.092 (4.883, 5.308)	7.249 (7.018, 7.486)	7.249 (7.018, 7.486)	7.265 (7.031, 7.505)	7.338 (7.099, 7.581)
50-54 years	6.270 (6.110, 6.433)	6.270 (6.113, 6.431)	6.313 (6.156, 6.473)	5.200 (4.985, 5.421)	5.230 (5.018, 5.448)	5.315 (5.104, 5.532)	7.196 (6.963, 7.434)	5.230 (5.018, 5.448)	7.196 (6.963, 7.434)	7.196 (6.963, 7.434)	7.174 (6.945, 7.409)	7.182 (6.955, 7.415)
55-59 years	5.862 (5.692, 6.036)	5.985 (5.817, 6.157)	5.938 (5.774, 6.105)	5.189 (4.951, 5.435)	5.221 (4.987, 5.462)	5.222 (4.994, 5.457)	6.419 (6.180, 6.666)	5.221 (4.987, 5.462)	6.419 (6.180, 6.666)	6.419 (6.180, 6.666)	6.624 (6.385, 6.869)	6.541 (6.308, 6.779)
60-64 years	5.123 (4.943, 5.308)	5.177 (5.000, 5.358)	5.252 (5.078, 5.430)	4.641 (4.385, 4.908)	4.689 (4.438, 4.950)	4.649 (4.404, 4.903)	5.512 (5.261, 5.771)	4.689 (4.438, 4.950)	5.512 (5.261, 5.771)	5.512 (5.261, 5.771)	5.572 (5.326, 5.825)	5.740 (5.496, 5.991)
65-69 years	4.079 (3.890, 4.275)	4.301 (4.112, 4.496)	4.446 (4.260, 4.637)	3.846 (3.571, 4.136)	4.174 (3.895, 4.467)	4.263 (3.991, 4.549)	4.264 (4.006, 4.534)	4.174 (3.895, 4.467)	4.264 (4.006, 4.534)	4.264 (4.006, 4.534)	4.401 (4.146, 4.667)	4.591 (4.339, 4.853)
70-74 years	3.653 (3.443, 3.872)	3.578 (3.375, 3.790)	3.629 (3.428, 3.839)	3.513 (3.204, 3.842)	3.375 (3.079, 3.690)	3.400 (3.109, 3.711)	3.762 (3.479, 4.061)	3.513 (3.204, 3.842)	3.762 (3.479, 4.061)	3.762 (3.479, 4.061)	3.738 (3.462, 4.030)	3.811 (3.536, 4.100)
75-79 years	2.915 (2.691, 3.151)	3.024 (2.801, 3.259)	3.063 (2.844, 3.295)	2.712 (2.386, 3.069)	2.895 (2.566, 3.254)	2.923 (2.599, 3.275)	3.066 (2.765, 3.391)	2.895 (2.566, 3.254)	3.066 (2.765, 3.391)	3.066 (2.765, 3.391)	3.120 (2.823, 3.440)	3.169 (2.875, 3.484)
80-84 years	3.194 (2.903, 3.505)	3.008 (2.732, 3.303)	3.077 (2.802, 3.370)	3.044 (2.602, 3.539)	3.016 (2.584, 3.498)	3.144 (2.710, 3.627)	3.294 (2.914, 3.707)	3.016 (2.584, 3.498)	3.294 (2.914, 3.707)	3.294 (2.914, 3.707)	3.002 (2.649, 3.388)	3.032 (2.683, 3.412)
85 years +	3.311 (3.001, 3.644)	3.363 (3.055, 3.692)	3.300 (3.000, 3.622)	3.547 (3.006, 4.153)	3.546 (3.018, 4.138)	3.419 (2.912, 3.986)	3.189 (2.816, 3.597)	3.546 (3.018, 4.138)	3.419 (2.912, 3.986)	3.419 (2.912, 3.986)	3.266 (2.893, 3.672)	3.235 (2.867, 3.636)
Crude Total (All)	5.439 (5.403, 5.476)	5.481 (5.445, 5.517)	5.510 (5.474, 5.545)	4.551 (4.503, 4.599)	4.600 (4.552, 4.648)	4.648 (4.600, 4.696)	6.256 (6.203, 6.309)	4.600 (4.552, 4.648)	6.256 (6.203, 6.309)	6.256 (6.203, 6.309)	6.289 (6.236, 6.342)	6.299 (6.247, 6.352)
Age-adj³ (All)	5.389 (5.353, 5.426)	5.433 (5.397, 5.470)	5.473 (5.436, 5.509)	4.539 (4.490, 4.588)	4.594 (4.546, 4.643)	4.646 (4.597, 4.695)	6.135 (6.081, 6.189)	4.594 (4.546, 4.643)	6.135 (6.081, 6.189)	6.135 (6.081, 6.189)	6.167 (6.113, 6.221)	6.196 (6.142, 6.249)
Crude Total (40+)	5.393 (5.331, 5.455)	5.429 (5.367, 5.490)	5.458 (5.397, 5.519)	4.608 (4.523, 4.694)	4.666 (4.582, 4.752)	4.681 (4.597, 4.766)	6.047 (5.958, 6.136)	4.666 (4.582, 4.752)	6.047 (5.958, 6.136)	6.047 (5.958, 6.136)	6.063 (5.976, 6.152)	6.106 (6.020, 6.194)
Age-adj³ (40+)	5.228 (5.166, 5.290)	5.274 (5.213, 5.335)	5.321 (5.260, 5.382)	4.505 (4.419, 4.590)	4.570 (4.485, 4.655)	4.594 (4.509, 4.678)	5.800 (5.712, 5.887)	4.570 (4.485, 4.655)	5.800 (5.712, 5.887)	5.800 (5.712, 5.887)	5.828 (5.741, 5.915)	5.897 (5.810, 5.983)

¹ Codes used are given in the glossary of ICD-9 and CPT codes used in this report. Determined at clinical level and cannot be disambiguated by plus minus cylinder considerations.
² Confidence intervals (CIs) are calculated by Clopper Pearson Exact method.
³ Age adjustment was based on projected U.S. population by Bureau of the Census for the year 2000.

HYPERMETROPIA

In Fiscal Year 2014, the estimated age-adjusted diagnostic prevalence of hypermetropia for both sexes is 17.832 percent for all ages, and 24.440 percent for ages forty and above. In fiscal year 2014, the estimated age-adjusted diagnostic prevalence of hypermetropia for all ages in females is 19.623 percent and 15.862 percent in males. For ages 40 and above in fiscal year 2014, the estimated age-adjusted diagnostic prevalence of the condition in females is 26.655 percent and 21.795 percent in males.

CHART 1.6A Diagnostic Prevalence Rates for Hypermetropia by Age and Gender
American Indian and Alaska Native, FY 2014

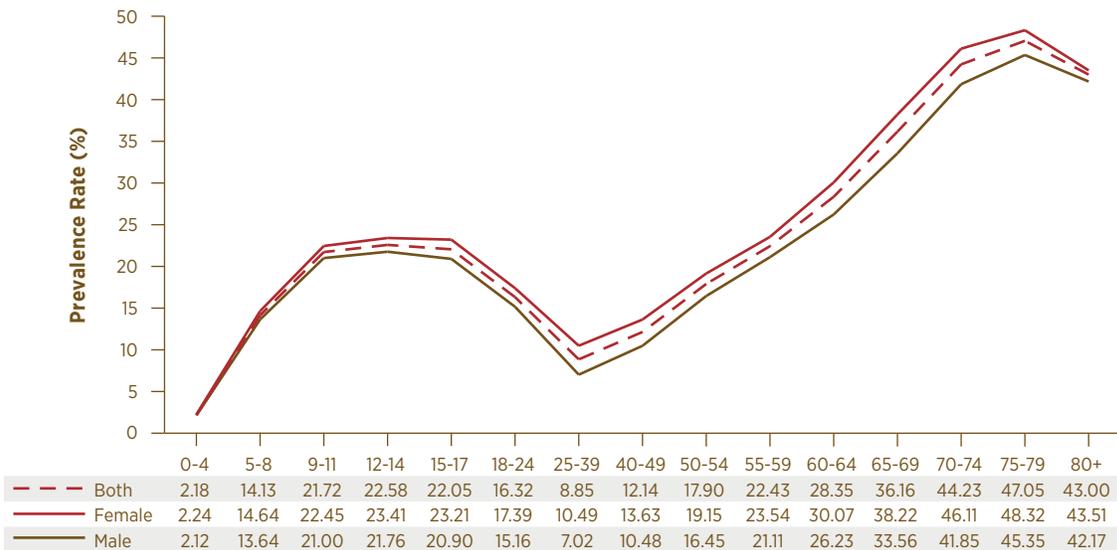


CHART 1.6B Diagnostic Prevalence Rates for Hypermetropia by Age and Gender (Age 40 and Older)
American Indian and Alaska Native, FY 2014

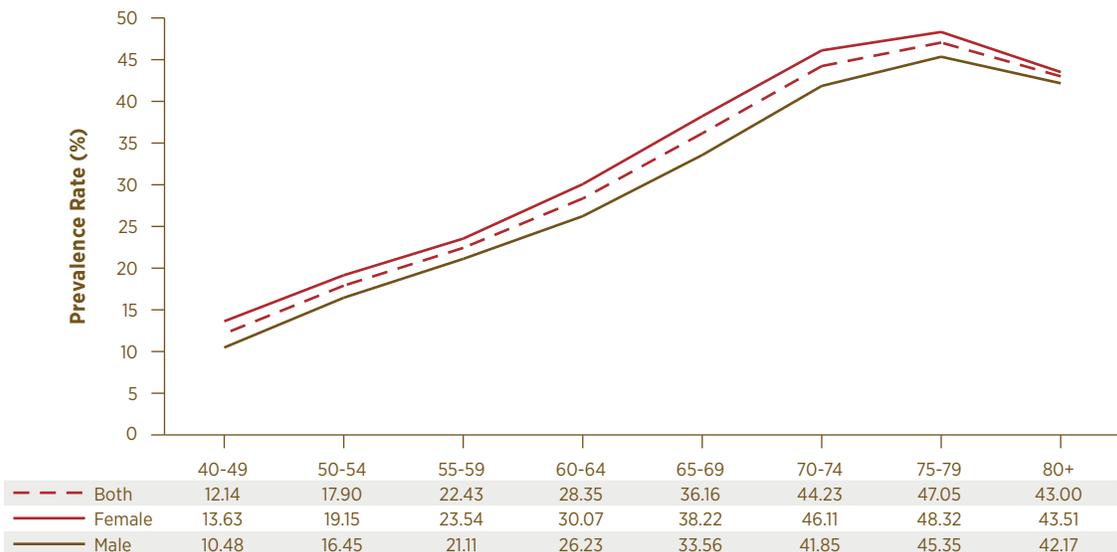


TABLE 1.6 Estimated Diagnostic Prevalence Rates of Hypertropia¹ by Age and Gender
American Indians and Alaska Natives, IHS Service Area, 2012–2014. (Rate and 95% CI² per 100 Population)

Age Group	American Indian and Alaska Native								
	Both Sexes			Male			Female		
	FY 2012	FY 2013	FY 2014	FY 2012	FY 2013	FY 2014	FY 2012	FY 2013	FY 2014
Under 1 year	0.052 (0.025, 0.096)	0.106 (0.065, 0.163)	0.125 (0.080, 0.186)	0.081 (0.035, 0.160)	0.123 (0.063, 0.214)	0.122 (0.063, 0.212)	0.021 (0.003, 0.077)	0.087 (0.038, 0.172)	0.129 (0.067, 0.226)
1 year	0.389 (0.315, 0.475)	0.457 (0.376, 0.550)	0.561 (0.470, 0.663)	0.423 (0.318, 0.551)	0.403 (0.299, 0.531)	0.563 (0.439, 0.710)	0.353 (0.255, 0.477)	0.514 (0.393, 0.659)	0.559 (0.431, 0.711)
2-4 years	2.928 (2.817, 3.042)	2.956 (2.843, 3.073)	3.127 (3.009, 3.248)	2.779 (2.628, 2.936)	2.854 (2.699, 3.016)	3.048 (2.886, 3.217)	3.081 (2.920, 3.248)	3.062 (2.898, 3.233)	3.208 (3.039, 3.385)
5 years	8.441 (8.132, 8.759)	8.768 (8.453, 9.091)	9.040 (8.717, 9.371)	8.236 (7.808, 8.680)	8.483 (8.048, 8.934)	8.761 (8.315, 9.222)	8.653 (8.208, 9.114)	9.059 (8.606, 9.528)	9.329 (8.864, 9.812)
6-8 years	15.138 (14.901, 15.377)	15.437 (15.200, 15.675)	15.815 (15.578, 16.054)	14.825 (14.496, 15.159)	15.007 (14.679, 15.340)	15.253 (14.925, 15.585)	15.459 (15.120, 15.803)	15.877 (15.537, 16.222)	16.395 (16.052, 16.742)
9 years	19.052 (18.587, 19.523)	19.849 (19.381, 20.323)	20.979 (20.508, 21.455)	18.424 (17.781, 19.081)	19.484 (18.833, 20.148)	20.311 (19.655, 20.979)	19.696 (19.027, 20.377)	20.223 (19.554, 20.906)	21.648 (20.976, 22.333)
10-11 years	20.399 (20.059, 20.743)	21.102 (20.758, 21.449)	22.104 (21.757, 22.454)	19.970 (19.494, 20.452)	20.393 (19.916, 20.877)	21.358 (20.877, 21.844)	20.834 (20.348, 21.326)	21.826 (21.331, 22.327)	22.870 (22.371, 23.376)
12-14 years	20.881 (20.601, 21.163)	21.661 (21.377, 21.947)	22.579 (22.291, 22.869)	19.830 (19.444, 20.220)	20.900 (20.505, 21.299)	21.761 (21.360, 22.165)	21.953 (21.548, 22.361)	22.434 (22.025, 22.846)	23.407 (22.994, 23.825)
15-17 years	19.909 (19.628, 20.192)	20.978 (20.692, 21.265)	22.052 (21.765, 22.342)	18.843 (18.454, 19.237)	19.868 (19.473, 20.268)	20.897 (20.498, 21.300)	20.968 (20.564, 21.376)	22.077 (21.667, 22.491)	23.207 (22.792, 23.625)
18-19 years	16.454 (16.145, 16.767)	18.046 (17.718, 18.377)	19.931 (19.588, 20.277)	15.424 (14.994, 15.861)	17.096 (16.639, 17.560)	18.886 (18.407, 19.372)	17.443 (17.000, 17.892)	18.964 (18.496, 19.439)	20.940 (20.451, 21.437)
20-24 years	12.067 (11.900, 12.236)	13.423 (13.247, 13.600)	14.984 (14.797, 15.172)	10.659 (10.430, 10.892)	12.068 (11.824, 12.315)	13.733 (13.472, 13.997)	13.348 (13.107, 13.592)	14.647 (14.395, 14.902)	16.111 (15.846, 16.379)
25-29 years	7.921 (7.773, 8.071)	8.919 (8.764, 9.075)	9.971 (9.809, 10.133)	6.328 (6.135, 6.524)	7.243 (7.059, 7.451)	8.268 (8.053, 8.487)	9.365 (9.145, 9.589)	10.431 (10.202, 10.663)	11.491 (11.255, 11.730)
30-34 years	6.878 (6.728, 7.030)	7.353 (7.201, 7.507)	7.957 (7.802, 8.114)	5.154 (4.965, 5.348)	5.487 (5.296, 5.683)	5.928 (5.732, 6.129)	8.456 (8.228, 8.688)	9.055 (8.822, 9.287)	9.791 (9.556, 10.030)
35-39 years	7.724 (7.551, 7.899)	8.107 (7.932, 8.284)	8.367 (8.192, 8.545)	6.246 (6.020, 6.478)	6.391 (6.165, 6.623)	6.627 (6.400, 6.860)	9.071 (8.815, 9.333)	9.672 (9.410, 9.938)	9.955 (9.693, 10.221)
40-44 years	9.923 (9.725, 10.125)	10.322 (10.121, 10.526)	10.610 (10.407, 10.815)	8.203 (7.939, 8.473)	8.639 (8.369, 8.915)	8.915 (8.643, 9.192)	11.465 (11.174, 11.761)	11.817 (11.524, 12.114)	12.130 (11.835, 12.430)
45-49 years	12.859 (12.641, 13.079)	13.308 (13.084, 13.534)	13.716 (13.486, 13.947)	11.334 (11.035, 11.639)	11.864 (11.555, 12.179)	12.090 (11.775, 12.411)	14.229 (13.916, 14.547)	14.603 (14.283, 14.928)	15.170 (14.842, 15.504)
50-54 years	16.528 (16.282, 16.776)	17.300 (17.053, 17.549)	17.898 (17.650, 18.148)	15.429 (15.078, 15.785)	15.910 (15.560, 16.264)	16.455 (16.104, 16.811)	17.478 (17.135, 17.825)	18.508 (18.162, 18.858)	19.153 (18.805, 19.505)
55-59 years	20.877 (20.581, 21.176)	21.580 (21.286, 21.876)	22.431 (22.140, 22.724)	19.409 (18.981, 19.842)	20.144 (19.720, 20.573)	21.107 (20.687, 21.533)	22.093 (21.685, 22.506)	22.779 (22.374, 23.188)	23.544 (23.143, 23.949)
60-64 years	27.464 (27.096, 27.834)	27.623 (27.263, 27.984)	28.350 (27.996, 28.707)	25.472 (24.936, 26.014)	25.594 (25.070, 26.123)	26.230 (25.713, 26.752)	29.072 (28.569, 29.579)	29.267 (28.775, 29.763)	30.067 (29.582, 30.556)
65-69 years	35.570 (35.106, 36.035)	36.066 (35.613, 36.520)	36.156 (35.719, 36.595)	33.012 (32.328, 33.702)	33.478 (32.809, 34.152)	33.562 (32.916, 34.212)	37.600 (36.972, 38.232)	38.114 (37.501, 38.730)	38.216 (37.624, 38.812)
70-74 years	42.484 (41.922, 43.047)	43.208 (42.657, 43.760)	44.233 (43.691, 44.776)	40.287 (39.445, 41.133)	40.911 (40.087, 41.739)	41.853 (41.042, 42.666)	44.202 (43.447, 44.958)	45.011 (44.271, 45.753)	46.115 (45.386, 46.845)
75-79 years	44.035 (43.362, 44.710)	45.745 (45.084, 46.407)	47.046 (46.397, 47.696)	42.230 (41.206, 43.258)	43.945 (42.940, 44.954)	45.351 (44.363, 46.342)	45.388 (44.494, 46.284)	47.104 (46.225, 47.983)	48.323 (47.462, 49.186)
80-84 years	41.659 (40.823, 42.498)	44.617 (43.794, 45.444)	46.800 (45.987, 47.614)	40.523 (39.209, 41.849)	43.263 (41.960, 44.572)	45.059 (43.771, 46.351)	42.419 (41.335, 43.507)	45.515 (44.449, 46.583)	47.948 (46.898, 49.000)
85 years +	33.705 (32.866, 34.552)	35.921 (35.084, 36.764)	38.754 (37.915, 39.598)	34.244 (32.804, 35.706)	36.605 (35.175, 38.053)	38.524 (37.113, 39.949)	33.425 (32.393, 34.469)	35.559 (34.526, 36.602)	38.880 (37.836, 39.931)
Crude Total (All)	15.042 (14.985, 15.099)	15.875 (15.817, 15.933)	16.777 (16.718, 16.835)	13.560 (13.482, 13.639)	14.340 (14.261, 14.421)	15.177 (15.096, 15.259)	16.404 (16.322, 16.485)	17.282 (17.200, 17.365)	18.243 (18.159, 18.327)
Age-adj ³ (All)	16.340 (16.273, 16.407)	17.066 (16.998, 17.133)	17.832 (17.764, 17.900)	14.511 (14.420, 14.600)	15.171 (15.080, 15.263)	15.862 (15.770, 15.954)	18.000 (17.903, 18.098)	18.784 (18.685, 18.882)	19.623 (19.523, 19.723)
Crude Total (40+)	21.840 (21.727, 21.954)	22.724 (22.610, 22.837)	23.611 (23.498, 23.725)	19.799 (19.637, 19.962)	20.631 (20.469, 20.794)	21.428 (21.265, 21.592)	23.540 (23.382, 23.698)	24.465 (24.308, 24.624)	25.433 (25.275, 25.591)
Age-adj ³ (40+)	22.952 (22.817, 23.087)	23.712 (23.577, 23.847)	24.440 (24.306, 24.575)	20.519 (20.331, 20.706)	21.192 (21.004, 21.379)	21.795 (21.608, 21.982)	24.976 (24.785, 25.168)	25.809 (25.618, 26.001)	26.655 (26.463, 26.847)

¹ Codes used are given in the glossary of ICD-9 and CPT codes used in this report. Determined at clinical level and cannot be disambiguated by plus minus cylinder considerations.
² Confidence intervals (CIs) are calculated by Clopper Pearson Exact method.
³ Age adjustment was based on projected U.S. population by Bureau of the Census for the year 2000.

ANISOMETROPIA

In Fiscal Year 2014, the estimated age-adjusted diagnostic prevalence of anisometropia for both sexes is 2.346 percent for all ages, and 3.249 percent for ages forty and above. In fiscal year 2014, the estimated age-adjusted diagnostic prevalence of anisometropia for all ages in females is 2.619 percent and 2.041 percent in males. For ages 40 and above in fiscal year 2014, the estimated age-adjusted diagnostic prevalence in females of the condition is 3.588 percent and 2.833 percent in males.

CHART 1.7A Diagnostic Prevalence Rates for Anisometropia by Age and Gender
American Indian and Alaska Native, FY 2014

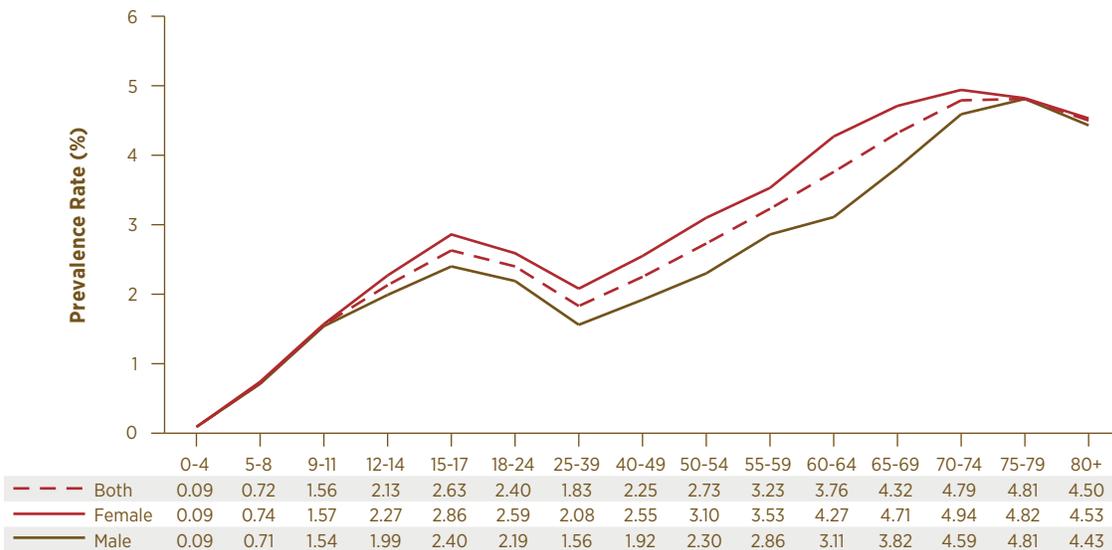


CHART 1.7B Diagnostic Prevalence Rates for Anisometropia by Age and Gender (Age 40 and Older)
American Indian and Alaska Native, FY 2014

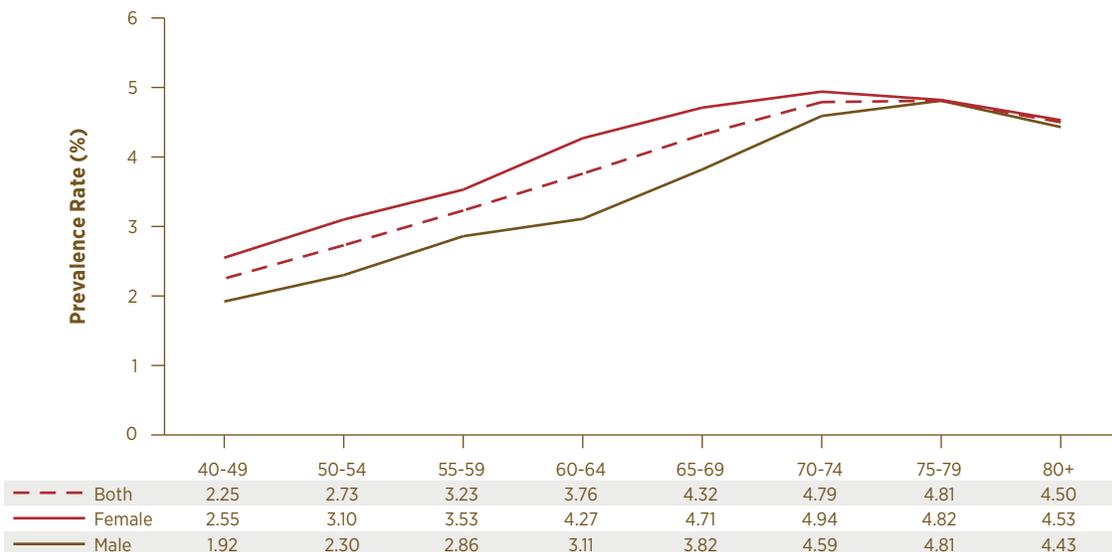


TABLE 1.7 Estimated Diagnostic Prevalence Rates of Anisometropia¹ by Age and Gender
American Indians and Alaska Natives, IHS Service Area, 2012–2014. (Rate and 95% CI² per 100 Population)

Age Group	American Indian and Alaska Native											
	Both Sexes				Male				Female			
	FY 2012	FY 2013	FY 2014	FY 2012	FY 2013	FY 2014	FY 2012	FY 2013	FY 2014	FY 2012	FY 2013	FY 2014
Under 1 year	0.005 (0, 0.029)	0.005 (0, 0.029)	0.005 (0, 0.029)	0.010 (0, 0.056)	0 (0, 0.038)	0 (0, 0.037)	0 (0, 0.039)	0.011 (0, 0.061)	0.011 (0, 0.061)	0.011 (0, 0.061)	0.011 (0, 0.061)	0.011 (0, 0.061)
1 year	0 (0, 0.015)	0.008 (0.001, 0.030)	0.029 (0.012, 0.060)	0 (0, 0.029)	0.016 (0.002, 0.058)	0.040 (0.013, 0.094)	0 (0, 0.031)	0 (0, 0.031)	0 (0, 0.031)	0 (0, 0.031)	0.017 (0.002, 0.062)	0.017 (0.002, 0.062)
2-4 years	0.072 (0.055, 0.092)	0.121 (0.098, 0.147)	0.135 (0.111, 0.162)	0.093 (0.066, 0.126)	0.125 (0.094, 0.164)	0.133 (0.101, 0.173)	0.051 (0.032, 0.077)	0.116 (0.085, 0.154)	0.116 (0.085, 0.154)	0.116 (0.085, 0.154)	0.136 (0.103, 0.177)	0.136 (0.103, 0.177)
5 years	0.347 (0.284, 0.420)	0.344 (0.281, 0.416)	0.395 (0.327, 0.473)	0.316 (0.234, 0.418)	0.402 (0.308, 0.515)	0.369 (0.279, 0.479)	0.379 (0.287, 0.491)	0.285 (0.206, 0.384)	0.285 (0.206, 0.384)	0.285 (0.206, 0.384)	0.423 (0.324, 0.541)	0.423 (0.324, 0.541)
6-8 years	0.741 (0.685, 0.800)	0.814 (0.756, 0.875)	0.833 (0.774, 0.894)	0.740 (0.662, 0.824)	0.810 (0.730, 0.898)	0.825 (0.745, 0.912)	0.742 (0.663, 0.827)	0.818 (0.736, 0.907)	0.818 (0.736, 0.907)	0.818 (0.736, 0.907)	0.840 (0.758, 0.930)	0.840 (0.758, 0.930)
9 years	1.379 (1.244, 1.524)	1.296 (1.166, 1.436)	1.279 (1.152, 1.416)	1.390 (1.202, 1.600)	1.307 (1.126, 1.509)	1.284 (1.106, 1.482)	1.367 (1.177, 1.577)	1.284 (1.103, 1.487)	1.284 (1.103, 1.487)	1.284 (1.103, 1.487)	1.273 (1.096, 1.471)	1.273 (1.096, 1.471)
10-11 years	1.621 (1.516, 1.731)	1.699 (1.592, 1.812)	1.705 (1.598, 1.817)	1.597 (1.451, 1.754)	1.705 (1.554, 1.866)	1.679 (1.531, 1.837)	1.644 (1.495, 1.804)	1.693 (1.542, 1.856)	1.693 (1.542, 1.856)	1.693 (1.542, 1.856)	1.732 (1.580, 1.895)	1.732 (1.580, 1.895)
12-14 years	2.034 (1.937, 2.133)	2.146 (2.047, 2.248)	2.130 (2.031, 2.232)	1.844 (1.716, 1.979)	1.941 (1.809, 2.080)	1.993 (1.859, 2.133)	2.227 (2.085, 2.376)	2.354 (2.208, 2.508)	2.354 (2.208, 2.508)	2.354 (2.208, 2.508)	2.269 (2.125, 2.419)	2.269 (2.125, 2.419)
15-17 years	2.304 (2.199, 2.412)	2.444 (2.337, 2.555)	2.627 (2.517, 2.744)	2.079 (1.939, 2.226)	2.222 (2.078, 2.374)	2.395 (2.247, 2.550)	2.528 (2.374, 2.689)	2.664 (2.507, 2.828)	2.664 (2.507, 2.828)	2.664 (2.507, 2.828)	2.859 (2.697, 3.028)	2.859 (2.697, 3.028)
18-19 years	2.242 (2.120, 2.370)	2.459 (2.329, 2.595)	2.551 (2.417, 2.691)	2.074 (1.907, 2.251)	2.223 (2.047, 2.410)	2.260 (2.081, 2.450)	2.405 (2.228, 2.591)	2.687 (2.497, 2.888)	2.687 (2.497, 2.888)	2.687 (2.497, 2.888)	2.833 (2.636, 3.040)	2.833 (2.636, 3.040)
20-24 years	2.002 (1.931, 2.075)	2.161 (2.086, 2.237)	2.346 (2.268, 2.427)	1.816 (1.718, 1.918)	1.950 (1.847, 2.057)	2.166 (2.057, 2.280)	2.171 (2.069, 2.277)	2.351 (2.244, 2.462)	2.351 (2.244, 2.462)	2.351 (2.244, 2.462)	2.508 (2.397, 2.624)	2.508 (2.397, 2.624)
25-29 years	1.545 (1.478, 1.615)	1.769 (1.697, 1.842)	1.974 (1.900, 2.050)	1.315 (1.226, 1.409)	1.569 (1.472, 1.670)	1.714 (1.614, 1.819)	1.754 (1.655, 1.856)	1.949 (1.847, 2.056)	1.949 (1.847, 2.056)	1.949 (1.847, 2.056)	2.206 (2.099, 2.318)	2.206 (2.099, 2.318)
30-34 years	1.421 (1.352, 1.494)	1.538 (1.467, 1.611)	1.660 (1.587, 1.735)	1.186 (1.095, 1.283)	1.302 (1.208, 1.401)	1.429 (1.331, 1.532)	1.636 (1.534, 1.744)	1.753 (1.648, 1.862)	1.753 (1.648, 1.862)	1.753 (1.648, 1.862)	1.869 (1.763, 1.980)	1.869 (1.763, 1.980)
35-39 years	1.657 (1.575, 1.742)	1.749 (1.666, 1.836)	1.849 (1.765, 1.937)	1.308 (1.203, 1.419)	1.396 (1.289, 1.510)	1.518 (1.407, 1.634)	1.976 (1.853, 2.105)	2.071 (1.947, 2.202)	2.071 (1.947, 2.202)	2.071 (1.947, 2.202)	2.152 (2.026, 2.283)	2.152 (2.026, 2.283)
40-44 years	1.863 (1.774, 1.955)	1.998 (1.907, 2.093)	2.075 (1.982, 2.171)	1.620 (1.499, 1.747)	1.690 (1.568, 1.819)	1.748 (1.624, 1.878)	2.080 (1.951, 2.215)	2.272 (2.138, 2.412)	2.272 (2.138, 2.412)	2.272 (2.138, 2.412)	2.368 (2.231, 2.510)	2.368 (2.231, 2.510)
45-49 years	2.156 (2.062, 2.253)	2.305 (2.207, 2.406)	2.428 (2.326, 2.533)	1.783 (1.660, 1.913)	1.902 (1.773, 2.038)	2.093 (1.956, 2.237)	2.491 (2.353, 2.635)	2.666 (2.521, 2.817)	2.666 (2.521, 2.817)	2.666 (2.521, 2.817)	2.728 (2.580, 2.882)	2.728 (2.580, 2.882)
50-54 years	2.377 (2.277, 2.480)	2.523 (2.422, 2.628)	2.728 (2.623, 2.836)	2.063 (1.927, 2.206)	2.177 (2.039, 2.322)	2.299 (2.159, 2.446)	2.648 (2.504, 2.798)	2.824 (2.678, 2.976)	2.824 (2.678, 2.976)	2.824 (2.678, 2.976)	3.101 (2.949, 3.259)	3.101 (2.949, 3.259)
55-59 years	2.866 (2.745, 2.990)	3.115 (2.992, 3.242)	3.226 (3.103, 3.351)	2.484 (2.318, 2.659)	2.743 (2.573, 2.922)	2.862 (2.693, 3.040)	3.182 (3.011, 3.360)	3.425 (3.251, 3.606)	3.425 (3.251, 3.606)	3.425 (3.251, 3.606)	3.531 (3.358, 3.710)	3.531 (3.358, 3.710)
60-64 years	3.191 (3.047, 3.339)	3.399 (3.255, 3.548)	3.755 (3.607, 3.908)	2.685 (2.489, 2.892)	2.807 (2.612, 3.013)	3.114 (2.913, 3.325)	3.599 (3.395, 3.811)	3.879 (3.673, 4.094)	3.879 (3.673, 4.094)	3.879 (3.673, 4.094)	4.275 (4.063, 4.494)	4.275 (4.063, 4.494)
65-69 years	3.540 (3.363, 3.724)	3.989 (3.806, 4.177)	4.319 (4.136, 4.508)	3.146 (2.897, 3.411)	3.583 (3.324, 3.856)	3.821 (3.563, 4.092)	3.853 (3.607, 4.110)	4.310 (4.057, 4.574)	4.310 (4.057, 4.574)	4.310 (4.057, 4.574)	4.714 (4.459, 4.980)	4.714 (4.459, 4.980)
70-74 years	4.202 (3.977, 4.436)	4.508 (4.280, 4.744)	4.788 (4.558, 5.026)	4.307 (3.965, 4.668)	4.388 (4.051, 4.744)	4.590 (4.252, 4.946)	4.120 (3.824, 4.432)	4.602 (4.296, 4.924)	4.602 (4.296, 4.924)	4.602 (4.296, 4.924)	4.944 (4.633, 5.271)	4.944 (4.633, 5.271)
75-79 years	3.834 (3.578, 4.102)	4.314 (4.049, 4.591)	4.814 (4.540, 5.099)	3.735 (3.353, 4.148)	4.348 (3.945, 4.779)	4.807 (4.392, 5.249)	3.908 (3.568, 4.270)	4.289 (3.940, 4.659)	4.289 (3.940, 4.659)	4.289 (3.940, 4.659)	4.819 (4.457, 5.200)	4.819 (4.457, 5.200)
80-84 years	3.797 (3.480, 4.134)	4.160 (3.836, 4.503)	4.745 (4.406, 5.103)	3.527 (3.050, 4.055)	3.926 (3.433, 4.469)	4.682 (4.152, 5.258)	3.977 (3.561, 4.427)	4.314 (3.891, 4.769)	4.314 (3.891, 4.769)	4.314 (3.891, 4.769)	4.787 (4.350, 5.255)	4.787 (4.350, 5.255)
85 years +	3.279 (2.970, 3.610)	3.845 (3.517, 4.195)	4.215 (3.876, 4.575)	3.163 (2.653, 3.740)	3.706 (3.166, 4.310)	4.116 (3.560, 4.731)	3.339 (2.957, 3.755)	3.919 (3.511, 4.360)	3.919 (3.511, 4.360)	3.919 (3.511, 4.360)	4.270 (3.848, 4.724)	4.270 (3.848, 4.724)
Crude Total (All)	1.873 (1.851, 1.894)	2.039 (2.017, 2.062)	2.190 (2.167, 2.213)	1.633 (1.604, 1.662)	1.780 (1.750, 1.810)	1.915 (1.884, 1.947)	2.093 (2.061, 2.124)	2.277 (2.245, 2.310)	2.277 (2.245, 2.310)	2.277 (2.245, 2.310)	2.442 (2.409, 2.476)	2.442 (2.409, 2.476)
Age-adj ³ (All)	2.026 (2.002, 2.049)	2.194 (2.170, 2.219)	2.346 (2.321, 2.371)	1.761 (1.729, 1.792)	1.905 (1.873, 1.938)	2.041 (2.008, 2.075)	2.263 (2.229, 2.297)	2.453 (2.418, 2.489)	2.453 (2.418, 2.489)	2.453 (2.418, 2.489)	2.619 (2.582, 2.655)	2.619 (2.582, 2.655)
Crude Total (40+)	2.729 (2.685, 2.774)	2.974 (2.928, 3.020)	3.207 (3.160, 3.254)	2.391 (2.329, 2.454)	2.593 (2.530, 2.658)	2.801 (2.736, 2.867)	3.011 (2.948, 3.075)	3.291 (3.226, 3.357)	3.291 (3.226, 3.357)	3.291 (3.226, 3.357)	3.545 (3.478, 3.613)	3.545 (3.478, 3.613)
Age-adj ³ (40+)	2.781 (2.734, 2.827)	3.024 (2.976, 3.071)	3.249 (3.200, 3.298)	2.440 (2.376, 2.504)	2.634 (2.568, 2.700)	2.833 (2.766, 2.900)	3.058 (2.993, 3.124)	3.341 (3.273, 3.408)	3.341 (3.273, 3.408)	3.341 (3.273, 3.408)	3.588 (3.519, 3.657)	3.588 (3.519, 3.657)

¹ Codes used are given in the glossary of ICD-9 and CPT codes used in this report. Determined at clinical level and cannot be disambiguated by plus minus cylinder considerations.
² Confidence intervals (CIs) are calculated by Clopper Pearson Exact method.
³ Age adjustment was based on projected U.S. population by Bureau of the Census for the year 2000.

LOW VISION DIAGNOSIS

In Fiscal Year 2014, the estimated age-adjusted diagnostic prevalence of low vision diagnosis for both sexes is 2.723 percent for all ages, and 3.849 percent for ages forty and above. In fiscal year 2014, the estimated age-adjusted diagnostic prevalence of low vision diagnosis for all ages in females is 2.900 percent and 2.531 percent in males. For ages 40 and above in fiscal year 2014, the estimated age-adjusted diagnostic prevalence of the diagnosis in females is 4.046 percent and 3.616 percent in males.

CHART 1.8A Diagnostic Prevalence Rates for Low Vision Diagnosis by Age and Gender
American Indian and Alaska Native, FY 2014

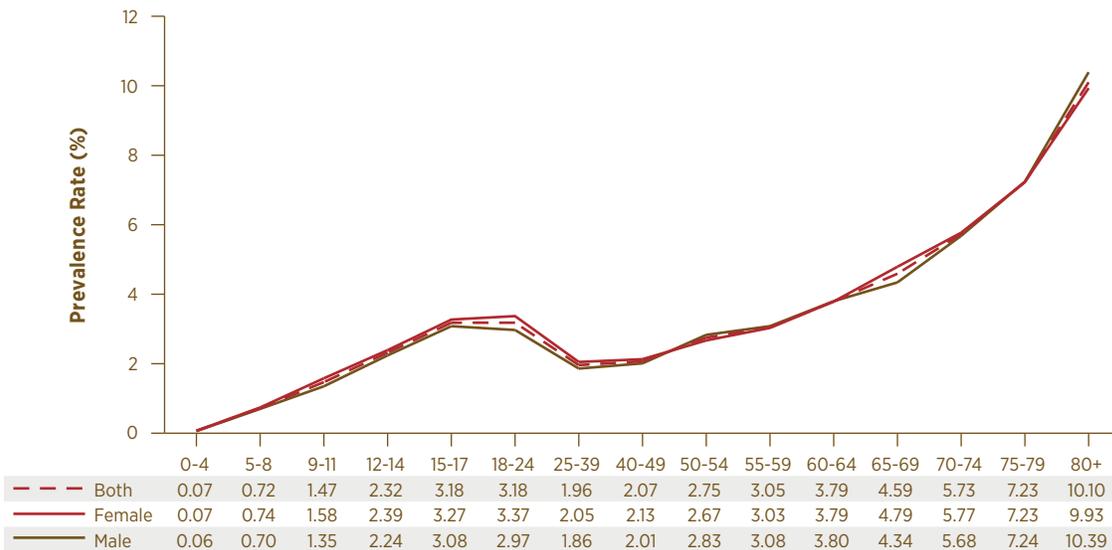


CHART 1.8B Diagnostic Prevalence Rates for Low Vision Diagnosis by Age and Gender (Age 40 and Older)
American Indian and Alaska Native, FY 2014

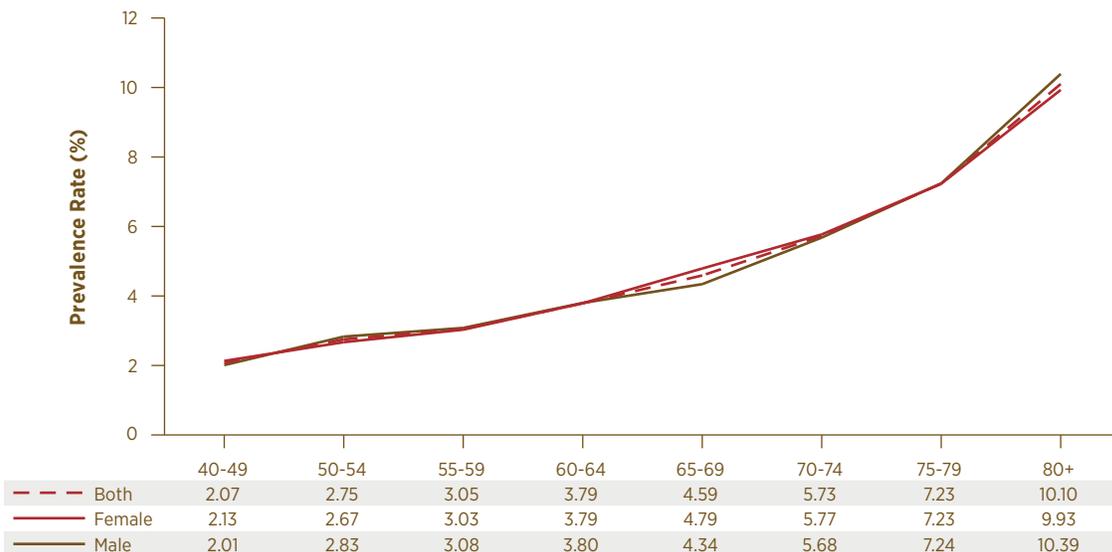


TABLE 1.8 Estimated Diagnostic Prevalence Rates of Low Vision¹ Diagnosis by Age and Gender
American Indians and Alaska Natives, IHS Service Area, 2012–2014. (Rate and 95% CI² per 100 Population)

Age Group	American Indian and Alaska Native											
	Both Sexes						Male			Female		
	FY 2012	FY 2013	FY 2014	FY 2012	FY 2013	FY 2014	FY 2012	FY 2013	FY 2014	FY 2012	FY 2013	FY 2014
Under 1 year	0.005 (0, 0.029)	0.011 (0.001, 0.038)	0.016 (0.003, 0.046)	0 (0, 0.037)	0.010 (0, 0.057)	0 (0, 0.037)	0.011 (0, 0.059)	0.011 (0, 0.061)	0.032 (0.007, 0.094)	0.011 (0, 0.059)	0.011 (0, 0.061)	0.032 (0.007, 0.094)
1 year	0.036 (0.017, 0.069)	0.033 (0.014, 0.065)	0.021 (0.007, 0.048)	0.039 (0.013, 0.091)	0.040 (0.013, 0.094)	0.024 (0.005, 0.070)	0.034 (0.009, 0.086)	0.025 (0.005, 0.074)	0.017 (0.002, 0.062)	0.034 (0.009, 0.086)	0.025 (0.005, 0.074)	0.017 (0.002, 0.062)
2-4 years	0.110 (0.089, 0.134)	0.081 (0.063, 0.102)	0.095 (0.075, 0.118)	0.115 (0.086, 0.151)	0.065 (0.043, 0.094)	0.088 (0.062, 0.121)	0.104 (0.076, 0.140)	0.097 (0.069, 0.132)	0.101 (0.073, 0.138)	0.104 (0.076, 0.140)	0.097 (0.069, 0.132)	0.101 (0.073, 0.138)
5 years	0.449 (0.371, 0.530)	0.396 (0.329, 0.474)	0.305 (0.246, 0.374)	0.465 (0.364, 0.585)	0.382 (0.291, 0.493)	0.310 (0.228, 0.412)	0.432 (0.334, 0.551)	0.411 (0.315, 0.526)	0.300 (0.218, 0.402)	0.432 (0.334, 0.551)	0.411 (0.315, 0.526)	0.300 (0.218, 0.402)
6-8 years	0.792 (0.734, 0.853)	0.845 (0.785, 0.907)	0.855 (0.796, 0.917)	0.744 (0.667, 0.829)	0.771 (0.692, 0.856)	0.823 (0.742, 0.910)	0.841 (0.757, 0.932)	0.920 (0.833, 1.014)	0.888 (0.802, 0.979)	0.841 (0.757, 0.932)	0.920 (0.833, 1.014)	0.888 (0.802, 0.979)
9 years	1.228 (1.101, 1.366)	1.246 (1.118, 1.383)	1.230 (1.105, 1.364)	1.282 (1.101, 1.484)	1.172 (1.001, 1.364)	1.081 (0.919, 1.265)	1.173 (0.998, 1.370)	1.321 (1.137, 1.526)	1.378 (1.194, 1.583)	1.173 (0.998, 1.370)	1.321 (1.137, 1.526)	1.378 (1.194, 1.583)
10-11 years	1.692 (1.584, 1.804)	1.586 (1.482, 1.695)	1.592 (1.489, 1.700)	1.668 (1.518, 1.828)	1.583 (1.438, 1.739)	1.495 (1.356, 1.645)	1.716 (1.563, 1.879)	1.588 (1.442, 1.746)	1.691 (1.541, 1.852)	1.716 (1.563, 1.879)	1.588 (1.442, 1.746)	1.691 (1.541, 1.852)
12-14 years	2.513 (2.406, 2.623)	2.372 (2.268, 2.479)	2.318 (2.215, 2.424)	2.396 (2.249, 2.549)	2.288 (2.145, 2.438)	2.244 (2.102, 2.392)	2.652 (2.477, 2.793)	2.457 (2.307, 2.614)	2.593 (2.246, 2.548)	2.652 (2.477, 2.793)	2.457 (2.307, 2.614)	2.593 (2.246, 2.548)
15-17 years	3.205 (3.082, 3.331)	3.257 (3.133, 3.384)	3.176 (3.055, 3.300)	3.034 (2.865, 3.210)	3.094 (2.924, 3.271)	3.078 (2.910, 3.252)	3.375 (3.198, 3.559)	3.418 (3.241, 3.603)	3.274 (3.101, 3.454)	3.375 (3.198, 3.559)	3.418 (3.241, 3.603)	3.274 (3.101, 3.454)
18-19 years	3.216 (3.070, 3.367)	3.285 (3.134, 3.440)	3.367 (3.214, 3.526)	3.060 (2.857, 3.273)	3.134 (2.925, 3.354)	3.112 (2.902, 3.332)	3.366 (3.157, 3.584)	3.430 (3.215, 3.655)	3.614 (3.392, 3.846)	3.366 (3.157, 3.584)	3.430 (3.215, 3.655)	3.614 (3.392, 3.846)
20-24 years	2.772 (2.688, 2.857)	2.975 (2.888, 3.064)	3.112 (3.022, 3.204)	2.571 (2.454, 2.692)	2.774 (2.652, 2.900)	2.921 (2.794, 3.052)	2.954 (2.835, 3.077)	3.157 (3.033, 3.284)	3.284 (3.157, 3.416)	2.954 (2.835, 3.077)	3.157 (3.033, 3.284)	3.284 (3.157, 3.416)
25-29 years	1.786 (1.714, 1.860)	2.070 (1.993, 2.149)	2.351 (2.270, 2.434)	1.679 (1.578, 1.785)	1.979 (1.870, 2.092)	2.207 (2.093, 2.325)	1.882 (1.781, 1.988)	2.152 (2.044, 2.264)	2.480 (2.366, 2.598)	1.882 (1.781, 1.988)	2.152 (2.044, 2.264)	2.480 (2.366, 2.598)
30-34 years	1.475 (1.404, 1.548)	1.589 (1.516, 1.663)	1.688 (1.614, 1.764)	1.426 (1.325, 1.531)	1.548 (1.445, 1.656)	1.609 (1.505, 1.717)	1.520 (1.421, 1.624)	1.626 (1.525, 1.731)	1.759 (1.656, 1.867)	1.609 (1.505, 1.717)	1.626 (1.525, 1.731)	1.759 (1.656, 1.867)
35-39 years	1.585 (1.505, 1.668)	1.667 (1.585, 1.751)	1.754 (1.671, 1.839)	1.483 (1.371, 1.601)	1.584 (1.470, 1.704)	1.696 (1.579, 1.819)	1.678 (1.564, 1.797)	1.742 (1.628, 1.862)	1.806 (1.691, 1.927)	1.696 (1.579, 1.819)	1.742 (1.628, 1.862)	1.806 (1.691, 1.927)
40-44 years	1.695 (1.610, 1.783)	1.811 (1.723, 1.901)	1.856 (1.768, 1.947)	1.678 (1.556, 1.808)	1.729 (1.605, 1.859)	1.772 (1.647, 1.903)	1.710 (1.593, 1.833)	1.883 (1.762, 2.011)	1.931 (1.808, 2.060)	1.729 (1.605, 1.859)	1.772 (1.647, 1.903)	1.931 (1.808, 2.060)
45-49 years	2.167 (2.073, 2.264)	2.289 (2.191, 2.390)	2.298 (2.199, 2.400)	2.113 (1.979, 2.254)	2.251 (2.110, 2.398)	2.261 (2.118, 2.410)	2.215 (2.085, 2.351)	2.323 (2.188, 2.464)	2.331 (2.195, 2.474)	2.251 (2.110, 2.398)	2.261 (2.118, 2.410)	2.331 (2.195, 2.474)
50-54 years	2.505 (2.403, 2.611)	2.612 (2.509, 2.719)	2.749 (2.644, 2.857)	2.662 (2.507, 2.823)	2.725 (2.571, 2.886)	2.835 (2.679, 2.997)	2.370 (2.234, 2.512)	2.514 (2.376, 2.658)	2.674 (2.532, 2.820)	2.725 (2.571, 2.886)	2.835 (2.679, 2.997)	2.674 (2.532, 2.820)
55-59 years	2.955 (2.832, 3.081)	3.014 (2.893, 3.139)	3.054 (2.935, 3.177)	2.888 (2.709, 3.075)	3.009 (2.831, 3.196)	3.085 (2.909, 3.269)	3.010 (2.843, 3.183)	3.018 (2.854, 3.188)	3.028 (2.868, 3.195)	3.014 (2.893, 3.139)	3.054 (2.935, 3.177)	3.028 (2.868, 3.195)
60-64 years	3.679 (3.525, 3.837)	3.837 (3.684, 3.995)	3.794 (3.645, 3.947)	3.703 (3.473, 3.943)	3.857 (3.629, 4.096)	3.799 (3.577, 4.030)	3.660 (3.454, 3.874)	3.821 (3.616, 4.034)	3.790 (3.591, 3.998)	3.837 (3.684, 3.995)	3.794 (3.645, 3.947)	3.790 (3.591, 3.998)
65-69 years	4.508 (4.309, 4.713)	4.534 (4.340, 4.734)	4.590 (4.402, 4.784)	4.342 (4.050, 4.649)	4.242 (3.961, 4.538)	4.336 (4.062, 4.624)	4.640 (4.371, 4.921)	4.765 (4.500, 5.041)	4.792 (4.534, 5.059)	4.534 (4.340, 4.734)	4.590 (4.402, 4.784)	4.792 (4.534, 5.059)
70-74 years	5.697 (5.436, 5.966)	5.736 (5.48, 6.000)	5.730 (5.479, 5.989)	5.704 (5.313, 6.115)	5.794 (5.409, 6.199)	5.681 (5.307, 6.073)	5.691 (5.345, 6.053)	5.690 (5.351, 6.044)	5.768 (5.433, 6.118)	5.736 (5.48, 6.000)	5.730 (5.479, 5.989)	5.768 (5.433, 6.118)
75-79 years	7.044 (6.701, 7.398)	7.324 (6.983, 7.677)	7.234 (6.901, 7.577)	7.036 (6.516, 7.585)	7.338 (6.820, 7.883)	7.241 (6.736, 7.772)	7.049 (6.598, 7.522)	7.313 (6.863, 7.784)	7.228 (6.789, 7.686)	7.324 (6.983, 7.677)	7.234 (6.901, 7.577)	7.228 (6.789, 7.686)
80-84 years	8.658 (8.187, 9.146)	8.796 (8.332, 9.276)	8.879 (8.422, 9.353)	9.319 (8.555, 10.126)	9.424 (8.671, 10.219)	9.191 (8.459, 9.965)	8.215 (7.624, 8.837)	8.380 (7.798, 8.990)	8.673 (8.093, 9.282)	8.796 (8.332, 9.276)	8.879 (8.422, 9.353)	8.673 (8.093, 9.282)
85 years +	10.893 (10.346, 11.460)	11.203 (10.659, 11.766)	11.469 (10.926, 12.029)	11.239 (10.296, 12.236)	11.325 (10.4, 12.301)	11.890 (10.968, 12.862)	10.714 (10.045, 11.411)	11.139 (10.469, 11.837)	11.239 (10.572, 11.934)	11.203 (10.659, 11.766)	11.469 (10.926, 12.029)	11.239 (10.572, 11.934)
Crude Total (All)	2.303 (2.279, 2.327)	2.408 (2.384, 2.432)	2.481 (2.457, 2.506)	2.178 (2.145, 2.212)	2.275 (2.241, 2.309)	2.339 (2.305, 2.373)	2.417 (2.383, 2.451)	2.529 (2.495, 2.564)	2.611 (2.577, 2.646)	2.417 (2.383, 2.451)	2.529 (2.495, 2.564)	2.611 (2.577, 2.646)
Age-adj ³ (All)	2.574 (2.547, 2.601)	2.667 (2.640, 2.694)	2.723 (2.696, 2.750)	2.403 (2.365, 2.440)	2.486 (2.448, 2.523)	2.531 (2.493, 2.568)	2.732 (2.693, 2.771)	2.835 (2.796, 2.874)	2.900 (2.861, 2.939)	2.486 (2.448, 2.523)	2.531 (2.493, 2.568)	2.732 (2.693, 2.771)
Crude Total (40+)	3.399 (3.349, 3.449)	3.537 (3.487, 3.588)	3.605 (3.555, 3.655)	3.315 (3.243, 3.389)	3.436 (3.363, 3.510)	3.497 (3.424, 3.570)	3.469 (3.401, 3.537)	3.622 (3.554, 3.691)	3.695 (3.626, 3.764)	3.436 (3.363, 3.510)	3.497 (3.424, 3.570)	3.695 (3.626, 3.764)
Age-adj ³ (40+)	3.688 (3.633, 3.743)	3.807 (3.752, 3.861)	3.849 (3.794, 3.903)	3.494 (3.415, 3.572)	3.587 (3.509, 3.665)	3.616 (3.539, 3.693)	3.653 (3.576, 3.930)	3.994 (3.917, 4.071)	4.046 (3.969, 4.122)	3.587 (3.509, 3.665)	3.616 (3.539, 3.693)	4.046 (3.969, 4.122)

¹ Codes used are given in the glossary of ICD-9 and CPT codes used in this report. Determined at clinical level and cannot be disambiguated by plus minus cylinder considerations.
² Confidence intervals (CIs) are calculated by Clopper Pearson Exact method.
³ Age adjustment was based on projected U.S. population by Bureau of the Census for the year 2000.

AMBLYOPIA

In Fiscal Year 2014, the estimated age-adjusted diagnostic prevalence of amblyopia for both sexes is 2.688 percent for all ages, and 2.043 percent for ages forty and above. In fiscal year 2014, the estimated age-adjusted diagnostic prevalence of amblyopia for all ages in females is 2.722 percent and 2.650 percent in males. For ages 40 and above in fiscal year 2014, the estimated age-adjusted diagnostic prevalence of the condition in females is 2.094 percent and 1.980 percent in males.

CHART 1.9A Diagnostic Prevalence Rates for Amblyopia by Age and Gender
American Indian and Alaska Native, FY 2014

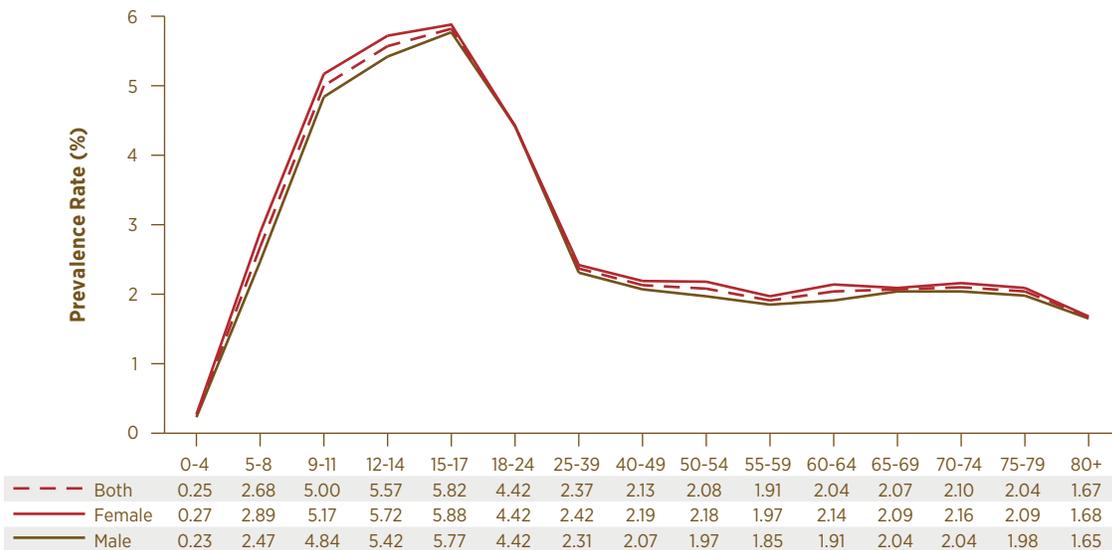


CHART 1.9B Diagnostic Prevalence Rates for Amblyopia by Age and Gender (Age 40 and Older)
American Indian and Alaska Native, FY 2014

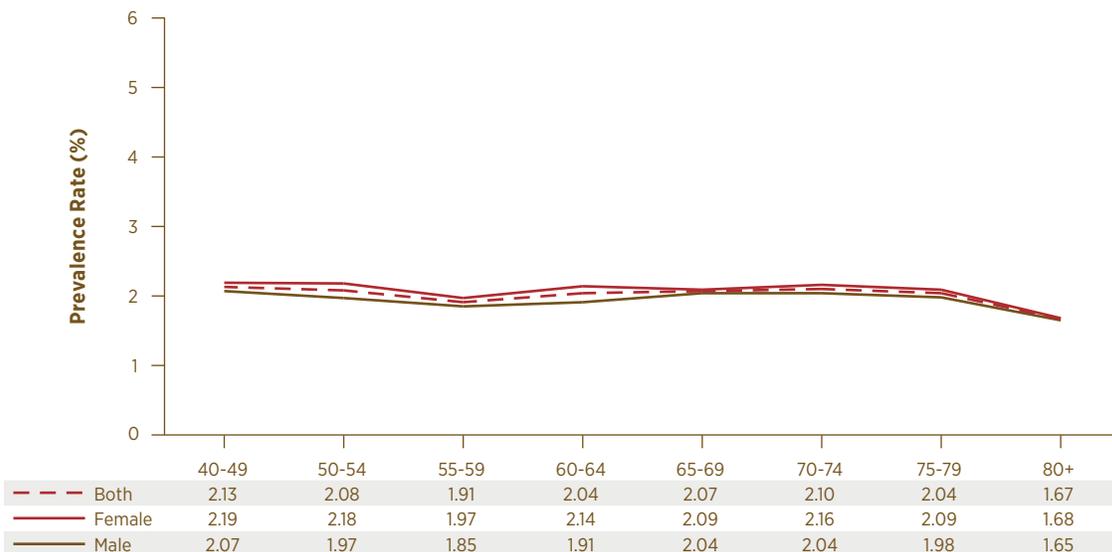


TABLE 1.9 Estimated Diagnostic Prevalence Rates of Amblyopia¹ by Age and Gender
American Indians and Alaska Natives, IHS Service Area, 2012–2014. (Rate and 95% CI² per 100 Population)

Age Group	American Indian and Alaska Native											
	Both Sexes						Male			Female		
	FY 2012	FY 2013	FY 2014	FY 2012	FY 2013	FY 2014	FY 2012	FY 2013	FY 2014	FY 2012	FY 2013	FY 2014
Under 1 year	0.031 (0.011, 0.068)	0.026 (0.009, 0.062)	0.010 (0.001, 0.038)	0.030 (0.006, 0.089)	0.020 (0.002, 0.074)	0.020 (0.002, 0.073)	0.032 (0.007, 0.094)	0.033 (0.007, 0.096)	0.033 (0.007, 0.096)	0.032 (0.007, 0.094)	0.033 (0.007, 0.096)	0.032 (0.007, 0.094)
1 year	0.069 (0.040, 0.110)	0.091 (0.057, 0.137)	0.100 (0.064, 0.148)	0.070 (0.032, 0.134)	0.081 (0.039, 0.148)	0.113 (0.062, 0.189)	0.067 (0.029, 0.132)	0.101 (0.052, 0.176)	0.101 (0.052, 0.176)	0.067 (0.029, 0.132)	0.101 (0.052, 0.176)	0.086 (0.041, 0.158)
2-4 years	0.318 (0.282, 0.358)	0.340 (0.302, 0.381)	0.347 (0.308, 0.390)	0.300 (0.251, 0.356)	0.283 (0.235, 0.338)	0.312 (0.261, 0.370)	0.337 (0.284, 0.396)	0.398 (0.340, 0.464)	0.398 (0.340, 0.464)	0.337 (0.284, 0.396)	0.398 (0.340, 0.464)	0.383 (0.326, 0.449)
5 years	1.068 (0.956, 1.190)	1.202 (1.083, 1.331)	1.374 (1.245, 1.512)	1.013 (0.862, 1.184)	1.076 (0.919, 1.251)	1.266 (1.094, 1.456)	1.124 (0.962, 1.306)	1.332 (1.155, 1.528)	1.332 (1.155, 1.528)	1.124 (0.962, 1.306)	1.332 (1.155, 1.528)	1.486 (1.296, 1.695)
6-8 years	2.747 (2.639, 2.857)	2.969 (2.858, 3.082)	3.112 (2.999, 3.227)	2.647 (2.499, 2.800)	2.768 (2.619, 2.924)	2.874 (2.723, 3.031)	2.849 (2.694, 3.010)	3.174 (3.013, 3.343)	3.174 (3.013, 3.343)	2.849 (2.694, 3.010)	3.174 (3.013, 3.343)	3.357 (3.191, 3.528)
9 years	4.470 (4.227, 4.722)	4.413 (4.175, 4.661)	4.528 (4.290, 4.775)	4.403 (4.067, 4.759)	4.269 (3.941, 4.616)	4.263 (3.938, 4.607)	4.538 (4.192, 4.903)	4.561 (4.218, 4.924)	4.561 (4.218, 4.924)	4.538 (4.192, 4.903)	4.561 (4.218, 4.924)	4.793 (4.448, 5.156)
10-11 years	4.924 (4.742, 5.110)	5.116 (4.931, 5.305)	5.250 (5.065, 5.440)	4.707 (4.457, 4.967)	5.007 (4.751, 5.273)	5.138 (4.881, 5.404)	5.143 (4.881, 5.415)	5.227 (4.962, 5.501)	5.227 (4.962, 5.501)	5.143 (4.881, 5.415)	5.227 (4.962, 5.501)	5.366 (5.100, 5.641)
12-14 years	5.278 (5.125, 5.434)	5.507 (5.350, 5.667)	5.570 (5.413, 5.731)	5.228 (5.014, 5.448)	5.423 (5.205, 5.648)	5.420 (5.202, 5.644)	5.329 (5.111, 5.553)	5.592 (5.369, 5.822)	5.592 (5.369, 5.822)	5.329 (5.111, 5.553)	5.592 (5.369, 5.822)	5.723 (5.498, 5.955)
15-17 years	5.082 (4.928, 5.239)	5.399 (5.241, 5.559)	5.822 (5.660, 5.987)	5.012 (4.796, 5.234)	5.347 (5.126, 5.575)	5.768 (5.540, 6.002)	5.151 (4.934, 5.376)	5.450 (5.227, 5.679)	5.450 (5.227, 5.679)	5.151 (4.934, 5.376)	5.450 (5.227, 5.679)	5.877 (5.647, 6.112)
18-19 years	4.363 (4.193, 4.537)	4.717 (4.538, 4.902)	5.085 (4.898, 5.278)	4.326 (4.086, 4.576)	4.713 (4.458, 4.978)	5.046 (4.781, 5.322)	4.398 (4.161, 4.645)	4.721 (4.470, 4.982)	4.721 (4.470, 4.982)	4.398 (4.161, 4.645)	4.721 (4.470, 4.982)	5.123 (4.860, 5.396)
20-24 years	3.388 (3.295, 3.482)	3.788 (3.689, 3.888)	4.169 (4.065, 4.275)	3.352 (3.219, 3.489)	3.743 (3.601, 3.888)	4.173 (4.022, 4.328)	3.420 (3.292, 3.552)	3.828 (3.692, 3.968)	3.828 (3.692, 3.968)	3.420 (3.292, 3.552)	3.828 (3.692, 3.968)	4.165 (4.022, 4.312)
25-29 years	2.172 (2.093, 2.254)	2.468 (2.384, 2.554)	2.798 (2.710, 2.886)	2.105 (1.992, 2.223)	2.370 (2.251, 2.493)	2.674 (2.548, 2.803)	2.233 (2.122, 2.348)	2.556 (2.439, 2.678)	2.556 (2.439, 2.678)	2.233 (2.122, 2.348)	2.556 (2.439, 2.678)	2.909 (2.786, 3.037)
30-34 years	1.897 (1.817, 1.980)	2.026 (1.945, 2.110)	2.158 (2.075, 2.243)	1.900 (1.784, 2.021)	2.049 (1.931, 2.172)	2.171 (2.050, 2.296)	1.894 (1.783, 2.010)	2.006 (1.894, 2.122)	2.006 (1.894, 2.122)	1.894 (1.783, 2.010)	2.006 (1.894, 2.122)	2.147 (2.033, 2.265)
35-39 years	1.776 (1.691, 1.864)	1.884 (1.798, 1.973)	2.025 (1.937, 2.117)	1.688 (1.569, 1.813)	1.825 (1.703, 1.954)	1.995 (1.868, 2.128)	1.856 (1.737, 1.981)	1.938 (1.817, 2.064)	1.938 (1.817, 2.064)	1.856 (1.737, 1.981)	1.938 (1.817, 2.064)	2.053 (1.931, 2.182)
40-44 years	1.940 (1.849, 2.034)	2.043 (1.950, 2.139)	2.098 (2.005, 2.195)	1.896 (1.766, 2.033)	1.916 (1.786, 2.053)	2.000 (1.867, 2.139)	1.979 (1.854, 2.112)	2.156 (2.025, 2.292)	2.156 (2.025, 2.292)	1.979 (1.854, 2.112)	2.156 (2.025, 2.292)	2.187 (2.056, 2.324)
45-49 years	1.910 (1.822, 2.001)	2.045 (1.952, 2.140)	2.169 (2.073, 2.269)	1.807 (1.683, 1.938)	1.991 (1.859, 2.130)	2.135 (1.997, 2.280)	2.003 (1.879, 2.133)	2.093 (1.964, 2.227)	2.093 (1.964, 2.227)	2.003 (1.879, 2.133)	2.093 (1.964, 2.227)	2.199 (2.066, 2.338)
50-54 years	1.853 (1.764, 1.944)	1.938 (1.849, 2.030)	2.084 (1.992, 2.178)	1.739 (1.614, 1.871)	1.837 (1.711, 1.971)	1.972 (1.842, 2.109)	1.951 (1.827, 2.080)	2.025 (1.901, 2.155)	2.025 (1.901, 2.155)	1.951 (1.827, 2.080)	2.025 (1.901, 2.155)	2.181 (2.053, 2.314)
55-59 years	1.736 (1.642, 1.834)	1.844 (1.749, 1.943)	1.914 (1.819, 2.012)	1.658 (1.523, 1.803)	1.779 (1.642, 1.925)	1.851 (1.714, 1.995)	1.801 (1.672, 1.937)	1.898 (1.768, 2.035)	1.898 (1.768, 2.035)	1.801 (1.672, 1.937)	1.898 (1.768, 2.035)	1.967 (1.837, 2.103)
60-64 years	1.832 (1.723, 1.945)	1.947 (1.838, 2.062)	2.040 (1.930, 2.154)	1.739 (1.581, 1.907)	1.799 (1.642, 1.966)	1.910 (1.752, 2.078)	1.907 (1.758, 2.064)	2.068 (1.916, 2.227)	2.068 (1.916, 2.227)	1.907 (1.758, 2.064)	2.068 (1.916, 2.227)	2.145 (1.994, 2.304)
65-69 years	1.904 (1.774, 2.041)	1.985 (1.856, 2.121)	2.070 (1.942, 2.204)	1.907 (1.713, 2.116)	1.983 (1.790, 2.190)	2.044 (1.855, 2.247)	1.902 (1.729, 2.088)	1.987 (1.815, 2.171)	1.987 (1.815, 2.171)	1.902 (1.729, 2.088)	1.987 (1.815, 2.171)	2.090 (1.920, 2.272)
70-74 years	1.967 (1.812, 2.131)	2.090 (1.935, 2.255)	2.104 (1.950, 2.266)	1.947 (1.771, 2.199)	2.085 (1.852, 2.338)	2.036 (1.811, 2.281)	1.983 (1.777, 2.205)	2.095 (1.888, 2.319)	2.095 (1.888, 2.319)	1.983 (1.777, 2.205)	2.095 (1.888, 2.319)	2.157 (1.950, 2.379)
75-79 years	1.753 (1.579, 1.939)	1.902 (1.725, 2.091)	2.039 (1.860, 2.231)	1.734 (1.475, 2.026)	1.877 (1.613, 2.172)	1.976 (1.710, 2.271)	1.767 (1.538, 2.018)	1.920 (1.687, 2.176)	1.920 (1.687, 2.176)	1.767 (1.538, 2.018)	1.920 (1.687, 2.176)	2.087 (1.848, 2.347)
80-84 years	1.615 (1.409, 1.843)	1.614 (1.412, 1.836)	1.731 (1.525, 1.956)	1.504 (1.196, 1.865)	1.642 (1.326, 2.010)	1.849 (1.517, 2.230)	1.690 (1.420, 1.996)	1.596 (1.339, 1.886)	1.596 (1.339, 1.886)	1.690 (1.420, 1.996)	1.596 (1.339, 1.886)	1.653 (1.396, 1.942)
85 years +	1.336 (1.140, 1.556)	1.503 (1.298, 1.731)	1.592 (1.384, 1.823)	1.414 (1.078, 1.820)	1.418 (1.089, 1.815)	1.394 (1.075, 1.776)	1.296 (1.060, 1.568)	1.548 (1.293, 1.838)	1.548 (1.293, 1.838)	1.296 (1.060, 1.568)	1.548 (1.293, 1.838)	1.701 (1.435, 2.000)
Crude Total (All)	2.508 (2.484, 2.533)	2.680 (2.655, 2.706)	2.845 (2.819, 2.871)	2.467 (2.431, 2.503)	2.629 (2.593, 2.666)	2.791 (2.754, 2.829)	2.547 (2.512, 2.581)	2.727 (2.691, 2.762)	2.727 (2.691, 2.762)	2.547 (2.512, 2.581)	2.727 (2.691, 2.762)	2.895 (2.859, 2.932)
Age-adjusted (All)	2.373 (2.349, 2.397)	2.535 (2.510, 2.559)	2.688 (2.663, 2.713)	2.340 (2.306, 2.374)	2.496 (2.461, 2.531)	2.650 (2.614, 2.686)	2.401 (2.368, 2.434)	2.567 (2.533, 2.601)	2.567 (2.533, 2.601)	2.401 (2.368, 2.434)	2.567 (2.533, 2.601)	2.722 (2.687, 2.757)
Crude Total (40+)	1.847 (1.810, 1.884)	1.953 (1.916, 1.991)	2.046 (2.009, 2.085)	1.781 (1.728, 1.836)	1.880 (1.826, 1.936)	1.975 (1.920, 2.031)	1.902 (1.851, 1.953)	2.014 (1.963, 2.066)	2.014 (1.963, 2.066)	1.902 (1.851, 1.953)	2.014 (1.963, 2.066)	2.106 (2.054, 2.158)
Age-adjusted (40+)	1.842 (1.805, 1.879)	1.950 (1.912, 1.988)	2.043 (2.005, 2.081)	1.786 (1.731, 1.840)	1.885 (1.830, 1.941)	1.980 (1.924, 2.036)	1.886 (1.835, 1.937)	2.001 (1.949, 2.052)	2.001 (1.949, 2.052)	1.886 (1.835, 1.937)	2.001 (1.949, 2.052)	2.094 (2.042, 2.146)

¹ Codes used are given in the glossary of ICD-9 and CPT codes used in this report. Determined at clinical level and cannot be disambiguated by plus minus cylinder considerations.
² Confidence intervals (CIs) are calculated by Clopper Pearson Exact method.
³ Age adjustment was based on projected U.S. population by Bureau of the Census for the year 2000.

STRABISMUS

In Fiscal Year 2014, the estimated age-adjusted diagnostic prevalence of strabismus for both sexes is 0.053 percent for all ages, and 0.075 percent for ages forty and above. In fiscal year 2014, the estimated age-adjusted diagnostic prevalence of strabismus for all ages in females is 0.056 percent and 0.051 percent in males. For ages 40 and above in fiscal year 2014, the estimated age-adjusted diagnostic prevalence of the condition in females is 0.082 percent and 0.068 percent in males.

CHART 1.10A Diagnostic Prevalence Rates for Strabismus by Age and Gender
American Indian and Alaska Native, FY 2014

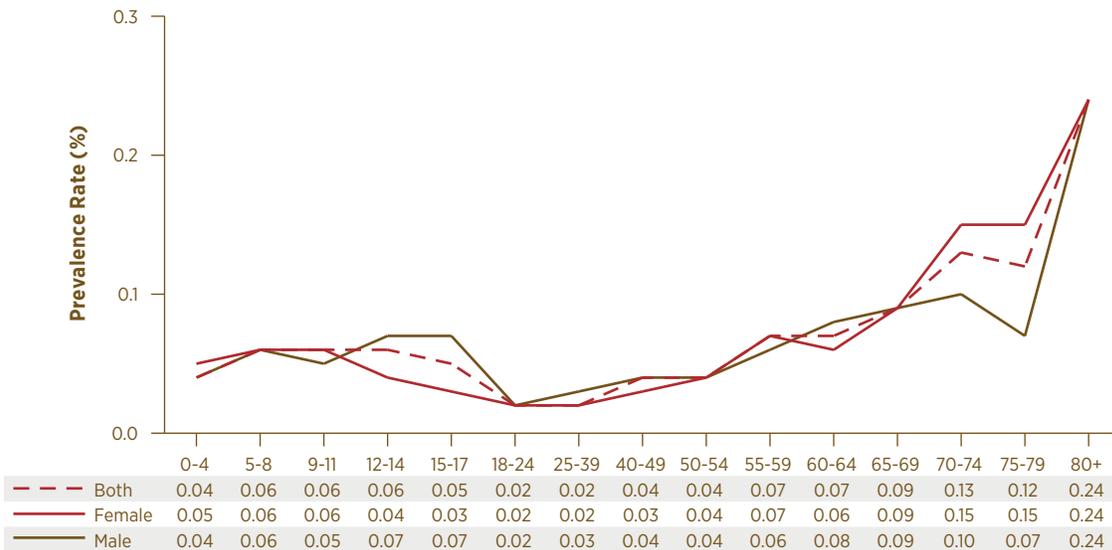


CHART 1.10B Diagnostic Prevalence Rates for Strabismus by Age and Gender (Age 40 and Older)
American Indian and Alaska Native, FY 2014

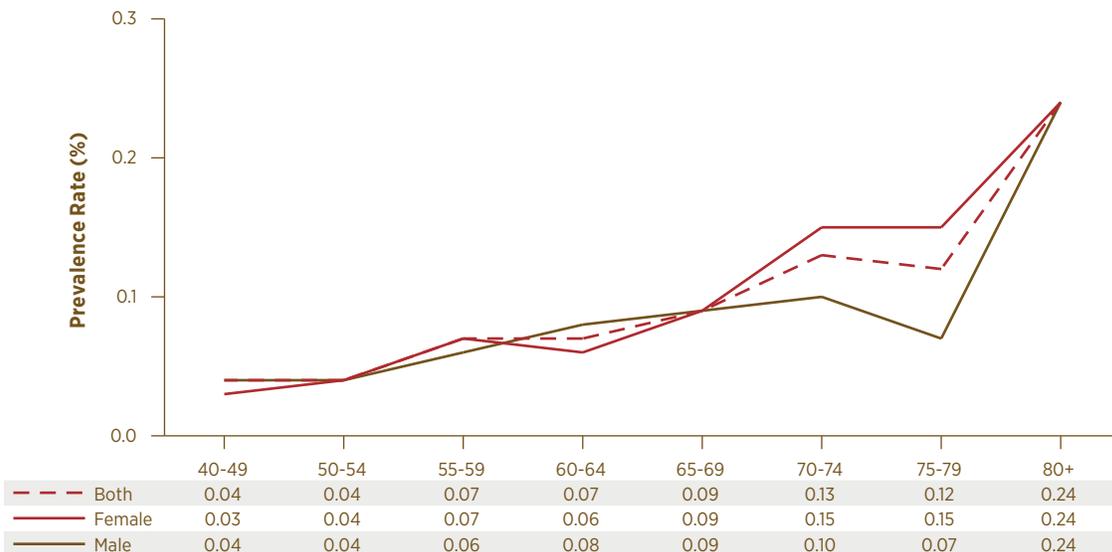


TABLE 1.10 Estimated Diagnostic Prevalence Rates of Strabismus¹ by Age and Gender
American Indians and Alaska Natives, IHS Service Area, 2012–2014. (Rate and 95% CI² per 100 Population)

Age Group	American Indian and Alaska Native																	
	Both Sexes						Male						Female					
	FY 2012	FY 2013	FY 2014	FY 2012	FY 2013	FY 2014	FY 2012	FY 2013	FY 2014	FY 2012	FY 2013	FY 2014						
Under 1 year	0.031 (0.011, 0.068)	0.005 (0, 0.029)	0.005 (0, 0.029)	0.020 (0.002, 0.073)	0 (0, 0.038)	0 (0, 0.037)	0.043 (0.012, 0.109)	0.011 (0, 0.061)	0.011 (0, 0.061)	0.043 (0.012, 0.109)	0.011 (0, 0.061)	0.011 (0, 0.061)						
1 year	0.057 (0.031, 0.095)	0.041 (0.020, 0.076)	0.025 (0.009, 0.054)	0.070 (0.032, 0.134)	0.032 (0.009, 0.083)	0.016 (0.002, 0.058)	0.042 (0.014, 0.098)	0.051 (0.019, 0.110)	0.051 (0.019, 0.110)	0.042 (0.014, 0.098)	0.051 (0.019, 0.110)	0.034 (0.009, 0.088)						
2-4 years	0.043 (0.031, 0.060)	0.056 (0.041, 0.074)	0.058 (0.043, 0.077)	0.038 (0.022, 0.061)	0.053 (0.034, 0.080)	0.052 (0.033, 0.079)	0.049 (0.030, 0.075)	0.058 (0.037, 0.086)	0.058 (0.037, 0.086)	0.049 (0.030, 0.075)	0.058 (0.037, 0.086)	0.064 (0.042, 0.094)						
5 years	0.066 (0.040, 0.101)	0.046 (0.025, 0.077)	0.057 (0.033, 0.091)	0.071 (0.035, 0.127)	0.052 (0.022, 0.102)	0.046 (0.019, 0.095)	0.060 (0.027, 0.114)	0.040 (0.015, 0.087)	0.040 (0.015, 0.087)	0.060 (0.027, 0.114)	0.040 (0.015, 0.087)	0.068 (0.033, 0.125)						
6-8 years	0.049 (0.035, 0.066)	0.065 (0.049, 0.084)	0.061 (0.046, 0.079)	0.058 (0.038, 0.086)	0.069 (0.047, 0.097)	0.059 (0.039, 0.086)	0.039 (0.023, 0.063)	0.061 (0.040, 0.089)	0.061 (0.040, 0.089)	0.039 (0.023, 0.063)	0.061 (0.040, 0.089)	0.063 (0.042, 0.091)						
9 years	0.051 (0.028, 0.086)	0.047 (0.025, 0.080)	0.059 (0.035, 0.095)	0.051 (0.020, 0.104)	0.050 (0.020, 0.102)	0.056 (0.024, 0.110)	0.052 (0.021, 0.107)	0.044 (0.016, 0.095)	0.044 (0.016, 0.095)	0.052 (0.021, 0.107)	0.044 (0.016, 0.095)	0.063 (0.029, 0.120)						
10-11 years	0.060 (0.041, 0.084)	0.063 (0.044, 0.088)	0.057 (0.038, 0.080)	0.082 (0.051, 0.123)	0.066 (0.039, 0.104)	0.054 (0.030, 0.089)	0.037 (0.018, 0.069)	0.060 (0.034, 0.098)	0.060 (0.034, 0.098)	0.037 (0.018, 0.069)	0.060 (0.034, 0.098)	0.059 (0.034, 0.096)						
12-14 years	0.042 (0.029, 0.059)	0.047 (0.033, 0.065)	0.057 (0.042, 0.076)	0.054 (0.034, 0.082)	0.059 (0.038, 0.088)	0.069 (0.046, 0.100)	0.030 (0.015, 0.052)	0.035 (0.019, 0.059)	0.035 (0.019, 0.059)	0.030 (0.015, 0.052)	0.035 (0.019, 0.059)	0.045 (0.027, 0.071)						
15-17 years	0.028 (0.018, 0.043)	0.041 (0.028, 0.058)	0.048 (0.034, 0.066)	0.036 (0.020, 0.061)	0.057 (0.035, 0.086)	0.065 (0.043, 0.096)	0.021 (0.009, 0.044)	0.025 (0.012, 0.047)	0.025 (0.012, 0.047)	0.021 (0.009, 0.044)	0.025 (0.012, 0.047)	0.030 (0.016, 0.053)						
18-19 years	0.013 (0.005, 0.026)	0.021 (0.010, 0.037)	0.021 (0.011, 0.038)	0.011 (0.002, 0.033)	0.015 (0.004, 0.040)	0.020 (0.006, 0.046)	0.014 (0.004, 0.037)	0.026 (0.011, 0.054)	0.026 (0.011, 0.054)	0.014 (0.004, 0.037)	0.026 (0.011, 0.054)	0.023 (0.008, 0.050)						
20-24 years	0.022 (0.015, 0.031)	0.023 (0.016, 0.032)	0.022 (0.015, 0.031)	0.026 (0.015, 0.041)	0.025 (0.015, 0.040)	0.023 (0.013, 0.037)	0.018 (0.010, 0.031)	0.021 (0.012, 0.035)	0.021 (0.012, 0.035)	0.018 (0.010, 0.031)	0.021 (0.012, 0.035)	0.022 (0.012, 0.035)						
25-29 years	0.024 (0.017, 0.035)	0.020 (0.013, 0.029)	0.023 (0.016, 0.033)	0.031 (0.019, 0.049)	0.021 (0.011, 0.036)	0.022 (0.012, 0.038)	0.018 (0.009, 0.031)	0.019 (0.010, 0.033)	0.019 (0.010, 0.033)	0.018 (0.009, 0.031)	0.019 (0.010, 0.033)	0.024 (0.014, 0.039)						
30-34 years	0.014 (0.008, 0.023)	0.022 (0.014, 0.033)	0.022 (0.014, 0.032)	0.017 (0.008, 0.033)	0.024 (0.013, 0.041)	0.024 (0.013, 0.040)	0.011 (0.004, 0.023)	0.020 (0.011, 0.036)	0.020 (0.011, 0.036)	0.011 (0.004, 0.023)	0.020 (0.011, 0.036)	0.020 (0.010, 0.034)						
35-39 years	0.025 (0.016, 0.038)	0.028 (0.018, 0.041)	0.028 (0.019, 0.041)	0.028 (0.014, 0.048)	0.025 (0.012, 0.044)	0.035 (0.020, 0.057)	0.023 (0.012, 0.041)	0.031 (0.017, 0.051)	0.031 (0.017, 0.051)	0.023 (0.012, 0.041)	0.031 (0.017, 0.051)	0.022 (0.011, 0.039)						
40-44 years	0.027 (0.017, 0.040)	0.026 (0.017, 0.039)	0.035 (0.024, 0.050)	0.027 (0.013, 0.048)	0.029 (0.015, 0.051)	0.034 (0.018, 0.056)	0.026 (0.014, 0.046)	0.024 (0.012, 0.043)	0.024 (0.012, 0.043)	0.026 (0.014, 0.046)	0.024 (0.012, 0.043)	0.037 (0.021, 0.059)						
45-49 years	0.032 (0.022, 0.046)	0.031 (0.020, 0.045)	0.038 (0.026, 0.054)	0.035 (0.020, 0.058)	0.041 (0.024, 0.065)	0.057 (0.036, 0.085)	0.029 (0.016, 0.049)	0.022 (0.010, 0.040)	0.022 (0.010, 0.040)	0.029 (0.016, 0.049)	0.022 (0.010, 0.040)	0.022 (0.011, 0.040)						
50-54 years	0.044 (0.031, 0.060)	0.041 (0.029, 0.057)	0.038 (0.027, 0.053)	0.042 (0.024, 0.067)	0.041 (0.024, 0.065)	0.035 (0.020, 0.058)	0.045 (0.028, 0.069)	0.042 (0.025, 0.064)	0.042 (0.025, 0.064)	0.045 (0.028, 0.069)	0.042 (0.025, 0.064)	0.041 (0.025, 0.063)						
55-59 years	0.049 (0.034, 0.067)	0.065 (0.048, 0.086)	0.069 (0.052, 0.089)	0.043 (0.023, 0.072)	0.056 (0.033, 0.087)	0.064 (0.041, 0.096)	0.053 (0.033, 0.081)	0.073 (0.049, 0.104)	0.073 (0.049, 0.104)	0.053 (0.033, 0.081)	0.073 (0.049, 0.104)	0.072 (0.049, 0.103)						
60-64 years	0.069 (0.049, 0.094)	0.062 (0.044, 0.086)	0.069 (0.050, 0.093)	0.087 (0.055, 0.132)	0.072 (0.043, 0.112)	0.076 (0.047, 0.116)	0.054 (0.032, 0.087)	0.055 (0.033, 0.087)	0.055 (0.033, 0.087)	0.054 (0.032, 0.087)	0.055 (0.033, 0.087)	0.064 (0.040, 0.097)						
65-69 years	0.061 (0.039, 0.090)	0.081 (0.056, 0.112)	0.090 (0.065, 0.122)	0.033 (0.012, 0.072)	0.073 (0.040, 0.123)	0.092 (0.056, 0.144)	0.083 (0.050, 0.130)	0.087 (0.054, 0.133)	0.087 (0.054, 0.133)	0.083 (0.050, 0.130)	0.087 (0.054, 0.133)	0.089 (0.056, 0.133)						
70-74 years	0.111 (0.076, 0.155)	0.119 (0.084, 0.163)	0.127 (0.091, 0.172)	0.092 (0.047, 0.160)	0.102 (0.056, 0.171)	0.098 (0.054, 0.164)	0.125 (0.078, 0.192)	0.132 (0.083, 0.197)	0.132 (0.083, 0.197)	0.125 (0.078, 0.192)	0.132 (0.083, 0.197)	0.149 (0.098, 0.217)						
75-79 years	0.157 (0.108, 0.221)	0.123 (0.081, 0.179)	0.118 (0.078, 0.172)	0.156 (0.085, 0.261)	0.095 (0.044, 0.181)	0.071 (0.029, 0.147)	0.158 (0.095, 0.247)	0.144 (0.085, 0.228)	0.144 (0.085, 0.228)	0.158 (0.095, 0.247)	0.144 (0.085, 0.228)	0.153 (0.094, 0.237)						
80-84 years	0.208 (0.139, 0.301)	0.228 (0.156, 0.321)	0.247 (0.173, 0.342)	0.241 (0.129, 0.412)	0.214 (0.111, 0.374)	0.225 (0.120, 0.384)	0.186 (0.104, 0.307)	0.236 (0.144, 0.365)	0.236 (0.144, 0.365)	0.186 (0.104, 0.307)	0.236 (0.144, 0.365)	0.262 (0.166, 0.393)						
85 years +	0.238 (0.159, 0.341)	0.269 (0.186, 0.376)	0.238 (0.162, 0.338)	0.240 (0.115, 0.440)	0.275 (0.142, 0.479)	0.261 (0.135, 0.456)	0.237 (0.143, 0.369)	0.266 (0.167, 0.403)	0.266 (0.167, 0.403)	0.237 (0.143, 0.369)	0.266 (0.167, 0.403)	0.226 (0.136, 0.353)						
Crude Total (All)	0.042 (0.039, 0.046)	0.046 (0.042, 0.049)	0.049 (0.045, 0.052)	0.044 (0.040, 0.050)	0.046 (0.041, 0.051)	0.048 (0.043, 0.053)	0.040 (0.036, 0.045)	0.046 (0.041, 0.050)	0.046 (0.041, 0.050)	0.040 (0.036, 0.045)	0.046 (0.041, 0.050)	0.049 (0.044, 0.054)						
Age-adjusted (All)	0.048 (0.044, 0.051)	0.051 (0.047, 0.054)	0.053 (0.049, 0.057)	0.047 (0.042, 0.053)	0.048 (0.043, 0.053)	0.051 (0.045, 0.056)	0.048 (0.043, 0.053)	0.053 (0.048, 0.059)	0.053 (0.048, 0.059)	0.048 (0.043, 0.053)	0.053 (0.048, 0.059)	0.056 (0.050, 0.061)						
Crude Total (40+)	0.061 (0.055, 0.068)	0.065 (0.058, 0.072)	0.070 (0.063, 0.077)	0.058 (0.048, 0.068)	0.061 (0.052, 0.072)	0.066 (0.056, 0.077)	0.064 (0.055, 0.074)	0.068 (0.058, 0.078)	0.068 (0.058, 0.078)	0.064 (0.055, 0.074)	0.068 (0.058, 0.078)	0.073 (0.063, 0.083)						
Age-adjusted (40+)	0.069 (0.061, 0.076)	0.071 (0.064, 0.079)	0.075 (0.068, 0.083)	0.062 (0.052, 0.073)	0.064 (0.054, 0.074)	0.068 (0.058, 0.079)	0.074 (0.063, 0.085)	0.078 (0.067, 0.089)	0.078 (0.067, 0.089)	0.074 (0.063, 0.085)	0.078 (0.067, 0.089)	0.082 (0.071, 0.093)						

¹ Codes used are given in the glossary of ICD-9 and CPT codes used in this report. Determined at clinical level and cannot be disambiguated by plus minus cylinder considerations.
² Confidence intervals (CIs) are calculated by Clopper Pearson Exact method.
³ Age adjustment was based on projected U.S. population by Bureau of the Census for the year 2000.

CATARACT (AGE 40 AND OLDER)

In Fiscal Year 2014, the estimated age-adjusted diagnostic prevalence of cataract for both sexes is 12.246 percent for all ages, and 27.914 percent for ages forty and above. In fiscal year 2014, the estimated age-adjusted diagnostic prevalence of cataract for all ages in females is 14.040 percent and 10.339 percent in males. For ages 40 and above in fiscal year 2014, the estimated age-adjusted diagnostic prevalence of the condition in females is 30.755 percent and 24.576 percent in males.

CHART 1.11 Diagnostic Prevalence Rates for Cataract by Age and Gender
American Indian and Alaska Native, FY 2014

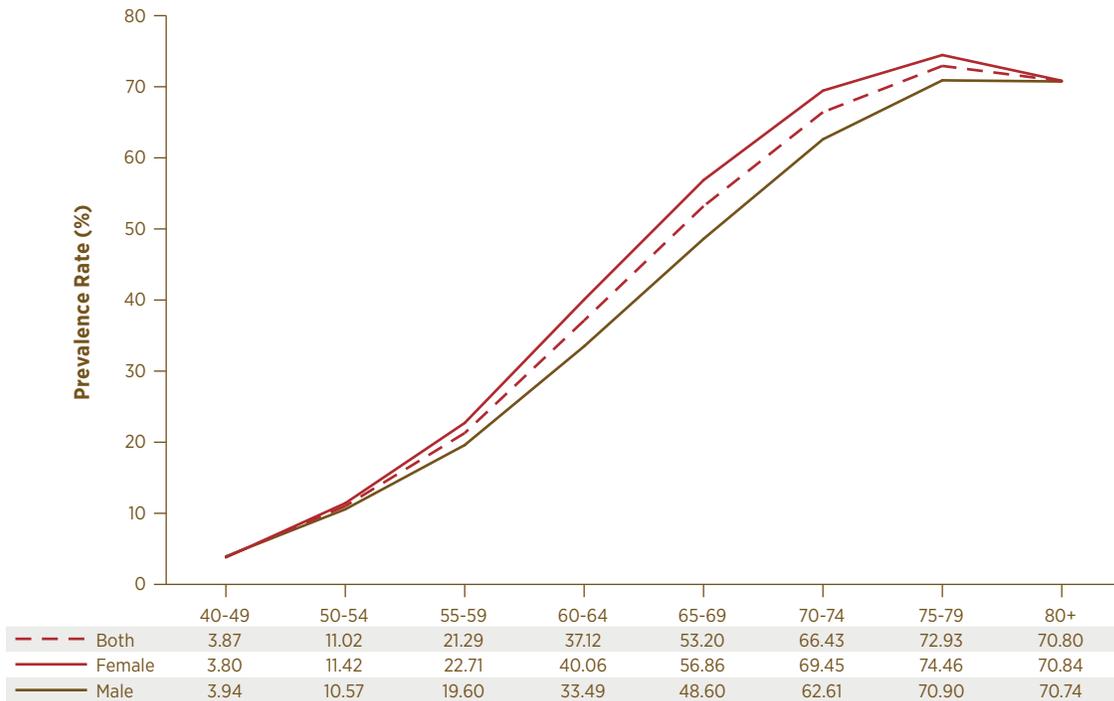


TABLE 1.11 Estimated Diagnostic Prevalence Rates of Cataract¹ by Age and Gender
American Indians and Alaska Natives, IHS Service Area, 2012–2014. (Rate and 95% CI² per 100 Population)

Age Group	Both Sexes						Male			Female		
	American Indian and Alaska Native											
	FY 2012	FY 2013	FY 2014	FY 2012	FY 2013	FY 2014	FY 2012	FY 2013	FY 2014	FY 2012	FY 2013	FY 2014
Under 1 year	0.005 (0, 0.029)	0.011 (0.001, 0.038)	0.010 (0.001, 0.038)	0 (0, 0.037)	0.020 (0.002, 0.074)	0 (0, 0.037)	0.011 (0, 0.059)	0 (0, 0.040)	0.022 (0.003, 0.078)	0 (0, 0.040)	0 (0, 0.032)	0.022 (0.003, 0.078)
1 year	0.016 (0.004, 0.042)	0.033 (0.014, 0.065)	0.008 (0.001, 0.030)	0 (0, 0.029)	0.016 (0.002, 0.058)	0.016 (0.002, 0.058)	0.034 (0.009, 0.086)	0.051 (0.019, 0.110)	0 (0, 0.032)	0.051 (0.019, 0.110)	0 (0, 0.032)	0 (0, 0.032)
2-4 years	0.030 (0.019, 0.044)	0.026 (0.016, 0.039)	0.028 (0.018, 0.042)	0.041 (0.024, 0.064)	0.021 (0.010, 0.040)	0.017 (0.007, 0.034)	0.019 (0.008, 0.037)	0.031 (0.017, 0.054)	0.040 (0.023, 0.064)	0.031 (0.017, 0.054)	0.040 (0.023, 0.064)	0.040 (0.023, 0.064)
5 years	0.039 (0.020, 0.069)	0.043 (0.023, 0.073)	0.057 (0.033, 0.091)	0.045 (0.018, 0.093)	0.078 (0.040, 0.136)	0.066 (0.032, 0.121)	0.033 (0.011, 0.078)	0.007 (0, 0.037)	0.048 (0.019, 0.098)	0.007 (0, 0.037)	0.048 (0.019, 0.098)	0.048 (0.019, 0.098)
6-8 years	0.107 (0.087, 0.131)	0.085 (0.067, 0.107)	0.071 (0.055, 0.090)	0.112 (0.083, 0.148)	0.084 (0.060, 0.115)	0.089 (0.064, 0.121)	0.102 (0.074, 0.136)	0.086 (0.061, 0.119)	0.052 (0.033, 0.078)	0.086 (0.061, 0.119)	0.052 (0.033, 0.078)	0.052 (0.033, 0.078)
9 years	0.099 (0.065, 0.144)	0.119 (0.082, 0.167)	0.136 (0.097, 0.186)	0.109 (0.061, 0.179)	0.128 (0.076, 0.202)	0.133 (0.080, 0.207)	0.089 (0.046, 0.156)	0.109 (0.061, 0.180)	0.140 (0.085, 0.216)	0.109 (0.061, 0.180)	0.140 (0.085, 0.216)	0.140 (0.085, 0.216)
10-11 years	0.142 (0.112, 0.177)	0.123 (0.095, 0.156)	0.131 (0.103, 0.165)	0.159 (0.115, 0.215)	0.136 (0.096, 0.187)	0.137 (0.097, 0.188)	0.124 (0.085, 0.174)	0.109 (0.073, 0.156)	0.126 (0.087, 0.176)	0.109 (0.073, 0.156)	0.126 (0.087, 0.176)	0.126 (0.087, 0.176)
12-14 years	0.140 (0.115, 0.168)	0.156 (0.130, 0.186)	0.161 (0.134, 0.191)	0.145 (0.110, 0.187)	0.155 (0.119, 0.198)	0.187 (0.147, 0.234)	0.135 (0.101, 0.176)	0.158 (0.121, 0.202)	0.134 (0.101, 0.175)	0.158 (0.121, 0.202)	0.134 (0.101, 0.175)	0.134 (0.101, 0.175)
15-17 years	0.179 (0.151, 0.212)	0.179 (0.151, 0.211)	0.183 (0.154, 0.215)	0.197 (0.155, 0.246)	0.198 (0.156, 0.247)	0.186 (0.146, 0.234)	0.162 (0.125, 0.207)	0.161 (0.123, 0.205)	0.179 (0.140, 0.225)	0.161 (0.123, 0.205)	0.179 (0.140, 0.225)	0.179 (0.140, 0.225)
18-19 years	0.235 (0.196, 0.279)	0.230 (0.191, 0.274)	0.197 (0.160, 0.239)	0.238 (0.184, 0.304)	0.243 (0.187, 0.311)	0.216 (0.163, 0.281)	0.232 (0.179, 0.296)	0.216 (0.164, 0.280)	0.178 (0.131, 0.237)	0.216 (0.164, 0.280)	0.178 (0.131, 0.237)	0.178 (0.131, 0.237)
20-24 years	0.292 (0.265, 0.321)	0.298 (0.270, 0.327)	0.319 (0.290, 0.350)	0.371 (0.327, 0.419)	0.378 (0.333, 0.427)	0.390 (0.344, 0.441)	0.220 (0.188, 0.256)	0.225 (0.192, 0.261)	0.255 (0.220, 0.295)	0.225 (0.192, 0.261)	0.255 (0.220, 0.295)	0.255 (0.220, 0.295)
25-29 years	0.443 (0.407, 0.481)	0.460 (0.424, 0.499)	0.447 (0.412, 0.484)	0.476 (0.423, 0.534)	0.503 (0.449, 0.562)	0.499 (0.445, 0.558)	0.413 (0.366, 0.465)	0.422 (0.375, 0.473)	0.400 (0.355, 0.450)	0.422 (0.375, 0.473)	0.400 (0.355, 0.450)	0.400 (0.355, 0.450)
30-34 years	0.691 (0.643, 0.742)	0.709 (0.661, 0.760)	0.717 (0.669, 0.767)	0.764 (0.691, 0.843)	0.762 (0.690, 0.839)	0.758 (0.687, 0.834)	0.625 (0.562, 0.693)	0.662 (0.598, 0.731)	0.679 (0.615, 0.747)	0.662 (0.598, 0.731)	0.679 (0.615, 0.747)	0.679 (0.615, 0.747)
35-39 years	1.195 (1.125, 1.268)	1.241 (1.170, 1.314)	1.252 (1.182, 1.325)	1.287 (1.183, 1.397)	1.376 (1.270, 1.489)	1.377 (1.272, 1.488)	1.111 (1.019, 1.209)	1.117 (1.025, 1.214)	1.138 (1.047, 1.235)	1.117 (1.025, 1.214)	1.138 (1.047, 1.235)	1.138 (1.047, 1.235)
40-44 years	2.275 (2.177, 2.377)	2.320 (2.221, 2.422)	2.412 (2.312, 2.516)	2.425 (2.278, 2.578)	2.427 (2.280, 2.580)	2.486 (2.339, 2.640)	2.142 (2.011, 2.279)	2.225 (2.092, 2.363)	2.346 (2.210, 2.488)	2.225 (2.092, 2.363)	2.346 (2.210, 2.488)	2.346 (2.210, 2.488)
45-49 years	5.030 (4.888, 5.174)	5.177 (5.031, 5.325)	5.357 (5.207, 5.509)	4.948 (4.744, 5.157)	5.169 (4.959, 5.386)	5.439 (5.220, 5.664)	5.104 (4.907, 5.305)	5.183 (4.983, 5.389)	5.284 (5.080, 5.493)	5.183 (4.983, 5.389)	5.284 (5.080, 5.493)	5.284 (5.080, 5.493)
50-54 years	10.079 (9.880, 10.280)	10.582 (10.382, 10.785)	11.021 (10.819, 11.226)	9.608 (9.323, 9.900)	10.151 (9.863, 10.445)	10.566 (10.276, 10.862)	10.486 (10.209, 10.767)	10.957 (10.679, 11.240)	11.417 (11.136, 11.702)	10.957 (10.679, 11.240)	11.417 (11.136, 11.702)	11.417 (11.136, 11.702)
55-59 years	19.974 (19.682, 20.267)	20.756 (20.466, 21.047)	21.285 (21.000, 21.573)	18.353 (17.955, 18.777)	19.112 (18.697, 19.535)	19.598 (19.189, 20.012)	21.315 (20.912, 21.723)	22.128 (21.727, 22.533)	22.705 (22.308, 23.105)	22.128 (21.727, 22.533)	22.705 (22.308, 23.105)	22.705 (22.308, 23.105)
60-64 years	35.018 (34.625, 35.413)	36.145 (35.758, 36.533)	37.122 (36.742, 37.504)	31.294 (30.722, 31.870)	32.334 (31.771, 32.900)	33.492 (32.937, 34.051)	38.026 (37.488, 38.567)	39.233 (38.704, 39.764)	40.061 (39.542, 40.582)	39.233 (38.704, 39.764)	40.061 (39.542, 40.582)	40.061 (39.542, 40.582)
65-69 years	50.986 (50.501, 51.471)	52.095 (51.623, 52.567)	53.203 (52.748, 53.658)	46.578 (45.850, 47.307)	47.711 (47.001, 48.422)	48.601 (47.915, 49.287)	54.485 (53.836, 55.132)	55.564 (54.935, 56.192)	56.857 (56.251, 57.461)	55.564 (54.935, 56.192)	56.857 (56.251, 57.461)	56.857 (56.251, 57.461)
70-74 years	64.439 (63.893, 64.983)	65.414 (64.883, 65.942)	66.433 (65.916, 66.947)	60.874 (60.032, 61.711)	61.684 (60.864, 62.498)	62.611 (61.812, 63.405)	67.228 (66.511, 67.939)	68.344 (67.648, 69.033)	69.454 (68.777, 70.125)	68.344 (67.648, 69.033)	69.454 (68.777, 70.125)	69.454 (68.777, 70.125)
75-79 years	69.881 (69.256, 70.502)	71.511 (70.909, 72.108)	72.930 (72.349, 73.505)	67.741 (66.764, 68.707)	69.385 (68.444, 70.314)	70.903 (69.994, 71.801)	71.486 (70.669, 72.292)	73.116 (72.329, 73.892)	74.457 (73.699, 75.204)	73.116 (72.329, 73.892)	74.457 (73.699, 75.204)	74.457 (73.699, 75.204)
80-84 years	70.587 (69.809, 71.357)	72.319 (71.572, 73.058)	73.616 (72.892, 74.331)	69.593 (68.345, 70.82)	71.033 (69.826, 72.219)	72.460 (71.290, 73.608)	71.253 (70.250, 72.240)	73.171 (72.213, 74.113)	74.379 (73.452, 75.290)	73.171 (72.213, 74.113)	74.379 (73.452, 75.290)	74.379 (73.452, 75.290)
85 years +	63.508 (62.647, 64.363)	65.480 (64.644, 66.309)	67.646 (66.834, 68.450)	64.965 (63.496, 66.414)	66.804 (65.386, 68.200)	68.576 (67.211, 69.917)	62.751 (61.682, 63.810)	64.780 (63.739, 65.810)	67.138 (66.123, 68.142)	64.780 (63.739, 65.810)	67.138 (66.123, 68.142)	67.138 (66.123, 68.142)
Crude Total (All)	8.193 (8.150, 8.237)	8.681 (8.637, 8.726)	9.142 (9.097, 9.188)	7.077 (7.018, 7.136)	7.520 (7.460, 7.581)	7.942 (7.881, 8.004)	9.219 (9.156, 9.283)	9.745 (9.681, 9.810)	10.242 (10.176, 10.308)	9.745 (9.681, 9.810)	10.242 (10.176, 10.308)	10.242 (10.176, 10.308)
Age-adj ³ (All)	11.659 (11.595, 11.724)	11.967 (11.903, 12.031)	12.246 (12.182, 12.309)	9.828 (9.743, 9.912)	10.096 (10.012, 10.180)	10.339 (10.256, 10.423)	13.379 (13.282, 13.476)	13.726 (13.630, 13.822)	14.040 (13.944, 14.135)	13.726 (13.630, 13.822)	14.040 (13.944, 14.135)	14.040 (13.944, 14.135)
Crude Total (40+)	23.827 (23.711, 23.945)	24.902 (24.784, 25.019)	25.945 (25.828, 26.063)	21.517 (21.350, 21.685)	22.54 (22.372, 22.708)	23.527 (23.359, 23.696)	25.751 (25.589, 25.914)	26.868 (26.705, 27.031)	27.963 (27.800, 28.126)	26.868 (26.705, 27.031)	27.963 (27.800, 28.126)	27.963 (27.800, 28.126)
Age-adj ³ (40+)	26.568 (26.419, 26.718)	27.270 (27.122, 27.418)	27.914 (27.767, 28.060)	23.350 (23.145, 23.555)	23.983 (23.780, 24.186)	24.576 (24.375, 24.777)	29.298 (29.084, 29.513)	30.063 (29.850, 30.276)	30.755 (30.544, 30.966)	30.063 (29.850, 30.276)	30.755 (30.544, 30.966)	30.755 (30.544, 30.966)

¹ Codes used are given in the glossary of ICD-9 and CPT codes used in this report.

² Confidence intervals (CIs) are calculated by Clopper Pearson Exact method.

³ Age adjustment was based on projected U.S. population by Bureau of the Census for the year 2000.

DIABETES IN THE IHS PATIENT POPULATION (AGE 40 AND OLDER)

In Fiscal Year 2014, the estimated age-adjusted diagnostic prevalence of diabetes in the IHS patient population for both sexes is 17.859 percent for all ages, and 35.243 percent for ages forty and above. In fiscal year 2014, the estimated age-adjusted diagnostic prevalence of diabetes in the IHS patient population for all ages in females is 19.198 percent and 16.424 percent in males. For ages 40 and above in fiscal year 2014, the estimated age-adjusted diagnostic prevalence of the condition in the IHS patient population in females is 36.238 percent and 34.084 percent in males.

CHART 1.12 Diagnostic Prevalence Rates in the IHS Patient Population for Diabetes by Age and Gender
American Indian and Alaska Native, FY 2014

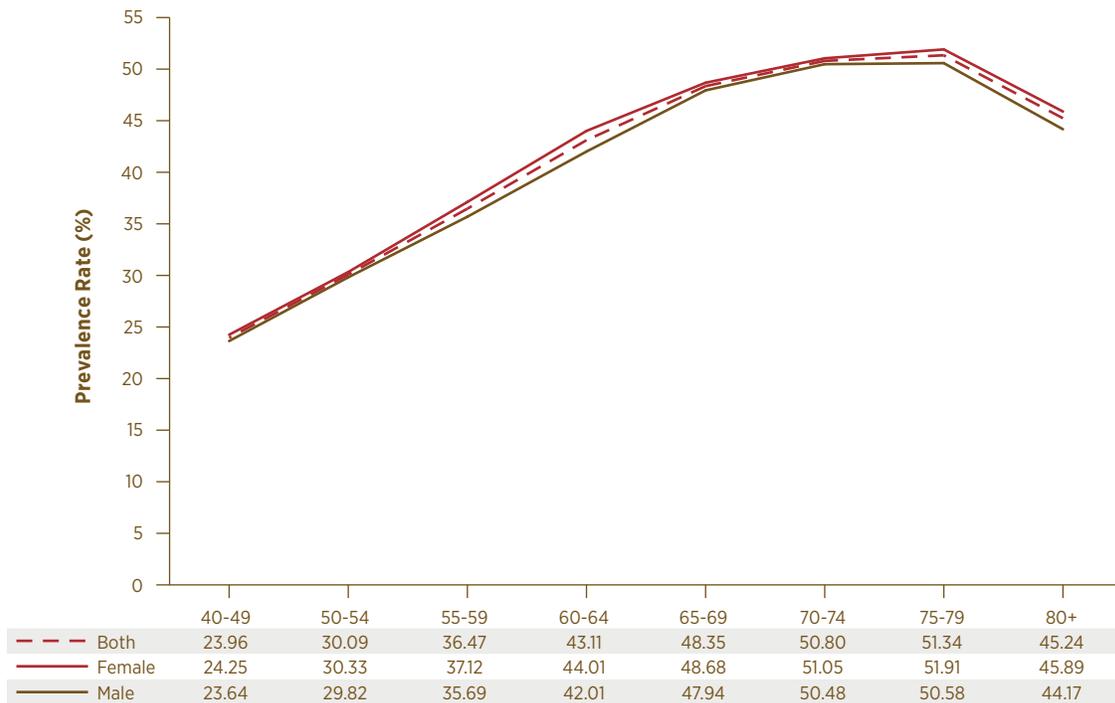


TABLE 1.12 Estimated Prevalence Rates in the IHS Patient Population of Diabetes¹ by Age and Gender
American Indians and Alaska Natives, IHS Service Area, 2012-2014. (Rate and 95% CI² per 100 Population)

Age Group	American Indian and Alaska Native								
	Both Sexes			Male			Female		
	FY 2012	FY 2013	FY 2014	FY 2012	FY 2013	FY 2014	FY 2012	FY 2013	FY 2014
Under 1 year	0.088 (0.052, 0.142)	0.016 (0.003, 0.046)	0.016 (0.003, 0.046)	0.112 (0.056, 0.200)	0.010 (0, 0.057)	0.020 (0.002, 0.073)	0.064 (0.024, 0.139)	0.022 (0.003, 0.079)	0.011 (0, 0.060)
1 year	0.134 (0.092, 0.188)	0.103 (0.067, 0.152)	0.046 (0.023, 0.082)	0.164 (0.102, 0.251)	0.121 (0.068, 0.199)	0.056 (0.023, 0.116)	0.101 (0.052, 0.176)	0.084 (0.040, 0.155)	0.034 (0.009, 0.088)
2-4 years	0.251 (0.219, 0.286)	0.232 (0.201, 0.267)	0.197 (0.167, 0.229)	0.271 (0.225, 0.324)	0.244 (0.199, 0.295)	0.202 (0.162, 0.250)	0.230 (0.187, 0.280)	0.220 (0.177, 0.27)	0.190 (0.150, 0.238)
5 years	0.350 (0.287, 0.423)	0.288 (0.231, 0.355)	0.295 (0.237, 0.363)	0.368 (0.279, 0.476)	0.331 (0.246, 0.434)	0.303 (0.222, 0.404)	0.333 (0.247, 0.438)	0.245 (0.173, 0.338)	0.286 (0.206, 0.387)
6-8 years	0.491 (0.446, 0.540)	0.454 (0.411, 0.501)	0.400 (0.360, 0.444)	0.524 (0.459, 0.595)	0.478 (0.417, 0.546)	0.416 (0.359, 0.479)	0.458 (0.396, 0.526)	0.429 (0.371, 0.495)	0.384 (0.329, 0.446)
9 years	0.620 (0.530, 0.720)	0.594 (0.507, 0.691)	0.597 (0.511, 0.694)	0.739 (0.603, 0.896)	0.561 (0.445, 0.699)	0.642 (0.518, 0.787)	0.498 (0.386, 0.631)	0.628 (0.502, 0.775)	0.553 (0.438, 0.688)
10-11 years	0.706 (0.637, 0.781)	0.758 (0.686, 0.834)	0.759 (0.688, 0.836)	0.752 (0.653, 0.863)	0.860 (0.753, 0.977)	0.764 (0.665, 0.873)	0.659 (0.566, 0.764)	0.653 (0.560, 0.758)	0.755 (0.655, 0.865)
12-14 years	0.980 (0.914, 1.051)	1.034 (0.965, 1.106)	1.077 (1.007, 1.150)	0.893 (0.804, 0.989)	0.951 (0.859, 1.050)	1.055 (0.958, 1.160)	1.070 (0.971, 1.175)	1.118 (1.018, 1.226)	1.098 (0.999, 1.205)
15-17 years	1.376 (1.295, 1.460)	1.411 (1.329, 1.496)	1.435 (1.354, 1.520)	1.323 (1.211, 1.442)	1.337 (1.226, 1.457)	1.360 (1.248, 1.479)	1.429 (1.313, 1.552)	1.484 (1.366, 1.608)	1.510 (1.392, 1.635)
18-19 years	1.923 (1.810, 2.042)	1.818 (1.705, 1.936)	1.772 (1.660, 1.890)	1.768 (1.614, 1.933)	1.714 (1.559, 1.879)	1.613 (1.462, 1.775)	2.072 (1.909, 2.246)	1.918 (1.758, 2.09)	1.926 (1.764, 2.100)
20-24 years	2.616 (2.534, 2.699)	2.703 (2.620, 2.789)	2.748 (2.663, 2.835)	2.123 (2.017, 2.233)	2.213 (2.104, 2.327)	2.296 (2.183, 2.413)	3.063 (2.942, 3.188)	3.146 (3.022, 3.273)	3.157 (3.031, 3.285)
25-29 years	5.277 (5.155, 5.401)	5.153 (5.033, 5.275)	5.139 (5.020, 5.259)	4.369 (4.208, 4.535)	4.276 (4.117, 4.439)	4.213 (4.056, 4.373)	6.099 (5.919, 6.283)	5.944 (5.768, 6.125)	5.966 (5.792, 6.145)
30-34 years	9.800 (9.624, 9.978)	9.658 (9.486, 9.832)	9.548 (9.379, 9.718)	8.514 (8.276, 8.758)	8.363 (8.130, 8.601)	8.297 (8.067, 8.530)	10.976 (10.720, 11.237)	10.838 (10.588, 11.091)	10.679 (10.435, 10.927)
35-39 years	15.727 (15.491, 15.965)	15.938 (15.703, 16.175)	15.833 (15.602, 16.066)	14.532 (14.202, 14.867)	14.614 (14.287, 14.947)	14.453 (14.131, 14.780)	16.818 (16.483, 17.156)	17.144 (16.810, 17.482)	17.092 (16.763, 17.426)
40-44 years	20.761 (20.492, 21.033)	21.213 (20.942, 21.485)	21.741 (21.469, 22.015)	20.295 (19.866, 20.648)	20.748 (20.357, 21.144)	21.169 (20.778, 21.564)	21.215 (20.841, 21.593)	21.625 (21.251, 22.003)	22.254 (21.877, 22.635)
45-49 years	24.941 (24.659, 25.225)	25.641 (25.353, 25.931)	26.237 (25.943, 26.532)	24.733 (24.325, 25.145)	25.482 (25.064, 25.903)	26.175 (25.748, 26.605)	25.128 (24.739, 25.521)	25.784 (25.387, 26.185)	26.292 (25.888, 26.700)
50-54 years	29.474 (29.172, 29.778)	29.925 (29.626, 30.225)	30.092 (29.795, 30.391)	29.203 (28.760, 29.649)	29.812 (29.374, 30.254)	29.821 (29.386, 30.258)	29.709 (29.295, 30.126)	30.023 (29.613, 30.435)	30.328 (29.921, 30.738)
55-59 years	36.441 (36.090, 36.794)	36.497 (36.152, 36.842)	36.467 (36.131, 36.804)	35.131 (34.614, 35.652)	35.280 (34.774, 35.789)	35.686 (35.191, 36.184)	37.526 (37.048, 38.006)	37.513 (37.043, 37.983)	37.124 (36.666, 37.584)
60-64 years	43.358 (42.949, 43.768)	42.984 (42.585, 43.383)	43.114 (42.724, 43.505)	42.814 (42.203, 43.427)	41.858 (41.264, 42.454)	42.012 (41.430, 42.595)	43.797 (43.246, 44.349)	43.896 (43.358, 44.435)	44.006 (43.480, 44.534)
65-69 years	47.712 (47.227, 48.197)	48.217 (47.745, 48.689)	48.352 (47.897, 48.808)	47.592 (46.863, 48.322)	48.344 (47.634, 49.056)	47.944 (47.259, 48.630)	47.807 (47.158, 48.457)	48.116 (47.484, 48.749)	48.677 (48.066, 49.288)
70-74 years	50.101 (49.532, 50.669)	50.418 (49.862, 50.975)	50.797 (50.251, 51.343)	49.168 (48.308, 50.028)	49.891 (49.050, 50.731)	50.479 (49.656, 51.302)	50.830 (50.070, 51.590)	50.833 (50.089, 51.577)	51.048 (50.317, 51.779)
75-79 years	49.055 (48.376, 49.733)	50.251 (49.587, 50.915)	51.339 (50.689, 51.989)	47.988 (46.951, 49.026)	49.268 (48.254, 50.283)	50.575 (49.581, 51.569)	49.854 (48.956, 50.753)	50.992 (50.112, 51.872)	51.914 (51.052, 52.775)
80-84 years	47.294 (46.447, 48.143)	47.753 (46.925, 48.583)	48.901 (48.086, 49.717)	46.427 (45.088, 47.769)	46.225 (44.913, 47.541)	47.685 (46.391, 48.981)	47.875 (46.778, 48.973)	48.765 (47.695, 49.836)	49.704 (48.652, 50.756)
85 years +	38.828 (37.962, 39.699)	39.948 (39.092, 40.808)	41.146 (40.298, 41.998)	36.808 (35.342, 38.292)	38.115 (36.672, 39.574)	39.743 (38.324, 41.175)	39.878 (38.804, 40.959)	40.917 (39.854, 41.986)	41.912 (40.855, 42.976)
Crude Total (All)	13.937 (13.882, 13.992)	14.322 (14.266, 14.377)	14.661 (14.605, 14.717)	12.773 (12.696, 12.85)	13.145 (13.068, 13.222)	13.479 (13.401, 13.556)	15.007 (14.928, 15.086)	15.401 (15.322, 15.480)	15.745 (15.666, 15.824)
Age-adj ³ (All)	17.500 (17.425, 17.574)	17.691 (17.617, 17.765)	17.859 (17.786, 17.932)	16.085 (15.982, 16.188)	16.265 (16.163, 16.368)	16.424 (16.322, 16.525)	18.821 (18.714, 18.928)	19.022 (18.916, 19.128)	19.198 (19.093, 19.303)
Crude Total (40+)	33.891 (33.761, 34.021)	34.484 (34.355, 34.615)	35.062 (34.934, 35.190)	32.954 (32.763, 33.146)	33.582 (33.392, 33.772)	34.174 (33.985, 34.362)	34.670 (34.493, 34.847)	35.235 (35.060, 35.411)	35.803 (35.629, 35.977)
Age-adj ³ (40+)	34.373 (34.211, 34.535)	34.812 (34.652, 34.973)	35.243 (35.084, 35.403)	33.186 (32.951, 33.421)	33.645 (33.411, 33.878)	34.084 (33.852, 34.315)	35.391 (35.167, 35.614)	35.816 (35.595, 36.037)	36.238 (36.019, 36.458)

¹ Codes used are given in the glossary of ICD-9 and CPT codes used in this report.
² Confidence intervals (CIs) are calculated by Clopper Pearson Exact method.
³ Age adjustment was based on projected U.S. population by Bureau of the Census for the year 2000.

DIABETIC RETINOPATHY IN THE IHS PATIENT POPULATION (AGE 40 AND OLDER)

In Fiscal Year 2014, the estimated age-adjusted diagnostic prevalence of diabetic retinopathy in the IHS patient population for both sexes is 4.680 percent for all ages, and 10.296 percent for ages forty and above. In fiscal year 2014, the estimated age-adjusted diagnostic prevalence of diabetic retinopathy in the IHS patient population for all ages in females is 5.069 percent and 4.283 percent in males. For ages 40 and above in fiscal year 2014, the estimated age-adjusted diagnostic prevalence of the condition in the IHS patient population in females is 10.727 percent and 9.824 percent in males.

CHART 1.13 Diagnostic Prevalence Rates in the IHS Patient Population for Diabetic Retinopathy by Age and Gender American Indian and Alaska Native, FY 2014

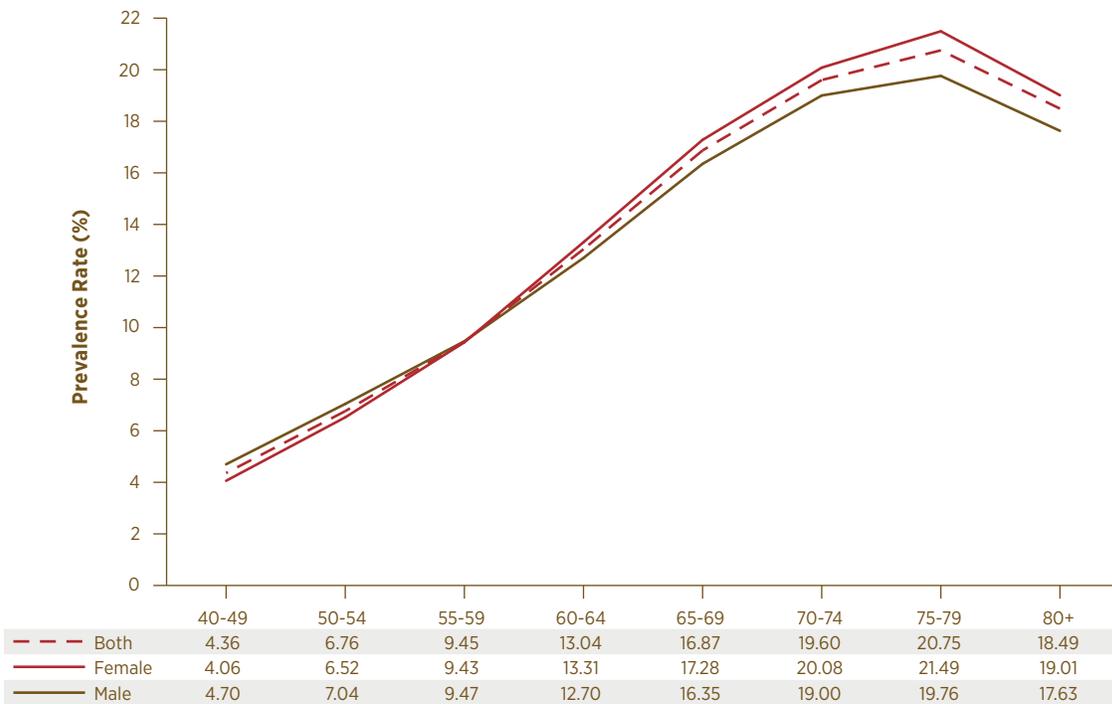


TABLE 1.13 Estimated Prevalence Rates in the IHS Patient Population of Diabetic Retinopathy¹ by Age and Gender
American Indians and Alaska Natives, IHS Service Area, 2012-2014. (Rate and 95% CI² per 100 Population)

Age Group	American Indian and Alaska Native											
	Both Sexes						Male			Female		
	FY 2012	FY 2013	FY 2014	FY 2012	FY 2013	FY 2014	FY 2012	FY 2013	FY 2014	FY 2012	FY 2013	FY 2014
Under 1 year	0 (0, 0.019)	0 (0, 0.019)	0 (0, 0.019)	0 (0, 0.037)	0 (0, 0.038)	0 (0, 0.037)	0 (0, 0.039)	0 (0, 0.040)	0 (0, 0.040)	0 (0, 0.039)	0 (0, 0.040)	0 (0, 0.040)
1 year	0 (0, 0.015)	0 (0, 0.015)	0 (0, 0.015)	0 (0, 0.029)	0 (0, 0.030)	0 (0, 0.030)	0 (0, 0.031)	0 (0, 0.031)	0 (0, 0.031)	0 (0, 0.031)	0 (0, 0.031)	0 (0, 0.032)
2-4 years	0 (0, 0.004)	0 (0, 0.004)	0 (0, 0.004)	0 (0, 0.008)	0 (0, 0.009)	0 (0, 0.009)	0 (0, 0.009)	0 (0, 0.009)	0 (0, 0.009)	0 (0, 0.009)	0 (0, 0.009)	0 (0, 0.009)
5 years	0 (0, 0.012)	0 (0, 0.012)	0.003 (0, 0.019)	0 (0, 0.024)	0 (0, 0.024)	0 (0, 0.024)	0 (0, 0.025)	0 (0, 0.024)	0 (0, 0.024)	0 (0, 0.024)	0 (0, 0.024)	0.007 (0, 0.038)
6-8 years	0.001 (0, 0.006)	0.001 (0, 0.006)	0.001 (0, 0.006)	0.002 (0, 0.013)	0.002 (0, 0.012)	0 (0, 0.008)	0 (0, 0.009)	0 (0, 0.008)	0 (0, 0.008)	0 (0, 0.008)	0 (0, 0.008)	0.002 (0, 0.013)
9 years	0 (0, 0.014)	0 (0, 0.013)	0.003 (0, 0.019)	0 (0, 0.027)	0 (0, 0.026)	0.007 (0, 0.039)	0 (0, 0.027)	0 (0, 0.027)	0 (0, 0.027)	0 (0, 0.027)	0 (0, 0.027)	0 (0, 0.026)
10-11 years	0.004 (0, 0.013)	0.002 (0, 0.010)	0 (0, 0.007)	0.004 (0, 0.021)	0.004 (0, 0.020)	0 (0, 0.013)	0.004 (0, 0.021)	0 (0, 0.014)	0 (0, 0.014)	0 (0, 0.014)	0 (0, 0.014)	0 (0, 0.014)
12-14 years	0.005 (0.001, 0.013)	0.007 (0.003, 0.016)	0.014 (0.007, 0.024)	0.002 (0, 0.014)	0.005 (0.001, 0.018)	0.007 (0.002, 0.022)	0.007 (0.002, 0.022)	0.010 (0.003, 0.026)	0.010 (0.003, 0.026)	0.010 (0.003, 0.026)	0.010 (0.003, 0.026)	0.020 (0.009, 0.039)
15-17 years	0.025 (0.015, 0.038)	0.024 (0.015, 0.038)	0.025 (0.015, 0.039)	0.034 (0.018, 0.058)	0.026 (0.012, 0.047)	0.025 (0.012, 0.046)	0.015 (0.006, 0.034)	0.023 (0.010, 0.044)	0.023 (0.010, 0.044)	0.023 (0.010, 0.044)	0.023 (0.010, 0.044)	0.025 (0.012, 0.046)
18-19 years	0.042 (0.027, 0.063)	0.030 (0.017, 0.049)	0.039 (0.024, 0.060)	0.037 (0.018, 0.068)	0.039 (0.019, 0.071)	0.047 (0.024, 0.082)	0.046 (0.025, 0.079)	0.022 (0.008, 0.049)	0.022 (0.008, 0.049)	0.022 (0.008, 0.049)	0.022 (0.008, 0.049)	0.030 (0.013, 0.060)
20-24 years	0.109 (0.093, 0.127)	0.111 (0.094, 0.130)	0.114 (0.097, 0.133)	0.093 (0.071, 0.118)	0.093 (0.071, 0.119)	0.104 (0.081, 0.132)	0.124 (0.100, 0.152)	0.128 (0.103, 0.156)	0.128 (0.103, 0.156)	0.128 (0.103, 0.156)	0.128 (0.103, 0.156)	0.122 (0.098, 0.150)
25-29 years	0.361 (0.329, 0.396)	0.334 (0.303, 0.367)	0.319 (0.289, 0.351)	0.314 (0.271, 0.362)	0.283 (0.243, 0.329)	0.255 (0.217, 0.298)	0.404 (0.358, 0.455)	0.379 (0.334, 0.428)	0.379 (0.334, 0.428)	0.379 (0.334, 0.428)	0.379 (0.334, 0.428)	0.376 (0.332, 0.424)
30-34 years	0.851 (0.797, 0.907)	0.868 (0.814, 0.923)	0.867 (0.814, 0.922)	0.820 (0.744, 0.901)	0.862 (0.786, 0.944)	0.863 (0.788, 0.944)	0.879 (0.804, 0.959)	0.872 (0.799, 0.951)	0.872 (0.799, 0.951)	0.872 (0.799, 0.951)	0.872 (0.799, 0.951)	0.870 (0.797, 0.947)
35-39 years	1.927 (1.839, 2.019)	1.989 (1.901, 2.081)	1.946 (1.859, 2.035)	2.051 (1.920, 2.189)	2.067 (1.936, 2.203)	2.019 (1.892, 2.153)	1.814 (1.696, 1.938)	1.919 (1.799, 2.045)	1.919 (1.799, 2.045)	1.919 (1.799, 2.045)	1.919 (1.799, 2.045)	1.879 (1.761, 2.002)
40-44 years	3.307 (3.188, 3.428)	3.404 (3.285, 3.526)	3.531 (3.410, 3.655)	3.528 (3.351, 3.711)	3.694 (3.513, 3.880)	3.872 (3.689, 4.062)	3.108 (2.951, 3.272)	3.147 (2.990, 3.310)	3.147 (2.990, 3.310)	3.147 (2.990, 3.310)	3.147 (2.990, 3.310)	3.226 (3.067, 3.390)
45-49 years	4.813 (4.674, 4.954)	5.099 (4.955, 5.247)	5.205 (5.057, 5.355)	5.172 (4.964, 5.386)	5.424 (5.208, 5.646)	5.540 (5.319, 5.766)	4.489 (4.305, 4.679)	4.808 (4.615, 5.007)	4.808 (4.615, 5.007)	4.808 (4.615, 5.007)	4.808 (4.615, 5.007)	4.905 (4.708, 5.108)
50-54 years	6.550 (6.387, 6.716)	6.663 (6.501, 6.828)	6.763 (6.601, 6.928)	6.716 (6.474, 6.965)	6.912 (6.670, 7.159)	7.045 (6.804, 7.292)	6.406 (6.186, 6.632)	6.447 (6.229, 6.670)	6.447 (6.229, 6.670)	6.447 (6.229, 6.670)	6.447 (6.229, 6.670)	6.517 (6.300, 6.740)
55-59 years	9.712 (9.497, 9.930)	9.503 (9.294, 9.715)	9.449 (9.246, 9.656)	9.591 (9.274, 9.916)	9.375 (9.068, 9.689)	9.474 (9.173, 9.781)	9.812 (9.520, 10.109)	9.610 (9.326, 9.899)	9.610 (9.326, 9.899)	9.610 (9.326, 9.899)	9.610 (9.326, 9.899)	9.429 (9.154, 9.710)
60-64 years	13.670 (13.388, 13.956)	13.421 (13.147, 13.697)	13.038 (12.774, 13.306)	13.255 (12.839, 13.679)	13.009 (12.607, 13.42)	12.700 (12.311, 13.098)	14.005 (13.622, 14.395)	13.754 (13.383, 14.131)	13.754 (13.383, 14.131)	13.754 (13.383, 14.131)	13.754 (13.383, 14.131)	13.312 (12.954, 13.676)
65-69 years	16.828 (16.467, 17.194)	16.988 (16.636, 17.345)	16.868 (16.528, 17.211)	16.244 (15.710, 16.789)	16.661 (16.135, 17.196)	16.353 (15.849, 16.866)	17.291 (16.803, 17.788)	17.248 (16.773, 17.730)	17.248 (16.773, 17.730)	17.248 (16.773, 17.730)	17.248 (16.773, 17.730)	17.277 (16.818, 17.743)
70-74 years	19.610 (19.161, 20.065)	19.648 (19.208, 20.093)	19.599 (19.168, 20.036)	18.784 (18.119, 19.464)	19.067 (18.413, 19.735)	18.995 (18.355, 19.648)	20.256 (19.649, 20.872)	20.104 (19.512, 20.706)	20.104 (19.512, 20.706)	20.104 (19.512, 20.706)	20.104 (19.512, 20.706)	20.076 (19.495, 20.668)
75-79 years	19.903 (19.365, 20.449)	20.184 (19.655, 20.722)	20.747 (20.222, 21.278)	18.153 (17.361, 18.965)	18.685 (17.903, 19.487)	19.758 (18.974, 20.559)	21.215 (20.486, 21.957)	21.315 (20.600, 22.044)	21.315 (20.600, 22.044)	21.315 (20.600, 22.044)	21.315 (20.600, 22.044)	21.492 (20.789, 22.207)
80-84 years	20.018 (19.344, 20.705)	20.592 (19.926, 21.269)	20.856 (20.198, 21.525)	18.953 (17.914, 20.026)	19.454 (18.425, 20.515)	19.817 (18.797, 20.868)	20.731 (19.850, 21.633)	21.345 (20.476, 22.234)	21.345 (20.476, 22.234)	21.345 (20.476, 22.234)	21.345 (20.476, 22.234)	21.541 (20.685, 22.416)
85 years +	14.246 (13.630, 14.879)	15.088 (14.468, 15.724)	15.838 (15.215, 16.478)	12.892 (11.890, 13.947)	13.933 (12.919, 14.995)	14.874 (13.856, 15.936)	14.950 (14.176, 15.749)	15.699 (14.921, 16.501)	15.699 (14.921, 16.501)	15.699 (14.921, 16.501)	15.699 (14.921, 16.501)	16.365 (15.580, 17.174)
Crude Total (All)	3.432 (3.403, 3.461)	3.551 (3.522, 3.580)	3.641 (3.612, 3.671)	3.155 (3.115, 3.195)	3.286 (3.246, 3.327)	3.389 (3.348, 3.431)	3.687 (3.645, 3.728)	3.794 (3.752, 3.836)	3.794 (3.752, 3.836)	3.794 (3.752, 3.836)	3.794 (3.752, 3.836)	3.872 (3.830, 3.914)
Age-adj ³ (All)	4.594 (4.554, 4.633)	4.652 (4.613, 4.691)	4.680 (4.642, 4.719)	4.160 (4.106, 4.214)	4.237 (4.184, 4.290)	4.283 (4.230, 4.336)	5.016 (4.958, 5.073)	5.056 (5.000, 5.113)	5.056 (5.000, 5.113)	5.056 (5.000, 5.113)	5.056 (5.000, 5.113)	5.069 (5.013, 5.125)
Crude Total (40+)	9.608 (9.527, 9.689)	9.804 (9.724, 9.885)	9.953 (9.873, 10.034)	9.255 (9.137, 9.373)	9.509 (9.392, 9.628)	9.702 (9.585, 9.821)	9.901 (9.791, 10.013)	10.050 (9.940, 10.160)	10.050 (9.940, 10.160)	10.050 (9.940, 10.160)	10.050 (9.940, 10.160)	10.162 (10.053, 10.272)
Age-adj ³ (40+)	10.096 (10.007, 10.185)	10.220 (10.132, 10.309)	10.296 (10.209, 10.384)	9.517 (9.39, 9.645)	9.700 (9.574, 9.826)	9.824 (9.699, 9.950)	10.616 (10.491, 10.741)	10.693 (10.569, 10.816)	10.693 (10.569, 10.816)	10.693 (10.569, 10.816)	10.693 (10.569, 10.816)	10.727 (10.605, 10.849)

¹ Codes used are given in the glossary of ICD-9 and CPT codes used in this report.

² Confidence intervals (CIs) are calculated by Clopper Pearson Exact method.

³ Age adjustment was based on projected U.S. population by Bureau of the Census for the year 2000.

DIABETIC RETINOPATHY IN LIVING IHS DIABETIC PATIENTS (AGE 40 AND OLDER)

In Fiscal Year 2014, the estimated age-adjusted diagnostic prevalence of diabetic retinopathy in the living IHS diabetic patient population for both sexes is 14.011 percent for all ages, and 26.651 percent for ages forty and above. In fiscal year 2014, the estimated age-adjusted diagnostic prevalence of diabetic retinopathy in the living IHS diabetic patient population for all ages in females is 14.362 percent and 13.756 percent in males. For ages 40 and above in fiscal year 2014, the estimated age-adjusted diagnostic prevalence of the condition in living IHS diabetic patients in females is 26.751 percent and 26.639 percent in males.

CHART 1.14 Diagnostic Prevalence Rates in Living IHS Diabetic Patients for Diabetic Retinopathy by Age and Gender
American Indian and Alaska Native, FY 2014

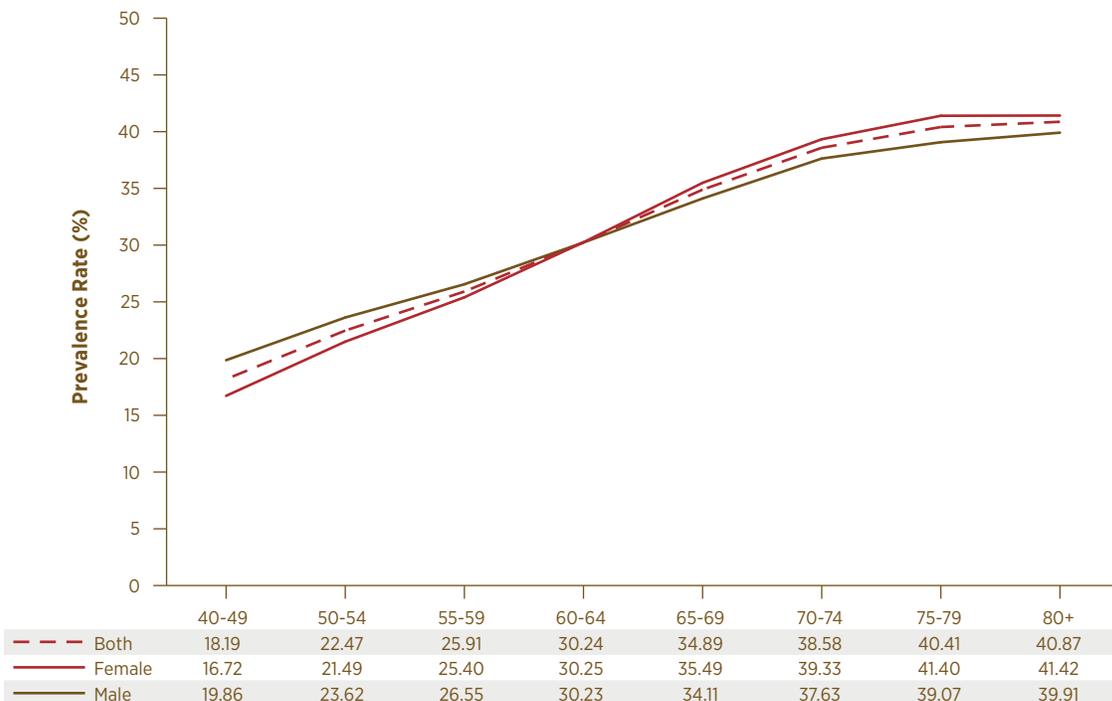


TABLE 1.14 Estimated Prevalence Rates in Living IHS Diabetic Patients of Diabetic Retinopathy¹ by Age and Gender
American Indians and Alaska Natives, IHS Service Area, 2012-2014. (Rate and 95% CI² per 100 Population)

Age Group	Both Sexes						Male			Female		
	FY 2012	FY 2013	FY 2014	FY 2012	FY 2013	FY 2014	FY 2012	FY 2013	FY 2014	FY 2012	FY 2013	FY 2014
Under 1 year	0 (0, 19,506)	0 (0, 70,760)	0 (0, 70,760)	0 (0, 28,491)	0 (0, 97,500)	0 (0, 84,189)	0 (0, 45,926)	0 (0, 84,189)	0 (0, 97,500)	0 (0, 45,926)	0 (0, 84,189)	0 (0, 97,500)
1 year	0 (0, 10,576)	0 (0, 13,719)	0 (0, 28,491)	0 (0, 16,110)	0 (0, 21,802)	0 (0, 40,962)	0 (0, 26,465)	0 (0, 30,850)	0 (0, 60,236)	0 (0, 26,465)	0 (0, 30,850)	0 (0, 60,236)
2-4 years	0 (0, 1,670)	0 (0, 1,864)	0 (0, 2,251)	0 (0, 3,027)	0 (0, 3,452)	0 (0, 4,247)	0 (0, 3,658)	0 (0, 3,973)	0 (0, 4,678)	0 (0, 3,658)	0 (0, 3,973)	0 (0, 4,678)
5 years	0 (0, 3,389)	0 (0, 4,105)	1,136 (0,029, 6,169)	0 (0, 6,267)	0 (0, 6,978)	0 (0, 7,706)	0 (0, 7,112)	0 (0, 9,489)	2,381 (0,060, 12,566)	0 (0, 7,112)	0 (0, 9,489)	2,381 (0,060, 12,566)
6-8 years	0.232 (0,006, 1,286)	0.247 (0,006, 1,368)	0.276 (0,007, 1,529)	0.429 (0,011, 2,368)	0.463 (0,012, 2,552)	0 (0, 1,913)	0 (0, 1,846)	0 (0, 1,933)	0.585 (0,015, 3,215)	0 (0, 1,846)	0 (0, 1,933)	0.585 (0,015, 3,215)
9 years	0 (0, 2,159)	0 (0, 2,211)	0.585 (0,015, 3,715)	0 (0, 3,552)	0 (0, 4,562)	1,087 (0,028, 5,908)	0 (0, 5,357)	0 (0, 4,199)	0 (0, 4,562)	0 (0, 5,357)	0 (0, 4,199)	0 (0, 4,562)
10-11 years	0.528 (0,064, 1,893)	0.245 (0,006, 1,358)	0 (0, 0,883)	0.493 (0,012, 2,714)	0.427 (0,011, 2,358)	0 (0, 1,725)	0.568 (0,014, 3,125)	0 (0, 2,098)	0 (0, 1,792)	0.568 (0,014, 3,125)	0 (0, 2,098)	0 (0, 1,792)
12-14 years	0.505 (0,138, 1,288)	0.720 (0,265, 1,561)	1.264 (0,633, 2,251)	0.275 (0,007, 1,521)	0.518 (0,063, 1,859)	0.699 (0,144, 2,030)	0.701 (0,145, 2,035)	0.895 (0,244, 2,275)	1.814 (0,786, 3,543)	0.701 (0,145, 2,035)	0.895 (0,244, 2,275)	1.814 (0,786, 3,543)
15-17 years	1.782 (1,076, 2,769)	1.724 (1,041, 2,679)	1.754 (1,075, 2,697)	2.544 (1,361, 4,311)	1.923 (0,926, 3,508)	1.852 (0,892, 3,379)	1.081 (0,398, 2,338)	1.546 (0,709, 2,915)	1.667 (0,802, 3,044)	1.081 (0,398, 2,338)	1.546 (0,709, 2,915)	1.667 (0,802, 3,044)
18-19 years	2.180 (1,387, 3,253)	1.670 (0,958, 2,698)	2.176 (1,334, 3,341)	2.105 (1,014, 3,837)	2.252 (1,085, 4,103)	2.920 (1,518, 5,045)	2.241 (1,199, 3,802)	1.167 (0,430, 2,523)	1.575 (0,682, 3,079)	2.241 (1,199, 3,802)	1.167 (0,430, 2,523)	1.575 (0,682, 3,079)
20-24 years	4.169 (3,555, 4,855)	4.109 (3,505, 4,782)	4.133 (3,526, 4,811)	4.369 (3,380, 5,545)	4.189 (3,234, 5,328)	4.528 (3,540, 5,695)	4.043 (3,279, 4,925)	4.057 (3,299, 4,932)	3.874 (3,127, 4,741)	4.043 (3,279, 4,925)	4.057 (3,299, 4,932)	3.874 (3,127, 4,741)
25-29 years	6.848 (6,256, 7,479)	6.478 (5,899, 7,095)	6.206 (5,643, 6,806)	7.186 (6,231, 8,238)	6.629 (5,707, 7,649)	6.057 (5,175, 7,039)	6.629 (5,884, 7,437)	6.380 (5,646, 7,177)	6.300 (5,580, 7,081)	6.629 (5,884, 7,437)	6.380 (5,646, 7,177)	6.300 (5,580, 7,081)
30-34 years	8.681 (8,153, 9,233)	8.982 (8,451, 9,535)	9.078 (8,549, 9,629)	9.628 (8,774, 10,537)	10.312 (9,437, 11,238)	10.408 (9,536, 11,330)	8.009 (7,346, 8,712)	8.048 (7,392, 8,742)	8.143 (7,490, 8,835)	8.009 (7,346, 8,712)	8.048 (7,392, 8,742)	8.143 (7,490, 8,835)
35-39 years	12.255 (11,722, 12,803)	12.482 (11,954, 13,025)	12.289 (11,769, 12,823)	14.116 (13,266, 14,999)	14.140 (13,300, 15,013)	13.97 (13,141, 14,832)	10.788 (10,117, 11,488)	11.194 (10,525, 11,890)	10.991 (10,334, 11,675)	10.788 (10,117, 11,488)	11.194 (10,525, 11,890)	10.991 (10,334, 11,675)
40-44 years	15.927 (15,394, 16,470)	16.047 (15,522, 16,584)	16.243 (15,723, 16,772)	17.418 (16,606, 18,252)	17.801 (16,995, 18,630)	18.292 (17,490, 19,114)	14.652 (13,953, 15,372)	14.553 (13,867, 15,259)	14.494 (13,821, 15,187)	14.652 (13,953, 15,372)	14.553 (13,867, 15,259)	14.494 (13,821, 15,187)
45-49 years	19.296 (18,782, 19,817)	19.887 (19,368, 20,414)	19.837 (19,319, 20,363)	20.912 (20,140, 21,700)	21.286 (20,510, 22,077)	21.163 (20,391, 21,952)	17.865 (17,182, 18,564)	18.648 (17,953, 19,357)	18.655 (17,960, 19,366)	17.865 (17,182, 18,564)	18.648 (17,953, 19,357)	18.655 (17,960, 19,366)
50-54 years	22.223 (21,716, 22,737)	22.266 (21,770, 22,768)	22.474 (21,982, 22,972)	22.999 (22,242, 23,769)	23.184 (22,446, 23,936)	23.624 (22,887, 24,374)	21.564 (20,882, 22,257)	21.473 (20,805, 22,152)	21.489 (20,830, 22,159)	21.564 (20,882, 22,257)	21.473 (20,805, 22,152)	21.489 (20,830, 22,159)
55-59 years	26.650 (26,117, 27,189)	26.038 (25,520, 26,562)	25.912 (25,406, 26,423)	27.301 (26,488, 28,126)	26.573 (25,787, 27,371)	26.548 (25,785, 27,321)	26.146 (25,440, 26,862)	25.618 (24,929, 26,316)	25.398 (24,723, 26,083)	26.146 (25,440, 26,862)	25.618 (24,929, 26,316)	25.398 (24,723, 26,083)
60-64 years	31.528 (30,946, 32,114)	31.222 (30,654, 31,795)	30.242 (29,691, 30,796)	30.959 (30,088, 31,840)	31.080 (30,220, 31,949)	30.231 (29,398, 31,074)	31.977 (31,196, 32,766)	31.332 (30,575, 32,097)	30.250 (29,517, 30,990)	31.977 (31,196, 32,766)	31.332 (30,575, 32,097)	30.250 (29,517, 30,990)
65-69 years	35.270 (34,600, 35,944)	35.233 (34,584, 35,886)	34.885 (34,261, 35,513)	34.132 (33,132, 35,143)	34.462 (33,493, 35,441)	34.108 (33,172, 35,054)	36.169 (35,268, 37,078)	35.846 (34,973, 36,725)	35.493 (34,656, 36,335)	36.169 (35,268, 37,078)	35.846 (34,973, 36,725)	35.493 (34,656, 36,335)
70-74 years	39.141 (38,358, 39,929)	38.970 (38,206, 39,737)	38.583 (37,838, 39,332)	38.205 (37,016, 39,404)	38.218 (37,064, 39,381)	37.630 (36,510, 38,760)	39.850 (38,807, 40,899)	39.550 (38,531, 40,575)	39.528 (38,530, 40,333)	39.850 (38,807, 40,899)	39.550 (38,531, 40,575)	39.528 (38,530, 40,333)
75-79 years	40.573 (39,622, 41,529)	40.167 (39,250, 41,089)	40.411 (39,521, 41,305)	37.827 (36,378, 39,293)	37.925 (36,527, 39,338)	39.066 (37,705, 40,439)	42.554 (41,297, 43,818)	41.801 (40,587, 43,024)	41.398 (40,221, 42,583)	42.554 (41,297, 43,818)	41.801 (40,587, 43,024)	41.398 (40,221, 42,583)
80-84 years	42.326 (41,107, 43,553)	43.121 (41,932, 44,316)	42.649 (41,496, 43,807)	40.824 (38,889, 42,780)	42.085 (40,174, 44,014)	41.558 (39,711, 43,423)	43.302 (41,730, 44,884)	43.771 (42,250, 45,301)	43.339 (41,861, 44,825)	43.302 (41,730, 44,884)	43.771 (42,250, 45,301)	43.339 (41,861, 44,825)
85 years +	36.690 (35,515, 38,081)	37.770 (36,430, 39,124)	38.493 (37,186, 39,812)	35.026 (32,638, 37,471)	36.555 (34,238, 38,919)	37.425 (35,199, 39,691)	37.488 (35,808, 39,192)	38.368 (36,726, 40,031)	39.047 (37,431, 40,680)	37.488 (35,808, 39,192)	38.368 (36,726, 40,031)	39.047 (37,431, 40,680)
Crude Total (All)	24.625 (24,442, 24,808)	24.794 (24,614, 24,974)	24.836 (24,659, 25,013)	24.698 (24,421, 24,976)	24.999 (24,727, 25,273)	25.146 (24,878, 25,415)	24.567 (24,323, 24,815)	24.633 (24,393, 24,874)	24.593 (24,357, 24,829)	24.567 (24,323, 24,815)	24.633 (24,393, 24,874)	24.593 (24,357, 24,829)
Age-adj ³ (All)	13.988 (13,868, 14,108)	14.011 (13,894, 14,128)	14.011 (13,896, 14,126)	13.670 (13,495, 13,846)	13.744 (13,571, 13,917)	13.756 (13,586, 13,925)	14.387 (14,223, 14,552)	14.363 (14,202, 14,524)	14.362 (14,203, 14,521)	14.387 (14,223, 14,552)	14.363 (14,202, 14,524)	14.362 (14,203, 14,521)
Crude Total (40+)	28.349 (28,136, 28,562)	28.431 (28,223, 28,640)	28.387 (28,184, 28,592)	28.083 (27,765, 28,404)	28.317 (28,004, 28,631)	28.392 (28,086, 28,699)	28.559 (28,274, 28,845)	28.517 (28,242, 28,801)	28.384 (28,111, 28,658)	28.559 (28,274, 28,845)	28.517 (28,242, 28,801)	28.384 (28,111, 28,658)
Age-adj ³ (40+)	26.666 (26,430, 26,903)	26.729 (26,498, 26,960)	26.615 (26,425, 26,877)	26.371 (26,018, 26,724)	26.578 (26,231, 26,924)	26.639 (26,299, 26,978)	26.997 (26,678, 27,315)	26.940 (26,628, 27,252)	26.751 (26,447, 27,056)	26.997 (26,678, 27,315)	26.940 (26,628, 27,252)	26.751 (26,447, 27,056)

¹ Codes used are given in the glossary of ICD-9 and CPT codes used in this report.

² Confidence intervals (CIs) are calculated by Clopper Pearson Exact method.

³ Age adjustment was based on projected U.S. population by Bureau of the Census for the year 2000.

DIABETIC MACULAR EDEMA IN THE IHS PATIENT POPULATION (AGE 40 AND OLDER)

In Fiscal Year 2014, the estimated age-adjusted diagnostic prevalence of diabetic macular edema in the IHS patient population for both sexes is 0.472 percent for all ages, and 1.045 percent for ages forty and above. In fiscal year 2014, the estimated age-adjusted diagnostic prevalence of diabetic macular edema in the IHS patient population for all ages in females is 0.495 percent and 0.450 percent in males. For ages 40 and above in fiscal year 2014, the estimated age-adjusted diagnostic prevalence of the condition in the IHS patient population in females is 1.060 percent and 1.034 percent in males.

CHART 1.15 Diagnostic Prevalence Rates in the IHS Patient Population for Diabetic Macular Edema by Age and Gender
American Indian and Alaska Native, FY 2014

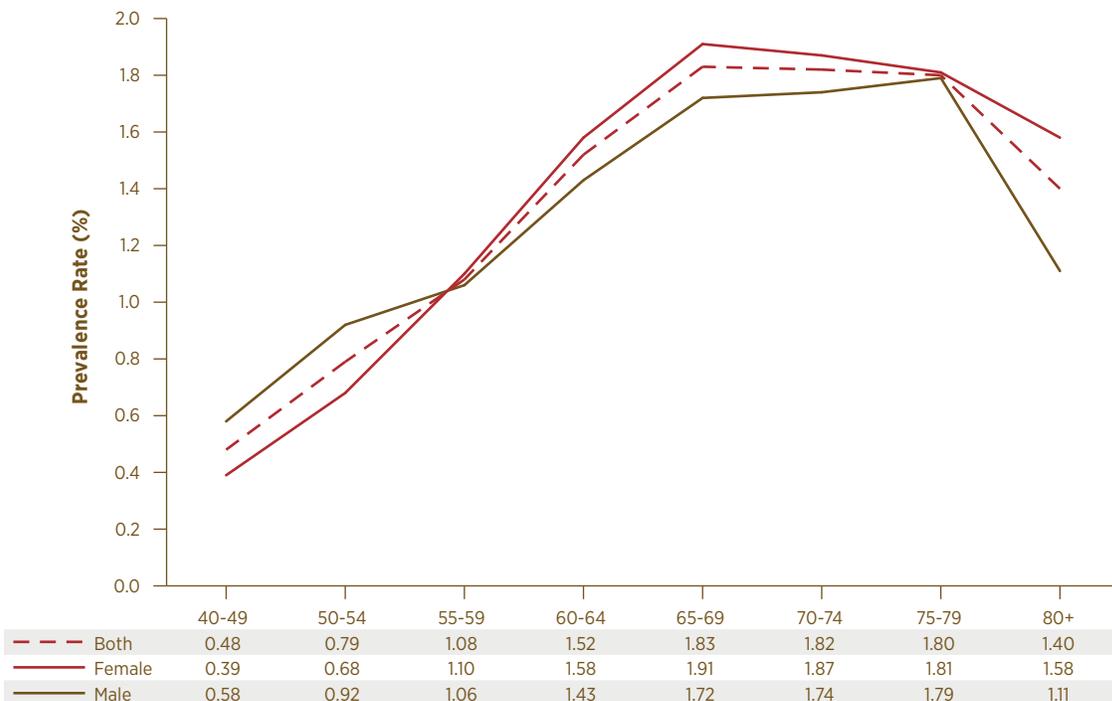


TABLE 1.15 Estimated Prevalence Rates in the IHS Patient Population of Diabetic Macular Edema¹ by Age and Gender
American Indians and Alaska Natives, IHS Service Area, 2012-2014. (Rate and 95% CI² per 100 Population)

Age Group	American Indian and Alaska Native											
	Both Sexes				Male				Female			
	FY 2012	FY 2013	FY 2014	FY 2012	FY 2013	FY 2014	FY 2012	FY 2013	FY 2014	FY 2012	FY 2013	FY 2014
Under 1 year	0 (0, 0.019)	0 (0, 0.019)	0 (0, 0.019)	0 (0, 0.037)	0 (0, 0.038)	0 (0, 0.037)	0 (0, 0.039)	0 (0, 0.040)	0 (0, 0.040)	0 (0, 0.039)	0 (0, 0.040)	0 (0, 0.040)
1 year	0 (0, 0.015)	0 (0, 0.015)	0 (0, 0.015)	0 (0, 0.029)	0 (0, 0.030)	0 (0, 0.030)	0 (0, 0.031)	0 (0, 0.031)	0 (0, 0.032)	0 (0, 0.031)	0 (0, 0.032)	0 (0, 0.032)
2-4 years	0 (0, 0.004)	0 (0, 0.004)	0 (0, 0.004)	0 (0, 0.008)	0 (0, 0.009)	0 (0, 0.009)	0 (0, 0.009)	0 (0, 0.009)	0 (0, 0.009)	0 (0, 0.009)	0 (0, 0.009)	0 (0, 0.009)
5 years	0 (0, 0.012)	0 (0, 0.012)	0 (0, 0.012)	0 (0, 0.024)	0 (0, 0.024)	0 (0, 0.024)	0 (0, 0.025)	0 (0, 0.024)	0 (0, 0.025)	0 (0, 0.024)	0 (0, 0.025)	0 (0, 0.025)
6-8 years	0 (0, 0.004)	0 (0, 0.004)	0 (0, 0.004)	0 (0, 0.008)	0 (0, 0.008)	0 (0, 0.008)	0 (0, 0.009)	0 (0, 0.008)	0 (0, 0.008)	0 (0, 0.008)	0 (0, 0.008)	0 (0, 0.008)
9 years	0 (0, 0.014)	0 (0, 0.013)	0 (0, 0.013)	0 (0, 0.027)	0 (0, 0.026)	0 (0, 0.026)	0 (0, 0.027)	0 (0, 0.027)	0 (0, 0.026)	0 (0, 0.027)	0 (0, 0.026)	0 (0, 0.026)
10-11 years	0 (0, 0.007)	0 (0, 0.007)	0 (0, 0.007)	0 (0, 0.014)	0 (0, 0.014)	0 (0, 0.013)	0 (0, 0.014)	0 (0, 0.014)	0 (0, 0.014)	0 (0, 0.014)	0 (0, 0.014)	0 (0, 0.014)
12-14 years	0 (0, 0.005)	0 (0, 0.005)	0.001 (0, 0.007)	0 (0, 0.009)	0 (0, 0.009)	0 (0, 0.009)	0 (0, 0.009)	0 (0, 0.009)	0.002 (0, 0.014)	0 (0, 0.009)	0.002 (0, 0.014)	0 (0, 0.009)
15-17 years	0.001 (0, 0.007)	0.001 (0, 0.007)	0.001 (0, 0.007)	0.003 (0, 0.014)	0.003 (0, 0.014)	0.003 (0, 0.014)	0 (0, 0.009)	0 (0, 0.009)	0 (0, 0.009)	0 (0, 0.009)	0 (0, 0.009)	0 (0, 0.009)
18-19 years	0 (0, 0.007)	0.002 (0, 0.011)	0.002 (0, 0.011)	0 (0, 0.014)	0.004 (0, 0.022)	0.004 (0, 0.022)	0 (0, 0.013)	0 (0, 0.014)	0 (0, 0.014)	0 (0, 0.014)	0 (0, 0.014)	0 (0, 0.014)
20-24 years	0.005 (0.002, 0.010)	0.006 (0.002, 0.011)	0.006 (0.003, 0.012)	0.007 (0.002, 0.017)	0.009 (0.003, 0.019)	0.012 (0.005, 0.024)	0.003 (0, 0.010)	0.003 (0, 0.010)	0.001 (0, 0.008)	0.003 (0, 0.010)	0.001 (0, 0.008)	0.001 (0, 0.008)
25-29 years	0.021 (0.014, 0.031)	0.022 (0.014, 0.031)	0.022 (0.015, 0.032)	0.020 (0.010, 0.035)	0.016 (0.008, 0.030)	0.018 (0.009, 0.032)	0.022 (0.013, 0.037)	0.026 (0.016, 0.042)	0.026 (0.015, 0.041)	0.026 (0.016, 0.042)	0.026 (0.015, 0.041)	0.026 (0.015, 0.041)
30-34 years	0.061 (0.047, 0.077)	0.075 (0.060, 0.093)	0.078 (0.062, 0.095)	0.069 (0.049, 0.096)	0.088 (0.064, 0.116)	0.082 (0.060, 0.109)	0.053 (0.036, 0.076)	0.064 (0.046, 0.088)	0.074 (0.054, 0.099)	0.064 (0.046, 0.088)	0.074 (0.054, 0.099)	0.074 (0.054, 0.099)
35-39 years	0.159 (0.134, 0.187)	0.175 (0.150, 0.204)	0.177 (0.152, 0.206)	0.191 (0.152, 0.237)	0.210 (0.169, 0.257)	0.220 (0.179, 0.267)	0.130 (0.100, 0.167)	0.144 (0.112, 0.182)	0.138 (0.108, 0.175)	0.144 (0.112, 0.182)	0.138 (0.108, 0.175)	0.138 (0.108, 0.175)
40-44 years	0.275 (0.241, 0.312)	0.320 (0.284, 0.360)	0.378 (0.338, 0.420)	0.338 (0.284, 0.399)	0.411 (0.351, 0.478)	0.480 (0.416, 0.551)	0.219 (0.178, 0.267)	0.240 (0.197, 0.289)	0.286 (0.240, 0.339)	0.240 (0.197, 0.289)	0.286 (0.240, 0.339)	0.286 (0.240, 0.339)
45-49 years	0.423 (0.382, 0.468)	0.524 (0.477, 0.574)	0.581 (0.531, 0.634)	0.527 (0.460, 0.600)	0.632 (0.558, 0.713)	0.681 (0.604, 0.766)	0.330 (0.281, 0.386)	0.427 (0.369, 0.490)	0.491 (0.429, 0.560)	0.427 (0.369, 0.490)	0.491 (0.429, 0.560)	0.491 (0.429, 0.560)
50-54 years	0.623 (0.572, 0.677)	0.701 (0.647, 0.758)	0.792 (0.735, 0.851)	0.675 (0.598, 0.760)	0.780 (0.698, 0.869)	0.921 (0.833, 1.017)	0.578 (0.511, 0.650)	0.632 (0.563, 0.707)	0.679 (0.608, 0.756)	0.632 (0.563, 0.707)	0.679 (0.608, 0.756)	0.679 (0.608, 0.756)
55-59 years	0.910 (0.842, 0.982)	0.963 (0.894, 1.035)	1.083 (1.012, 1.158)	0.893 (0.794, 1.001)	0.955 (0.855, 1.064)	1.059 (0.956, 1.170)	0.925 (0.833, 1.024)	0.969 (0.876, 1.068)	1.104 (1.007, 1.207)	0.969 (0.876, 1.068)	1.104 (1.007, 1.207)	1.104 (1.007, 1.207)
60-64 years	1.283 (1.192, 1.379)	1.388 (1.295, 1.485)	1.516 (1.421, 1.615)	1.236 (1.103, 1.380)	1.321 (1.187, 1.465)	1.434 (1.298, 1.581)	1.321 (1.198, 1.454)	1.442 (1.316, 1.577)	1.582 (1.452, 1.719)	1.442 (1.316, 1.577)	1.582 (1.452, 1.719)	1.582 (1.452, 1.719)
65-69 years	1.536 (1.419, 1.660)	1.733 (1.612, 1.861)	1.829 (1.709, 1.955)	1.466 (1.296, 1.651)	1.716 (1.536, 1.910)	1.723 (1.549, 1.910)	1.592 (1.434, 1.763)	1.747 (1.586, 1.920)	1.913 (1.749, 2.087)	1.747 (1.586, 1.920)	1.913 (1.749, 2.087)	1.913 (1.749, 2.087)
70-74 years	1.481 (1.347, 1.625)	1.677 (1.537, 1.826)	1.816 (1.674, 1.968)	1.359 (1.168, 1.572)	1.567 (1.366, 1.789)	1.742 (1.534, 1.970)	1.576 (1.393, 1.777)	1.763 (1.573, 1.969)	1.875 (1.682, 2.083)	1.763 (1.573, 1.969)	1.875 (1.682, 2.083)	1.875 (1.682, 2.083)
75-79 years	1.405 (1.250, 1.573)	1.569 (1.408, 1.742)	1.803 (1.634, 1.984)	1.201 (0.986, 1.448)	1.400 (1.172, 1.658)	1.792 (1.539, 2.075)	1.558 (1.344, 1.796)	1.696 (1.477, 1.938)	1.811 (1.589, 2.055)	1.696 (1.477, 1.938)	1.811 (1.589, 2.055)	1.811 (1.589, 2.055)
80-84 years	1.340 (1.152, 1.549)	1.578 (1.379, 1.798)	1.806 (1.596, 2.036)	1.095 (0.835, 1.411)	1.214 (0.944, 1.556)	1.382 (1.097, 1.717)	1.504 (1.249, 1.794)	1.820 (1.546, 2.128)	2.086 (1.797, 2.407)	1.820 (1.546, 2.128)	2.086 (1.797, 2.407)	2.086 (1.797, 2.407)
85 years +	0.533 (0.411, 0.679)	0.760 (0.616, 0.927)	0.954 (0.794, 1.136)	0.455 (0.274, 0.710)	0.663 (0.445, 0.951)	0.762 (0.531, 1.058)	0.573 (0.420, 0.764)	0.810 (0.629, 1.028)	1.059 (0.851, 1.301)	0.810 (0.629, 1.028)	1.059 (0.851, 1.301)	1.059 (0.851, 1.301)
Crude Total (All)	0.289 (0.280, 0.297)	0.333 (0.324, 0.343)	0.377 (0.368, 0.387)	0.275 (0.263, 0.287)	0.321 (0.308, 0.334)	0.363 (0.349, 0.377)	0.301 (0.289, 0.314)	0.345 (0.332, 0.358)	0.390 (0.377, 0.404)	0.345 (0.332, 0.358)	0.390 (0.377, 0.404)	0.390 (0.377, 0.404)
Age-adj ³ (All)	0.375 (0.364, 0.386)	0.425 (0.413, 0.436)	0.472 (0.460, 0.484)	0.353 (0.338, 0.369)	0.405 (0.388, 0.421)	0.450 (0.433, 0.467)	0.397 (0.381, 0.413)	0.447 (0.430, 0.463)	0.495 (0.478, 0.512)	0.447 (0.430, 0.463)	0.495 (0.478, 0.512)	0.495 (0.478, 0.512)
Crude Total (40+)	0.815 (0.790, 0.840)	0.928 (0.902, 0.954)	1.043 (1.016, 1.070)	0.807 (0.771, 0.844)	0.929 (0.891, 0.969)	1.043 (1.003, 1.084)	0.822 (0.788, 0.856)	0.927 (0.892, 0.963)	1.042 (1.006, 1.080)	0.927 (0.892, 0.963)	1.042 (1.006, 1.080)	1.042 (1.006, 1.080)
Age-adj ³ (40+)	0.827 (0.802, 0.852)	0.957 (0.911, 0.964)	1.045 (1.018, 1.073)	0.806 (0.770, 0.843)	0.925 (0.886, 0.963)	1.034 (0.994, 1.074)	0.848 (0.813, 0.883)	0.954 (0.917, 0.990)	1.060 (1.023, 1.098)	0.954 (0.917, 0.990)	1.060 (1.023, 1.098)	1.060 (1.023, 1.098)

¹ Codes used are given in the glossary of ICD-9 and CPT codes used in this report.

² Confidence intervals (CIs) are calculated by Clopper Pearson Exact method.

³ Age adjustment was based on projected U.S. population by Bureau of the Census for the year 2000.

DIABETIC MACULAR EDEMA IN LIVING IHS DIABETIC PATIENTS (AGE 40 AND OLDER)

In Fiscal Year 2014, the estimated age-adjusted diagnostic prevalence of diabetic macular edema in living IHS diabetic patients for both sexes is 1.390 percent for all ages, and 2.758 percent for ages forty and above. In fiscal year 2014, the estimated age-adjusted diagnostic prevalence for all ages of males is 1.469 percent and 1.344 percent for females. For ages 40 and above in fiscal year 2014, the estimated age-adjusted diagnostic prevalence of the condition in living IHS diabetic patients in males is 2.910 percent and 2.650 percent in females.

CHART 1.16 Diagnostic Prevalence Rates for Diabetic Macular Edema in living IHS Diabetic Patients by Age and Gender
American Indian and Alaska Native, FY 2014

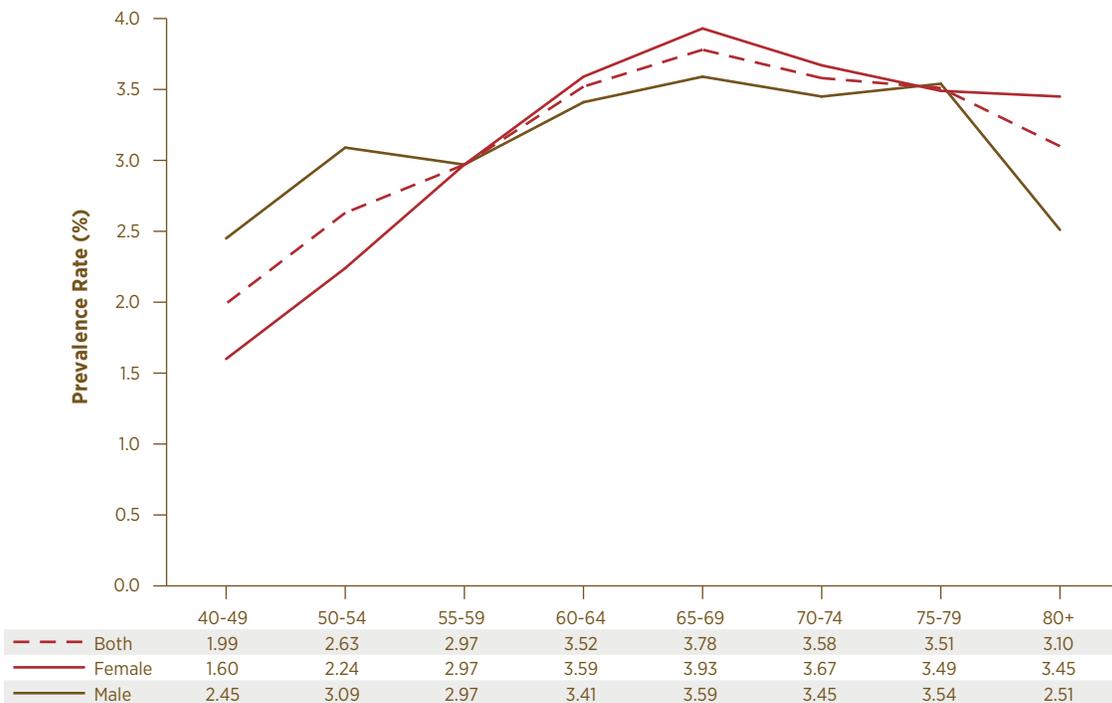


TABLE 1.16 Estimated Prevalence Rates in Living IHS Diabetic Macular Edema¹ by Age and Gender
American Indians and Alaska Natives, IHS Service Area, 2012–2014. (Rate and 95% CI² per 100 Population)

Age Group	Both Sexes						Male			Female		
	American Indian and Alaska Native											
	FY 2012	FY 2013	FY 2014	FY 2012	FY 2013	FY 2014	FY 2012	FY 2013	FY 2014	FY 2012	FY 2013	FY 2014
Under 1 year	0 (0, 19.506)	0 (0, 70.760)	0 (0, 70.760)	0 (0, 28.491)	0 (0, 97.500)	0 (0, 84.189)	0 (0, 45.926)	0 (0, 84.189)	0 (0, 97.500)	0 (0, 45.926)	0 (0, 84.189)	0 (0, 97.500)
1 year	0 (0, 10.576)	0 (0, 13.719)	0 (0, 28.491)	0 (0, 16.110)	0 (0, 21.802)	0 (0, 40.962)	0 (0, 26.465)	0 (0, 30.850)	0 (0, 60.236)	0 (0, 30.850)	0 (0, 60.236)	0 (0, 60.236)
2-4 years	0 (0, 1.670)	0 (0, 1.864)	0 (0, 2.251)	0 (0, 3.027)	0 (0, 3.452)	0 (0, 4.247)	0 (0, 3.658)	0 (0, 3.973)	0 (0, 4.678)	0 (0, 3.973)	0 (0, 4.678)	0 (0, 4.678)
5 years	0 (0, 3.389)	0 (0, 4.105)	0 (0, 4.105)	0 (0, 6.267)	0 (0, 6.978)	0 (0, 7.706)	0 (0, 7.112)	0 (0, 9.489)	0 (0, 8.408)	0 (0, 9.489)	0 (0, 8.408)	0 (0, 8.408)
6-8 years	0 (0, 0.852)	0 (0, 0.907)	0 (0, 1.014)	0 (0, 1.571)	0 (0, 1.693)	0 (0, 1.913)	0 (0, 1.846)	0 (0, 1.933)	0 (0, 2.134)	0 (0, 1.933)	0 (0, 2.134)	0 (0, 2.134)
9 years	0 (0, 2.159)	0 (0, 2.211)	0 (0, 2.134)	0 (0, 3.552)	0 (0, 4.562)	0 (0, 3.930)	0 (0, 5.357)	0 (0, 4.199)	0 (0, 4.562)	0 (0, 4.199)	0 (0, 4.562)	0 (0, 4.562)
10-11 years	0 (0, 0.969)	0 (0, 0.900)	0 (0, 0.883)	0 (0, 1.801)	0 (0, 1.564)	0 (0, 1.725)	0 (0, 2.074)	0 (0, 2.098)	0 (0, 1.792)	0 (0, 2.098)	0 (0, 1.792)	0 (0, 1.792)
12-14 years	0 (0, 0.465)	0 (0, 0.442)	0.15 (0.003, 0.639)	0 (0, 1.008)	0 (0, 0.951)	0 (0, 0.856)	0 (0, 0.858)	0 (0, 0.822)	0.27 (0.006, 1.257)	0 (0, 0.822)	0.27 (0.006, 1.257)	0.27 (0.006, 1.257)
15-17 years	0.094 (0.002, 0.522)	0.091 (0.002, 0.505)	0.088 (0.002, 0.488)	0.196 (0.005, 1.085)	0.192 (0.005, 1.067)	0.185 (0.005, 1.027)	0 (0, 0.662)	0 (0, 0.652)	0 (0, 0.615)	0 (0, 0.652)	0 (0, 0.615)	0 (0, 0.615)
18-19 years	0 (0, 0.349)	0.104 (0.003, 0.580)	0.109 (0.003, 0.605)	0 (0, 0.774)	0.225 (0.006, 1.248)	0.243 (0.006, 1.348)	0 (0, 0.634)	0 (0, 0.715)	0 (0, 0.724)	0 (0, 0.715)	0 (0, 0.724)	0 (0, 0.724)
20-24 years	0.185 (0.074, 0.380)	0.207 (0.089, 0.407)	0.234 (0.107, 0.444)	0.341 (0.111, 0.795)	0.399 (0.147, 0.866)	0.525 (0.227, 1.032)	0.086 (0.010, 0.310)	0.085 (0.010, 0.305)	0.043 (0.001, 0.240)	0.085 (0.010, 0.305)	0.043 (0.001, 0.240)	0.043 (0.001, 0.240)
25-29 years	0.402 (0.265, 0.584)	0.420 (0.279, 0.606)	0.427 (0.286, 0.613)	0.454 (0.235, 0.791)	0.381 (0.183, 0.699)	0.419 (0.209, 0.749)	0.368 (0.206, 0.607)	0.445 (0.264, 0.703)	0.433 (0.257, 0.683)	0.445 (0.264, 0.703)	0.433 (0.257, 0.683)	0.433 (0.257, 0.683)
30-34 years	0.621 (0.480, 0.789)	0.781 (0.625, 0.965)	0.814 (0.655, 0.999)	0.816 (0.572, 1.127)	1.047 (0.770, 1.390)	0.986 (0.720, 1.317)	0.482 (0.326, 0.688)	0.595 (0.421, 0.816)	0.693 (0.506, 0.926)	0.595 (0.421, 0.816)	0.693 (0.506, 0.926)	0.693 (0.506, 0.926)
35-39 years	1.012 (0.855, 1.190)	1.100 (0.939, 1.282)	1.120 (0.958, 1.301)	1.315 (1.049, 1.628)	1.436 (1.160, 1.756)	1.522 (1.240, 1.848)	0.774 (0.594, 0.991)	0.840 (0.655, 1.060)	0.810 (0.631, 1.024)	0.840 (0.655, 1.060)	0.810 (0.631, 1.024)	0.810 (0.631, 1.024)
40-44 years	1.325 (1.163, 1.504)	1.510 (1.339, 1.696)	1.736 (1.556, 1.931)	1.667 (1.402, 1.966)	1.981 (1.696, 2.299)	2.265 (1.965, 2.598)	1.033 (0.841, 1.255)	1.109 (0.913, 1.334)	1.285 (1.077, 1.521)	1.109 (0.913, 1.334)	1.285 (1.077, 1.521)	1.285 (1.077, 1.521)
45-49 years	1.697 (1.532, 1.874)	2.042 (1.862, 2.235)	2.214 (2.026, 2.414)	2.129 (1.862, 2.423)	2.479 (2.192, 2.793)	2.603 (2.309, 2.924)	1.314 (1.118, 1.535)	1.655 (1.434, 1.900)	1.867 (1.632, 2.126)	1.655 (1.434, 1.900)	1.867 (1.632, 2.126)	1.867 (1.632, 2.126)
50-54 years	2.113 (1.941, 2.297)	2.342 (2.165, 2.530)	2.652 (2.446, 2.828)	2.313 (2.049, 2.600)	2.616 (2.343, 2.912)	3.090 (2.796, 3.406)	1.944 (1.721, 2.188)	2.106 (1.878, 2.353)	2.239 (2.007, 2.490)	2.106 (1.878, 2.353)	2.239 (2.007, 2.490)	2.239 (2.007, 2.490)
55-59 years	2.498 (2.313, 2.694)	2.637 (2.451, 2.834)	2.970 (2.777, 3.173)	2.543 (2.263, 2.847)	2.708 (2.426, 3.013)	2.967 (2.680, 3.275)	2.464 (2.220, 2.727)	2.582 (2.337, 2.845)	2.973 (2.715, 3.249)	2.582 (2.337, 2.845)	2.973 (2.715, 3.249)	2.973 (2.715, 3.249)
60-64 years	2.959 (2.750, 3.179)	3.229 (3.016, 3.453)	3.516 (3.298, 3.743)	2.886 (2.578, 3.219)	3.156 (2.839, 3.498)	3.414 (3.092, 3.760)	3.017 (2.736, 3.317)	3.286 (3.001, 3.590)	3.594 (3.303, 3.903)	3.286 (3.001, 3.590)	3.594 (3.303, 3.903)	3.594 (3.303, 3.903)
65-69 years	3.219 (2.976, 3.476)	3.595 (3.346, 3.856)	3.782 (3.536, 4.040)	3.080 (2.726, 3.466)	3.549 (3.181, 3.947)	3.594 (3.235, 3.980)	3.330 (3.001, 3.683)	3.631 (3.298, 3.987)	3.930 (3.597, 4.284)	3.631 (3.298, 3.987)	3.930 (3.597, 4.284)	3.930 (3.597, 4.284)
70-74 years	2.956 (2.691, 3.240)	3.326 (3.051, 3.618)	3.576 (3.297, 3.871)	2.764 (2.378, 3.195)	3.141 (2.741, 3.582)	3.451 (3.042, 3.899)	3.102 (2.743, 3.492)	3.468 (3.098, 3.870)	3.673 (3.298, 4.077)	3.468 (3.098, 3.870)	3.673 (3.298, 4.077)	3.673 (3.298, 4.077)
75-79 years	2.864 (2.550, 3.205)	3.122 (2.805, 3.464)	3.512 (3.186, 3.861)	2.502 (2.057, 3.013)	2.841 (2.382, 3.360)	3.544 (3.047, 4.096)	3.126 (2.699, 3.598)	3.327 (2.900, 3.797)	3.488 (3.064, 3.953)	3.327 (2.900, 3.797)	3.488 (3.064, 3.953)	3.488 (3.064, 3.953)
80-84 years	2.833 (2.439, 3.271)	3.306 (2.891, 3.761)	3.693 (3.267, 4.158)	2.359 (1.801, 3.033)	2.625 (2.044, 3.317)	2.899 (2.305, 3.595)	3.141 (2.613, 3.742)	3.732 (3.175, 4.357)	4.196 (3.621, 4.834)	3.732 (3.175, 4.357)	4.196 (3.621, 4.834)	4.196 (3.621, 4.834)
85 years +	1.372 (1.061, 1.746)	1.901 (1.543, 2.317)	2.318 (1.932, 2.758)	1.237 (0.746, 1.925)	1.741 (1.169, 2.490)	1.918 (1.339, 2.657)	1.437 (1.054, 1.912)	1.980 (1.538, 2.508)	2.526 (2.033, 3.099)	1.980 (1.538, 2.508)	2.526 (2.033, 3.099)	2.526 (2.033, 3.099)
Crude Total (All)	2.071 (2.011, 2.132)	2.328 (2.266, 2.392)	2.573 (2.509, 2.639)	2.151 (2.059, 2.246)	2.441 (2.345, 2.540)	2.693 (2.595, 2.795)	2.009 (1.950, 2.090)	2.240 (2.158, 2.324)	2.479 (2.395, 2.566)	2.240 (2.158, 2.324)	2.479 (2.395, 2.566)	2.479 (2.395, 2.566)
Age-adj ³ (All)	1.121 (1.088, 1.154)	1.265 (1.250, 1.299)	1.390 (1.355, 1.426)	1.176 (1.125, 1.227)	1.339 (1.285, 1.393)	1.469 (1.414, 1.525)	1.090 (1.046, 1.133)	1.219 (1.174, 1.265)	1.344 (1.297, 1.391)	1.219 (1.174, 1.265)	1.344 (1.297, 1.391)	1.344 (1.297, 1.391)
Crude Total (40+)	2.405 (2.333, 2.478)	2.691 (2.617, 2.767)	2.974 (2.898, 3.052)	2.448 (2.340, 2.560)	2.767 (2.655, 2.883)	3.053 (2.937, 3.172)	2.370 (2.275, 2.468)	2.631 (2.533, 2.732)	2.911 (2.810, 3.015)	2.631 (2.533, 2.732)	2.911 (2.810, 3.015)	2.911 (2.810, 3.015)
Age-adj ³ (40+)	2.214 (2.147, 2.281)	2.492 (2.422, 2.562)	2.758 (2.686, 2.831)	2.309 (2.204, 2.413)	2.627 (2.517, 2.736)	2.910 (2.797, 3.023)	2.147 (2.059, 2.235)	2.396 (2.305, 2.487)	2.650 (2.556, 2.744)	2.396 (2.305, 2.487)	2.650 (2.556, 2.744)	2.650 (2.556, 2.744)

¹ Codes used are given in the glossary of ICD-9 and CPT codes used in this report.

² Confidence intervals (CIs) are calculated by Clopper Pearson Exact method.

³ Age adjustment was based on projected U.S. population by Bureau of the Census for the year 2000.

RETINAL DETACHMENT (AGE 40 AND OLDER)

In Fiscal Year 2014, the estimated age-adjusted diagnostic prevalence of retinal detachment for both sexes is 1.302 percent for all ages, and 2.389 percent for ages forty and above. In fiscal year 2014, the estimated age-adjusted diagnostic prevalence of retinal detachment for all ages of males is 1.321 percent and 1.288 percent for females. For ages 40 and above in fiscal year 2014, the estimated age-adjusted diagnostic prevalence of the condition in males is 2.477 percent and 2.318 percent in females.

CHART 1.17 Diagnostic Prevalence Rates for Retinal Detachment by Age and Gender
American Indian and Alaska Native, FY 2014

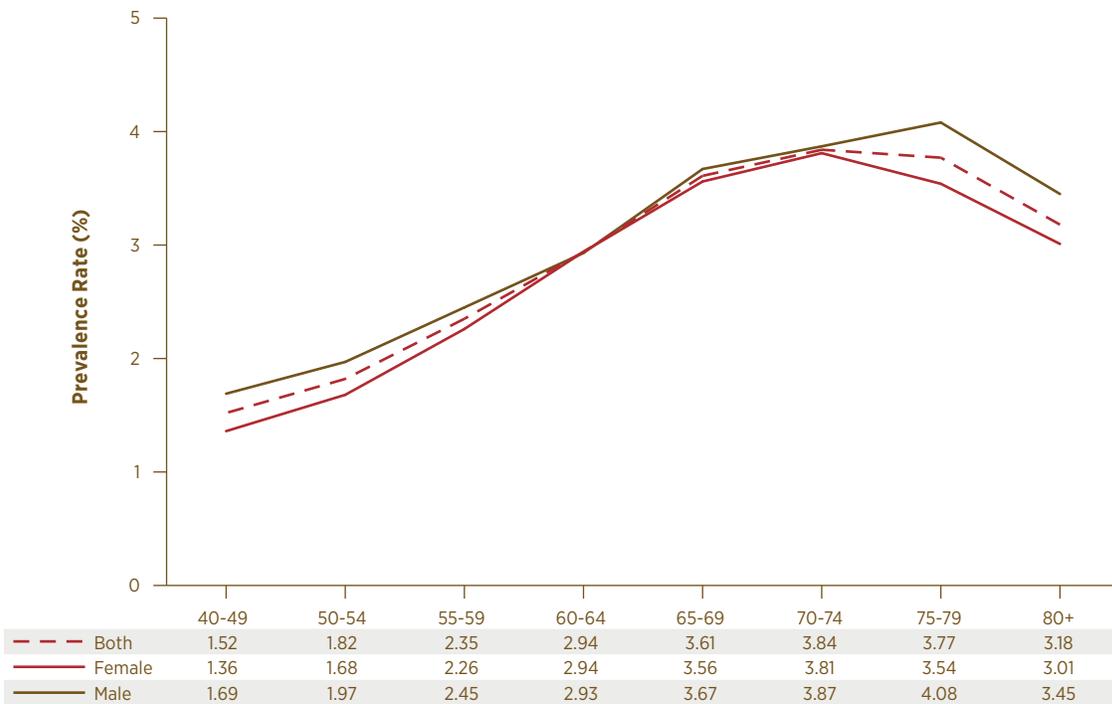


TABLE 1.17 Estimated Diagnostic Prevalence Rates of Retinal Detachment¹ by Age and Gender
American Indians and Alaska Natives, IHS Service Area, 2012–2014. (Rate and 95% CI² per 100 Population)

Age Group	American Indian and Alaska Native																	
	Both Sexes						Male						Female					
	FY 2012	FY 2013	FY 2014	FY 2012	FY 2013	FY 2014	FY 2012	FY 2013	FY 2014	FY 2012	FY 2013	FY 2014	FY 2012	FY 2013	FY 2014			
Under 1 year	0 (0, 0.019)	0 (0, 0.019)	0.005 (0, 0.029)	0 (0, 0.037)	0 (0, 0.038)	0.010 (0, 0.056)	0 (0, 0.037)	0 (0, 0.038)	0.010 (0, 0.056)	0 (0, 0.037)	0 (0, 0.038)	0.010 (0, 0.056)	0 (0, 0.037)	0 (0, 0.038)	0.010 (0, 0.056)			
1 year	0.004 (0, 0.023)	0.008 (0.001, 0.030)	0.004 (0, 0.023)	0.008 (0, 0.044)	0.008 (0, 0.045)	0.008 (0, 0.045)	0.008 (0, 0.044)	0.008 (0, 0.045)	0.008 (0, 0.045)	0.008 (0, 0.045)	0.008 (0, 0.045)	0.008 (0, 0.045)	0.008 (0, 0.047)	0.008 (0, 0.047)	0.008 (0, 0.047)			
2-4 years	0.008 (0.003, 0.017)	0.009 (0.004, 0.019)	0.007 (0.003, 0.016)	0.011 (0.004, 0.026)	0.016 (0.007, 0.033)	0.012 (0.004, 0.028)	0.011 (0.004, 0.026)	0.016 (0.007, 0.033)	0.012 (0.004, 0.028)	0.011 (0.004, 0.026)	0.012 (0.004, 0.028)	0.011 (0.004, 0.026)	0.005 (0.001, 0.017)	0.002 (0, 0.013)	0.002 (0, 0.014)			
5 years	0.016 (0.005, 0.038)	0.007 (0.001, 0.024)	0.010 (0.002, 0.029)	0.019 (0.004, 0.057)	0.006 (0, 0.036)	0.020 (0.004, 0.058)	0.019 (0.004, 0.057)	0.006 (0, 0.036)	0.020 (0.004, 0.058)	0.019 (0.004, 0.057)	0.020 (0.004, 0.058)	0.019 (0.004, 0.057)	0.013 (0.002, 0.048)	0.007 (0, 0.037)	0 (0, 0.025)			
6-8 years	0.026 (0.017, 0.039)	0.018 (0.010, 0.029)	0.019 (0.011, 0.030)	0.027 (0.014, 0.047)	0.020 (0.009, 0.038)	0.015 (0.006, 0.031)	0.027 (0.014, 0.047)	0.020 (0.009, 0.038)	0.015 (0.006, 0.031)	0.020 (0.009, 0.038)	0.015 (0.006, 0.031)	0.027 (0.014, 0.047)	0.025 (0.013, 0.045)	0.016 (0.006, 0.033)	0.022 (0.011, 0.041)			
9 years	0.037 (0.018, 0.067)	0.050 (0.028, 0.085)	0.028 (0.012, 0.055)	0.029 (0.008, 0.074)	0.050 (0.020, 0.102)	0.042 (0.015, 0.091)	0.029 (0.008, 0.074)	0.050 (0.020, 0.102)	0.042 (0.015, 0.091)	0.050 (0.020, 0.102)	0.042 (0.015, 0.091)	0.029 (0.008, 0.074)	0.045 (0.016, 0.097)	0.051 (0.021, 0.105)	0.014 (0.002, 0.051)			
10-11 years	0.075 (0.053, 0.101)	0.063 (0.044, 0.088)	0.069 (0.049, 0.095)	0.096 (0.063, 0.141)	0.070 (0.042, 0.109)	0.058 (0.033, 0.094)	0.096 (0.063, 0.141)	0.070 (0.042, 0.109)	0.058 (0.033, 0.094)	0.070 (0.042, 0.109)	0.058 (0.033, 0.094)	0.096 (0.063, 0.141)	0.052 (0.029, 0.088)	0.056 (0.032, 0.093)	0.081 (0.051, 0.123)			
12-14 years	0.121 (0.098, 0.148)	0.134 (0.10, 0.162)	0.139 (0.114, 0.167)	0.135 (0.102, 0.176)	0.153 (0.117, 0.196)	0.170 (0.132, 0.215)	0.135 (0.102, 0.176)	0.153 (0.117, 0.196)	0.170 (0.132, 0.215)	0.153 (0.117, 0.196)	0.170 (0.132, 0.215)	0.135 (0.102, 0.176)	0.107 (0.078, 0.145)	0.115 (0.084, 0.153)	0.107 (0.078, 0.144)			
15-17 years	0.234 (0.201, 0.270)	0.221 (0.190, 0.257)	0.243 (0.210, 0.280)	0.261 (0.213, 0.318)	0.249 (0.202, 0.304)	0.257 (0.210, 0.312)	0.221 (0.190, 0.257)	0.243 (0.210, 0.280)	0.261 (0.213, 0.318)	0.249 (0.202, 0.304)	0.257 (0.210, 0.312)	0.221 (0.190, 0.257)	0.206 (0.163, 0.256)	0.194 (0.153, 0.242)	0.229 (0.184, 0.281)			
18-19 years	0.343 (0.296, 0.395)	0.362 (0.313, 0.418)	0.372 (0.322, 0.428)	0.398 (0.327, 0.481)	0.436 (0.360, 0.524)	0.424 (0.348, 0.511)	0.362 (0.313, 0.418)	0.436 (0.360, 0.524)	0.424 (0.348, 0.511)	0.436 (0.360, 0.524)	0.424 (0.348, 0.511)	0.362 (0.313, 0.418)	0.289 (0.230, 0.360)	0.291 (0.230, 0.363)	0.322 (0.258, 0.398)			
20-24 years	0.457 (0.423, 0.493)	0.476 (0.441, 0.513)	0.520 (0.483, 0.559)	0.490 (0.439, 0.545)	0.515 (0.463, 0.572)	0.588 (0.531, 0.649)	0.476 (0.441, 0.513)	0.515 (0.463, 0.572)	0.588 (0.531, 0.649)	0.515 (0.463, 0.572)	0.588 (0.531, 0.649)	0.476 (0.441, 0.513)	0.427 (0.382, 0.476)	0.440 (0.394, 0.490)	0.459 (0.412, 0.511)			
25-29 years	0.652 (0.609, 0.698)	0.691 (0.646, 0.737)	0.732 (0.686, 0.779)	0.686 (0.622, 0.755)	0.735 (0.669, 0.805)	0.737 (0.671, 0.807)	0.691 (0.646, 0.737)	0.735 (0.669, 0.805)	0.737 (0.671, 0.807)	0.735 (0.669, 0.805)	0.737 (0.671, 0.807)	0.691 (0.646, 0.737)	0.621 (0.563, 0.684)	0.651 (0.592, 0.715)	0.727 (0.666, 0.793)			
30-34 years	0.874 (0.819, 0.931)	0.947 (0.891, 1.005)	0.963 (0.908, 1.021)	0.934 (0.853, 1.020)	0.995 (0.912, 1.082)	1.031 (0.948, 1.119)	0.947 (0.891, 1.005)	0.995 (0.912, 1.082)	1.031 (0.948, 1.119)	0.995 (0.912, 1.082)	1.031 (0.948, 1.119)	0.947 (0.891, 1.005)	0.819 (0.747, 0.897)	0.903 (0.828, 0.982)	0.903 (0.829, 0.981)			
35-39 years	1.078 (1.012, 1.148)	1.097 (1.031, 1.167)	1.143 (1.076, 1.212)	1.216 (1.115, 1.323)	1.254 (1.153, 1.362)	1.282 (1.181, 1.390)	1.097 (1.031, 1.167)	1.254 (1.153, 1.362)	1.282 (1.181, 1.390)	1.254 (1.153, 1.362)	1.282 (1.181, 1.390)	1.097 (1.031, 1.167)	0.953 (0.868, 1.045)	0.954 (0.870, 1.045)	1.016 (0.929, 1.108)			
40-44 years	1.231 (1.159, 1.307)	1.309 (1.234, 1.386)	1.356 (1.281, 1.434)	1.412 (1.300, 1.531)	1.447 (1.334, 1.567)	1.515 (1.398, 1.635)	1.309 (1.234, 1.386)	1.447 (1.334, 1.567)	1.515 (1.398, 1.635)	1.447 (1.334, 1.567)	1.515 (1.398, 1.635)	1.309 (1.234, 1.386)	1.070 (0.977, 1.168)	1.186 (1.089, 1.289)	1.215 (1.117, 1.319)			
45-49 years	1.475 (1.397, 1.555)	1.567 (1.486, 1.651)	1.687 (1.602, 1.775)	1.643 (1.525, 1.768)	1.770 (1.646, 1.902)	1.882 (1.752, 2.019)	1.567 (1.486, 1.651)	1.643 (1.525, 1.768)	1.882 (1.752, 2.019)	1.770 (1.646, 1.902)	1.882 (1.752, 2.019)	1.567 (1.486, 1.651)	1.323 (1.222, 1.430)	1.384 (1.279, 1.494)	1.512 (1.402, 1.629)			
50-54 years	1.658 (1.574, 1.745)	1.761 (1.676, 1.849)	1.819 (1.733, 1.908)	1.784 (1.657, 1.917)	1.900 (1.771, 2.035)	1.975 (1.844, 2.111)	1.761 (1.676, 1.849)	1.784 (1.657, 1.917)	1.900 (1.771, 2.035)	1.900 (1.771, 2.035)	1.975 (1.844, 2.111)	1.761 (1.676, 1.849)	1.549 (1.439, 1.665)	1.641 (1.529, 1.758)	1.684 (1.571, 1.802)			
55-59 years	2.097 (1.993, 2.204)	2.243 (2.138, 2.351)	2.348 (2.243, 2.456)	2.209 (2.052, 2.374)	2.361 (2.202, 2.527)	2.448 (2.291, 2.615)	2.243 (2.138, 2.351)	2.361 (2.202, 2.527)	2.448 (2.291, 2.615)	2.448 (2.291, 2.615)	2.448 (2.291, 2.615)	2.243 (2.138, 2.351)	2.004 (1.868, 2.147)	2.144 (2.006, 2.289)	2.264 (2.125, 2.409)			
60-64 years	2.808 (2.674, 2.948)	2.857 (2.724, 2.994)	2.936 (2.805, 3.072)	2.820 (2.619, 3.031)	2.822 (2.627, 3.029)	2.930 (2.735, 3.135)	2.857 (2.724, 2.994)	2.822 (2.627, 3.029)	2.820 (2.619, 3.031)	2.822 (2.627, 3.029)	2.930 (2.735, 3.135)	2.857 (2.724, 2.994)	2.799 (2.619, 2.988)	2.885 (2.706, 3.072)	2.941 (2.765, 3.126)			
65-69 years	3.316 (3.145, 3.494)	3.513 (3.341, 3.691)	3.612 (3.444, 3.786)	3.290 (3.035, 3.559)	3.515 (3.259, 3.786)	3.675 (3.421, 3.941)	3.513 (3.341, 3.691)	3.515 (3.259, 3.786)	3.612 (3.444, 3.786)	3.515 (3.259, 3.786)	3.675 (3.421, 3.941)	3.513 (3.341, 3.691)	3.337 (3.108, 3.578)	3.511 (3.282, 3.751)	3.563 (3.340, 3.796)			
70-74 years	3.401 (3.198, 3.613)	3.633 (3.428, 3.846)	3.836 (3.630, 4.051)	3.413 (3.109, 3.739)	3.768 (3.456, 4.100)	3.869 (3.559, 4.198)	3.633 (3.428, 3.846)	3.768 (3.456, 4.100)	3.836 (3.630, 4.051)	3.768 (3.456, 4.100)	3.869 (3.559, 4.198)	3.633 (3.428, 3.846)	3.592 (3.123, 3.677)	3.526 (3.258, 3.810)	3.811 (3.556, 4.100)			
75-79 years	3.191 (2.957, 3.438)	3.448 (3.210, 3.698)	3.772 (3.529, 4.027)	3.524 (3.152, 3.926)	3.680 (3.309, 4.080)	4.084 (3.701, 4.494)	3.448 (3.210, 3.698)	3.524 (3.152, 3.926)	3.772 (3.529, 4.027)	3.680 (3.309, 4.080)	4.084 (3.701, 4.494)	3.448 (3.210, 3.698)	2.941 (2.646, 3.260)	3.273 (2.968, 3.600)	3.537 (3.227, 3.869)			
80-84 years	2.911 (2.633, 3.209)	3.207 (2.922, 3.511)	3.317 (3.032, 3.621)	2.952 (2.516, 3.439)	3.445 (2.983, 3.956)	3.801 (3.323, 4.326)	3.207 (2.922, 3.511)	2.952 (2.516, 3.439)	3.317 (3.032, 3.621)	3.445 (2.983, 3.956)	3.801 (3.323, 4.326)	3.207 (2.922, 3.511)	2.883 (2.529, 3.273)	3.049 (2.693, 3.438)	2.997 (2.651, 3.376)			
85 years +	2.434 (2.168, 2.724)	2.698 (2.423, 2.996)	3.023 (2.735, 3.332)	2.492 (2.041, 3.012)	2.791 (2.323, 3.324)	3.005 (2.531, 3.541)	2.698 (2.423, 2.996)	3.023 (2.735, 3.332)	2.492 (2.041, 3.012)	2.791 (2.323, 3.324)	3.005 (2.531, 3.541)	2.698 (2.423, 2.996)	2.404 (2.080, 2.764)	2.649 (2.315, 3.018)	3.033 (2.677, 3.422)			
Crude Total (All)	0.960 (0.945, 0.976)	1.031 (1.015, 1.047)	1.097 (1.080, 1.113)	0.977 (0.955, 1.000)	1.050 (1.027, 1.073)	1.114 (1.091, 1.138)	1.031 (1.015, 1.047)	1.050 (1.027, 1.073)	1.097 (1.080, 1.113)	1.050 (1.027, 1.073)	1.114 (1.091, 1.138)	1.031 (1.015, 1.047)	0.945 (0.924, 0.967)	1.014 (0.993, 1.037)	1.080 (1.058, 1.103)			
Age-adj ³ (All)	1.171 (1.152, 1.190)	1.240 (1.221, 1.259)	1.302 (1.282, 1.321)	1.189 (1.162, 1.217)	1.260 (1.232, 1.288)	1.321 (1.292, 1.349)	1.240 (1.221, 1.259)	1.260 (1.232, 1.288)	1.302 (1.282, 1.321)	1.321 (1.292, 1.349)	1.321 (1.292, 1.349)	1.240 (1.221, 1.259)	1.157 (1.131, 1.183)	1.225 (1.199, 1.252)	1.288 (1.261, 1.315)			
Crude Total (40+)	2.093 (2.053, 2.132)	2.235 (2.195, 2.276)	2.359 (2.319, 2.400)	2.182 (2.123, 2.243)	2.330 (2.269, 2.391)	2.461 (2.400, 2.523)	2.235 (2.195, 2.276)	2.330 (2.269, 2.391)	2.359 (2.319, 2.400)	2.330 (2.269, 2.391)	2.461 (2.400, 2.523)	2.235 (2.195, 2.276)	2.018 (1.966, 2.071)	2.157 (2.104, 2.210)	2.274 (2.220, 2.329)			
Age-adj ³ (40+)	2.136 (2.095, 2.176)	2.273 (2.231, 2.314)	2.389 (2.347, 2.430)	2.213 (2.152, 2.274)	2.353 (2.291, 2.415)	2.477 (2.414, 2.539)	2.273 (2.231, 2.314)	2.353 (2.291, 2.415)	2.389 (2.347, 2.430)	2.353 (2.291, 2.415)	2.477 (2.414, 2.539)	2.273 (2.231, 2.314)	2.075 (2.020, 2.129)	2.208 (2.153, 2.263)	2.318 (2.262, 2.374)			

¹ Codes used are given in the glossary of ICD-9 and CPT codes used in this report.

² Confidence intervals (CIs) are calculated by Clopper Pearson Exact method.

³ Age adjustment was based on projected U.S. population by Bureau of the Census for the year 2000.

MACULAR DEGENERATION

In Fiscal Year 2014, the estimated age-adjusted diagnostic prevalence of macular degeneration for both sexes is 3.840 percent for all ages, and 8.577 percent for ages forty and above. In fiscal year 2014, the estimated age-adjusted diagnostic prevalence for all ages in females is 4.583 percent and 3.067 percent in males. For ages 40 and above in fiscal year 2014, the estimated age-adjusted diagnostic prevalence of the condition in females is 9.860 percent and 7.115 percent in males.

For ages 55 and above in fiscal year 2014 (see Appendix A) Estimated Diagnostic Prevalence Rates of Macular Degeneration by Age and Gender (55+, 65+ and 75+), the estimated age-adjusted diagnostic prevalence of the condition in ages 55 and above in females is 13.985 percent and 11.375 percent in males. For ages 65 and above in fiscal year 2014, the estimated age-adjusted diagnostic prevalence of the condition in females is 24.020 percent and 19.399 percent in males. For ages 75 and above in fiscal year 2014, the estimated age-adjusted diagnostic prevalence of the condition in females is 31.327 percent and 27.203 percent in males.

CHART 1.18A Diagnostic Prevalence Rates for Macular Degeneration by Age and Gender

American Indian and Alaska Native, FY 2014

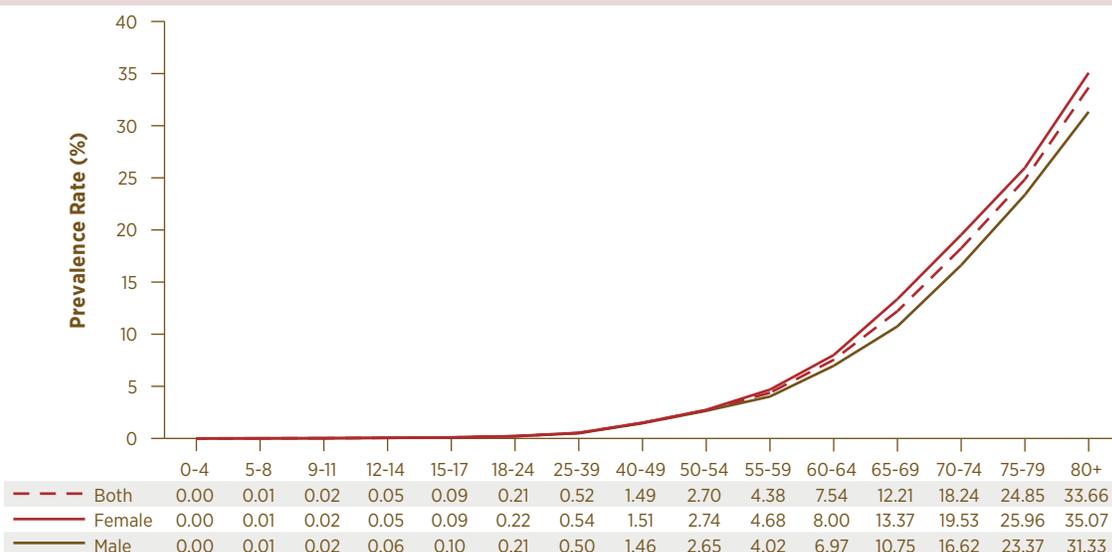


CHART 1.18B Diagnostic Prevalence Rates for Macular Degeneration by Age and Gender (Age 40 and Older)

American Indian and Alaska Native, FY 2014

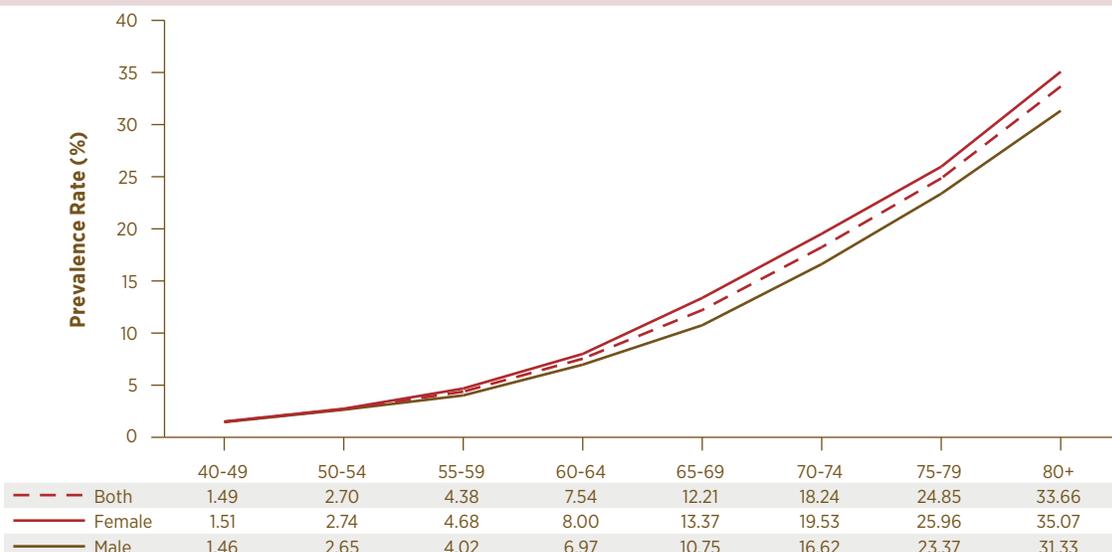


TABLE 1.18 Estimated Diagnostic Prevalence Rates of Macular Degeneration¹ by Age and Gender
American Indians and Alaska Natives, IHS Service Area, 2012–2014. (Rate and 95% CIs² per 100 Population)

Age Group	American Indian and Alaska Native								
	Both Sexes			Male			Female		
	FY 2012	FY 2013	FY 2014	FY 2012	FY 2013	FY 2014	FY 2012	FY 2013	FY 2014
Under 1 year	0 (0, 0.019)	0 (0, 0.019)	0 (0, 0.019)	0 (0, 0.037)	0 (0, 0.038)	0 (0, 0.037)	0 (0, 0.039)	0 (0, 0.04)	0 (0, 0.040)
1 year	0.04 (0, 0.023)	0 (0, 0.015)	0 (0, 0.015)	0 (0, 0.029)	0 (0, 0.030)	0 (0, 0.030)	0.008 (0, 0.047)	0 (0, 0.031)	0 (0, 0.032)
2-4 years	0.06 (0.002, 0.013)	0.005 (0.001, 0.012)	0.002 (0, 0.009)	0.005 (0.001, 0.016)	0 (0, 0.009)	0 (0, 0.009)	0.007 (0.001, 0.020)	0.010 (0.003, 0.025)	0.005 (0.001, 0.018)
5 years	0.03 (0, 0.018)	0.010 (0.002, 0.029)	0.010 (0.002, 0.029)	0.006 (0, 0.036)	0.013 (0.002, 0.047)	0 (0, 0.024)	0 (0, 0.025)	0.007 (0, 0.037)	0.020 (0.004, 0.060)
6-8 years	0.06 (0.002, 0.013)	0.006 (0.002, 0.013)	0.010 (0.005, 0.019)	0.007 (0.001, 0.020)	0.007 (0.001, 0.019)	0.011 (0.004, 0.025)	0.005 (0.001, 0.017)	0.005 (0.001, 0.016)	0.009 (0.002, 0.023)
9 years	0.015 (0.004, 0.038)	0.011 (0.002, 0.032)	0.010 (0.002, 0.031)	0.007 (0, 0.040)	0.007 (0, 0.040)	0.021 (0.004, 0.061)	0.022 (0.005, 0.065)	0.015 (0.002, 0.053)	0 (0, 0.026)
10-11 years	0.037 (0.023, 0.058)	0.022 (0.012, 0.039)	0.026 (0.014, 0.043)	0.044 (0.023, 0.078)	0.029 (0.013, 0.058)	0.014 (0.004, 0.037)	0.030 (0.013, 0.059)	0.015 (0.004, 0.038)	0.037 (0.018, 0.068)
12-14 years	0.058 (0.043, 0.077)	0.068 (0.051, 0.089)	0.054 (0.040, 0.073)	0.056 (0.036, 0.085)	0.064 (0.042, 0.094)	0.062 (0.040, 0.091)	0.060 (0.038, 0.089)	0.073 (0.049, 0.104)	0.047 (0.028, 0.074)
15-17 years	0.101 (0.080, 0.126)	0.093 (0.073, 0.117)	0.094 (0.074, 0.118)	0.101 (0.072, 0.138)	0.103 (0.074, 0.140)	0.101 (0.072, 0.137)	0.100 (0.071, 0.137)	0.084 (0.058, 0.118)	0.088 (0.061, 0.122)
18-19 years	0.151 (0.121, 0.188)	0.140 (0.110, 0.176)	0.152 (0.121, 0.190)	0.149 (0.106, 0.203)	0.147 (0.104, 0.201)	0.157 (0.112, 0.214)	0.154 (0.111, 0.207)	0.134 (0.094, 0.186)	0.148 (0.105, 0.202)
20-24 years	0.219 (0.196, 0.245)	0.228 (0.204, 0.255)	0.236 (0.211, 0.263)	0.194 (0.163, 0.230)	0.202 (0.169, 0.238)	0.224 (0.190, 0.263)	0.242 (0.209, 0.280)	0.253 (0.218, 0.291)	0.246 (0.211, 0.284)
25-29 years	0.352 (0.320, 0.386)	0.348 (0.317, 0.382)	0.334 (0.304, 0.367)	0.334 (0.289, 0.383)	0.311 (0.269, 0.358)	0.281 (0.241, 0.326)	0.368 (0.324, 0.417)	0.382 (0.337, 0.431)	0.382 (0.337, 0.430)
30-34 years	0.519 (0.477, 0.564)	0.527 (0.485, 0.571)	0.538 (0.497, 0.582)	0.523 (0.462, 0.589)	0.525 (0.466, 0.590)	0.544 (0.484, 0.609)	0.515 (0.458, 0.578)	0.528 (0.471, 0.590)	0.533 (0.476, 0.594)
35-39 years	0.761 (0.706, 0.820)	0.760 (0.705, 0.818)	0.759 (0.705, 0.816)	0.767 (0.687, 0.853)	0.794 (0.714, 0.881)	0.765 (0.687, 0.850)	0.756 (0.680, 0.838)	0.728 (0.654, 0.808)	0.753 (0.679, 0.832)
40-44 years	1.23 (1.053, 1.195)	1.161 (1.091, 1.234)	1.170 (1.100, 1.243)	1.081 (0.983, 1.186)	1.114 (1.014, 1.220)	1.144 (1.044, 1.250)	1.160 (1.063, 1.262)	1.203 (1.106, 1.307)	1.193 (1.097, 1.296)
45-49 years	1.680 (1.597, 1.765)	1.744 (1.658, 1.832)	1.815 (1.727, 1.906)	1.680 (1.561, 1.807)	1.737 (1.613, 1.867)	1.786 (1.659, 1.919)	1.679 (1.565, 1.798)	1.750 (1.633, 1.873)	1.840 (1.719, 1.968)
50-54 years	2.614 (2.509, 2.722)	2.720 (2.615, 2.829)	2.699 (2.595, 2.807)	2.528 (2.377, 2.686)	2.687 (2.534, 2.846)	2.649 (2.499, 2.806)	2.689 (2.544, 2.839)	2.749 (2.605, 2.899)	2.743 (2.600, 2.892)
55-59 years	4.146 (4.002, 4.294)	4.276 (4.132, 4.423)	4.380 (4.238, 4.525)	3.910 (3.702, 4.126)	3.988 (3.783, 4.201)	4.019 (3.818, 4.227)	4.342 (4.143, 4.548)	4.516 (4.317, 4.721)	4.684 (4.486, 4.889)
60-64 years	7.222 (7.010, 7.438)	7.318 (7.109, 7.530)	7.541 (7.335, 7.752)	6.503 (6.202, 6.814)	6.582 (6.287, 6.887)	6.97 (6.673, 7.276)	7.802 (7.507, 8.105)	7.914 (7.624, 8.211)	8.004 (7.719, 8.296)
65-69 years	11.666 (11.357, 11.981)	11.996 (11.692, 12.306)	12.209 (11.912, 12.510)	10.414 (9.974, 10.868)	10.504 (10.073, 10.947)	10.746 (10.326, 11.178)	12.66 (12.232, 13.098)	13.178 (12.754, 13.611)	13.370 (12.957, 13.791)
70-74 years	17.990 (17.358, 18.229)	18.077 (17.651, 18.509)	18.243 (17.824, 18.668)	16.196 (15.569, 16.838)	16.589 (15.970, 17.222)	16.617 (16.010, 17.237)	19.037 (18.445, 19.640)	19.246 (18.663, 19.838)	19.529 (18.953, 20.114)
75-79 years	23.137 (22.568, 23.713)	23.864 (23.301, 24.434)	24.851 (24.292, 25.417)	21.309 (20.467, 22.170)	22.312 (21.475, 23.166)	23.373 (22.539, 24.223)	24.506 (23.739, 25.286)	25.036 (24.278, 25.805)	25.965 (25.214, 26.727)
80-84 years	28.601 (27.838, 29.374)	29.835 (29.080, 30.599)	30.298 (29.552, 31.052)	27.659 (26.468, 28.875)	28.628 (27.446, 29.831)	28.507 (27.347, 29.690)	29.232 (28.240, 30.239)	30.635 (29.653, 31.629)	31.479 (30.508, 32.463)
85 years +	35.189 (34.341, 36.043)	36.443 (35.603, 37.289)	37.431 (36.598, 38.269)	33.070 (31.643, 34.521)	34.226 (32.818, 35.654)	34.887 (33.507, 36.285)	36.290 (35.237, 37.353)	37.615 (36.569, 38.669)	38.820 (37.777, 39.872)
Crude Total (All)	2.438 (2.414, 2.463)	2.577 (2.552, 2.602)	2.696 (2.671, 2.722)	2.048 (2.016, 2.081)	2.168 (2.135, 2.201)	2.269 (2.235, 2.303)	2.797 (2.760, 2.833)	2.952 (2.916, 2.990)	3.088 (3.050, 3.126)
Age-adj ³ (All)	3.652 (3.615, 3.690)	3.758 (3.722, 3.795)	3.840 (3.803, 3.877)	2.925 (2.878, 2.972)	3.011 (2.964, 3.058)	3.067 (3.020, 3.113)	4.348 (4.291, 4.405)	4.474 (4.417, 4.531)	4.583 (4.526, 4.640)
Crude Total (40+)	6.847 (6.778, 6.917)	7.155 (7.085, 7.225)	7.415 (7.345, 7.485)	5.998 (5.901, 6.095)	6.274 (6.176, 6.372)	6.501 (6.403, 6.599)	7.554 (7.457, 7.653)	7.888 (7.789, 7.987)	8.177 (8.078, 8.277)
Age-adj ³ (40+)	8.142 (8.057, 8.228)	8.388 (8.303, 8.473)	8.577 (8.492, 8.661)	6.769 (6.657, 6.882)	6.975 (6.863, 7.087)	7.115 (7.004, 7.226)	9.340 (9.214, 9.466)	9.622 (9.496, 9.748)	9.860 (9.735, 9.985)

¹ Codes used are given in the glossary of ICD-9 and CPT codes used in this report.
² Confidence intervals (CIs) are calculated by Clopper Pearson Exact method.
³ Age adjustment was based on projected U.S. population by Bureau of the Census for the year 2000.

GLAUCOMA (AGE 40 AND OLDER)

In Fiscal Year 2014, the estimated age-adjusted diagnostic prevalence of glaucoma for both sexes is 2.708 percent for all ages, and 5.994 percent for ages forty and above. In fiscal year 2014, the estimated age-adjusted diagnostic prevalence for all ages in females is 3.068 percent and 2.335 percent in males. For ages 40 and above in fiscal year 2014, the estimated age-adjusted diagnostic prevalence of the condition in females is 6.563 percent and 5.347 percent in males.

CHART 1.19 Diagnostic Prevalence Rates for Glaucoma by Age and Gender
American Indian and Alaska Native, FY 2014

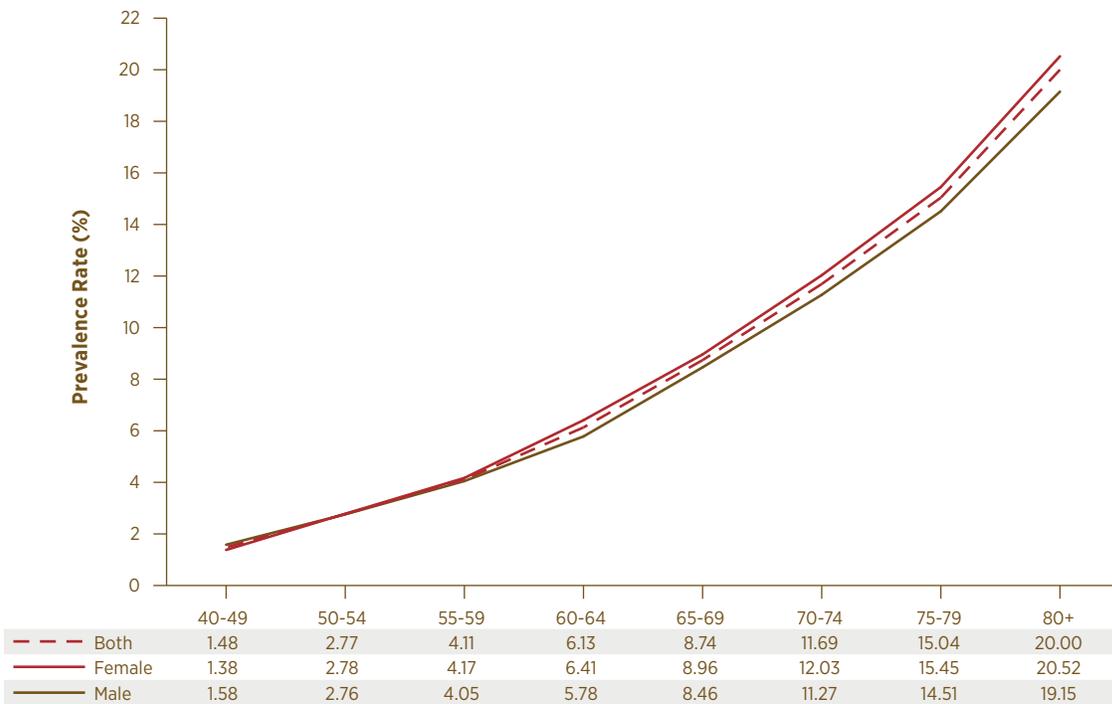


TABLE 1.19 Estimated Diagnostic Prevalence Rates of Glaucoma¹ by Age and Gender
American Indians and Alaska Natives, IHS Service Area, 2012–2014. (Rate and 95% CI² per 100 Population)

Age Group	American Indian and Alaska Native								
	Both Sexes			Male			Female		
	FY 2012	FY 2013	FY 2014	FY 2012	FY 2013	FY 2014	FY 2012	FY 2013	FY 2014
Under 1 year	0 (0, 0.019)	0 (0, 0.019)	0.010 (0.001, 0.038)	0 (0, 0.037)	0 (0, 0.038)	0.020 (0.002, 0.073)	0 (0, 0.039)	0 (0, 0.040)	0 (0, 0.040)
1 year	0.008 (0.001, 0.029)	0.004 (0, 0.023)	0.004 (0, 0.023)	0.016 (0.002, 0.057)	0.008 (0, 0.045)	0 (0, 0.030)	0 (0, 0.031)	0 (0, 0.031)	0.009 (0, 0.048)
2-4 years	0.013 (0.006, 0.023)	0.014 (0.007, 0.025)	0.008 (0.003, 0.017)	0.009 (0.002, 0.023)	0.012 (0.004, 0.027)	0.007 (0.001, 0.021)	0.016 (0.007, 0.033)	0.017 (0.007, 0.035)	0.010 (0.003, 0.025)
5 years	0.016 (0.005, 0.038)	0.010 (0.002, 0.029)	0.034 (0.016, 0.062)	0.026 (0.007, 0.066)	0.006 (0, 0.036)	0.033 (0.011, 0.077)	0.007 (0, 0.037)	0.013 (0.002, 0.048)	0.034 (0.011, 0.079)
6-8 years	0.019 (0.011, 0.031)	0.017 (0.009, 0.028)	0.020 (0.012, 0.031)	0.022 (0.011, 0.041)	0.022 (0.011, 0.041)	0.026 (0.014, 0.046)	0.016 (0.007, 0.033)	0.011 (0.004, 0.027)	0.013 (0.005, 0.029)
9 years	0.055 (0.031, 0.091)	0.032 (0.015, 0.061)	0.007 (0.001, 0.025)	0.051 (0.020, 0.104)	0.028 (0.008, 0.075)	0.007 (0, 0.039)	0.059 (0.026, 0.117)	0.036 (0.012, 0.085)	0.007 (0, 0.039)
10-11 years	0.035 (0.021, 0.055)	0.048 (0.032, 0.071)	0.047 (0.031, 0.070)	0.041 (0.020, 0.075)	0.048 (0.025, 0.082)	0.043 (0.022, 0.076)	0.030 (0.013, 0.059)	0.049 (0.026, 0.083)	0.052 (0.028, 0.087)
12-14 years	0.051 (0.036, 0.069)	0.053 (0.039, 0.072)	0.057 (0.042, 0.076)	0.056 (0.036, 0.085)	0.062 (0.040, 0.091)	0.064 (0.042, 0.094)	0.045 (0.027, 0.071)	0.045 (0.027, 0.071)	0.050 (0.030, 0.077)
15-17 years	0.072 (0.055, 0.094)	0.077 (0.059, 0.099)	0.072 (0.054, 0.093)	0.070 (0.046, 0.102)	0.067 (0.044, 0.098)	0.078 (0.053, 0.111)	0.075 (0.050, 0.107)	0.087 (0.060, 0.121)	0.065 (0.043, 0.096)
18-19 years	0.097 (0.072, 0.126)	0.104 (0.079, 0.136)	0.094 (0.070, 0.125)	0.089 (0.057, 0.133)	0.127 (0.088, 0.179)	0.090 (0.057, 0.135)	0.104 (0.069, 0.149)	0.082 (0.051, 0.124)	0.099 (0.064, 0.144)
20-24 years	0.156 (0.136, 0.178)	0.149 (0.129, 0.170)	0.147 (0.128, 0.169)	0.164 (0.135, 0.197)	0.150 (0.122, 0.182)	0.152 (0.124, 0.185)	0.149 (0.123, 0.179)	0.148 (0.121, 0.178)	0.143 (0.117, 0.173)
25-29 years	0.270 (0.242, 0.300)	0.274 (0.246, 0.303)	0.273 (0.245, 0.302)	0.302 (0.260, 0.349)	0.313 (0.270, 0.360)	0.295 (0.254, 0.341)	0.241 (0.205, 0.281)	0.238 (0.203, 0.278)	0.252 (0.217, 0.293)
30-34 years	0.417 (0.379, 0.457)	0.426 (0.389, 0.466)	0.438 (0.400, 0.477)	0.451 (0.396, 0.513)	0.464 (0.408, 0.525)	0.474 (0.419, 0.535)	0.385 (0.336, 0.439)	0.392 (0.343, 0.446)	0.404 (0.356, 0.458)
35-39 years	0.681 (0.628, 0.736)	0.693 (0.641, 0.748)	0.722 (0.669, 0.778)	0.711 (0.635, 0.795)	0.751 (0.673, 0.836)	0.792 (0.712, 0.878)	0.653 (0.583, 0.730)	0.640 (0.571, 0.715)	0.658 (0.589, 0.733)
40-44 years	1.081 (1.013, 1.152)	1.138 (1.069, 1.211)	1.159 (1.089, 1.231)	1.182 (1.079, 1.291)	1.182 (1.080, 1.291)	1.204 (1.101, 1.313)	0.991 (0.902, 1.086)	1.099 (1.006, 1.199)	1.118 (1.025, 1.218)
45-49 years	1.776 (1.691, 1.864)	1.790 (1.704, 1.880)	1.802 (1.714, 1.893)	1.882 (1.755, 2.015)	1.926 (1.797, 2.063)	1.973 (1.840, 2.113)	1.681 (1.567, 1.800)	1.668 (1.554, 1.789)	1.649 (1.534, 1.770)
50-54 years	2.743 (2.635, 2.853)	2.719 (2.614, 2.827)	2.771 (2.665, 2.879)	2.687 (2.531, 2.849)	2.720 (2.566, 2.881)	2.764 (2.611, 2.925)	2.791 (2.644, 2.945)	2.718 (2.574, 2.867)	2.776 (2.632, 2.925)
55-59 years	4.080 (3.937, 4.227)	4.067 (3.927, 4.210)	4.115 (3.977, 4.256)	3.885 (3.679, 4.101)	3.883 (3.680, 4.093)	4.052 (3.851, 4.261)	4.241 (4.044, 4.444)	4.221 (4.028, 4.420)	4.167 (3.980, 4.361)
60-64 years	6.151 (5.954, 6.352)	6.214 (6.021, 6.411)	6.131 (5.943, 6.322)	5.960 (5.671, 6.259)	5.946 (5.665, 6.237)	5.784 (5.513, 6.066)	6.305 (6.038, 6.580)	6.432 (6.168, 6.703)	6.411 (6.154, 6.675)
65-69 years	8.721 (8.450, 8.998)	8.694 (8.430, 8.963)	8.739 (8.483, 8.999)	8.546 (8.144, 8.963)	8.370 (7.981, 8.771)	8.459 (8.082, 8.847)	8.860 (8.495, 9.236)	8.951 (8.594, 9.318)	8.961 (8.616, 9.315)
70-74 years	11.330 (10.972, 11.695)	11.565 (11.212, 11.925)	11.695 (11.346, 12.050)	10.927 (10.398, 11.474)	11.261 (10.737, 11.802)	11.271 (10.757, 11.800)	11.645 (11.162, 12.140)	11.804 (11.329, 12.291)	12.029 (11.558, 12.512)
75-79 years	14.926 (14.446, 15.415)	15.081 (14.610, 15.562)	15.045 (14.583, 15.515)	14.240 (13.524, 14.979)	14.358 (13.656, 15.082)	14.513 (13.821, 15.225)	15.440 (14.798, 16.099)	15.627 (14.994, 16.275)	15.445 (14.829, 16.077)
80-84 years	18.179 (17.530, 18.842)	18.316 (17.680, 18.966)	18.686 (18.055, 19.328)	17.357 (16.354, 18.395)	17.419 (16.434, 18.438)	17.778 (16.801, 18.788)	18.730 (17.883, 19.600)	18.910 (18.081, 19.761)	19.284 (18.463, 20.126)
85 years +	20.131 (19.423, 20.854)	20.975 (20.268, 21.695)	21.477 (20.774, 22.193)	20.105 (18.899, 21.354)	20.590 (19.400, 21.820)	20.884 (19.716, 22.089)	20.145 (19.272, 21.059)	21.178 (20.302, 22.075)	21.801 (20.922, 22.699)
Crude Total (All)	1.849 (1.827, 1.870)	1.919 (1.897, 1.941)	1.982 (1.960, 2.004)	1.661 (1.632, 1.691)	1.723 (1.693, 1.752)	1.786 (1.756, 1.816)	2.021 (1.990, 2.052)	2.099 (2.068, 2.131)	2.161 (2.130, 2.193)
Age-adj³ (All)	2.647 (2.616, 2.678)	2.681 (2.651, 2.712)	2.708 (2.678, 2.738)	2.286 (2.246, 2.327)	2.308 (2.268, 2.348)	2.335 (2.295, 2.374)	2.994 (2.947, 3.040)	3.041 (2.995, 3.087)	3.068 (3.023, 3.113)
Crude Total (40+)	5.164 (5.103, 5.225)	5.290 (5.229, 5.351)	5.403 (5.342, 5.464)	4.826 (4.739, 4.914)	4.928 (4.841, 5.016)	5.050 (4.963, 5.138)	5.445 (5.361, 5.530)	5.591 (5.507, 5.676)	5.697 (5.613, 5.782)
Age-adj³ (40+)	5.864 (5.793, 5.934)	5.959 (5.869, 6.009)	5.994 (5.925, 6.063)	5.248 (5.150, 5.345)	5.288 (5.192, 5.384)	5.347 (5.253, 5.442)	6.402 (6.300, 6.504)	6.509 (6.408, 6.610)	6.563 (6.463, 6.663)

¹ Codes used are given in the glossary of ICD-9 and CPT codes used in this report.
² Confidence intervals (CIs) are calculated by Clopper Pearson Exact method.
³ Age adjustment was based on projected U.S. population by Bureau of the Census for the year 2000.



TEAR FILM INSUFFICIENCY (AGE 40 AND OLDER)

In Fiscal Year 2014, the estimated age-adjusted diagnostic prevalence of tear film insufficiency for both sexes is 12.105 percent for all ages, and 23.742 percent for ages forty and above. In fiscal year 2014, the estimated age-adjusted diagnostic prevalence of tear film insufficiency for all ages in females is 15.510 percent and 8.373 percent in males. For ages 40 and above in fiscal year 2014, the estimated age-adjusted diagnostic prevalence of the condition in females is 29.223 percent and 17.167 percent in males.

CHART 1.20 Diagnostic Prevalence Rates for Tear Film Insufficiency by Age and Gender
American Indian and Alaska Native, FY 2014

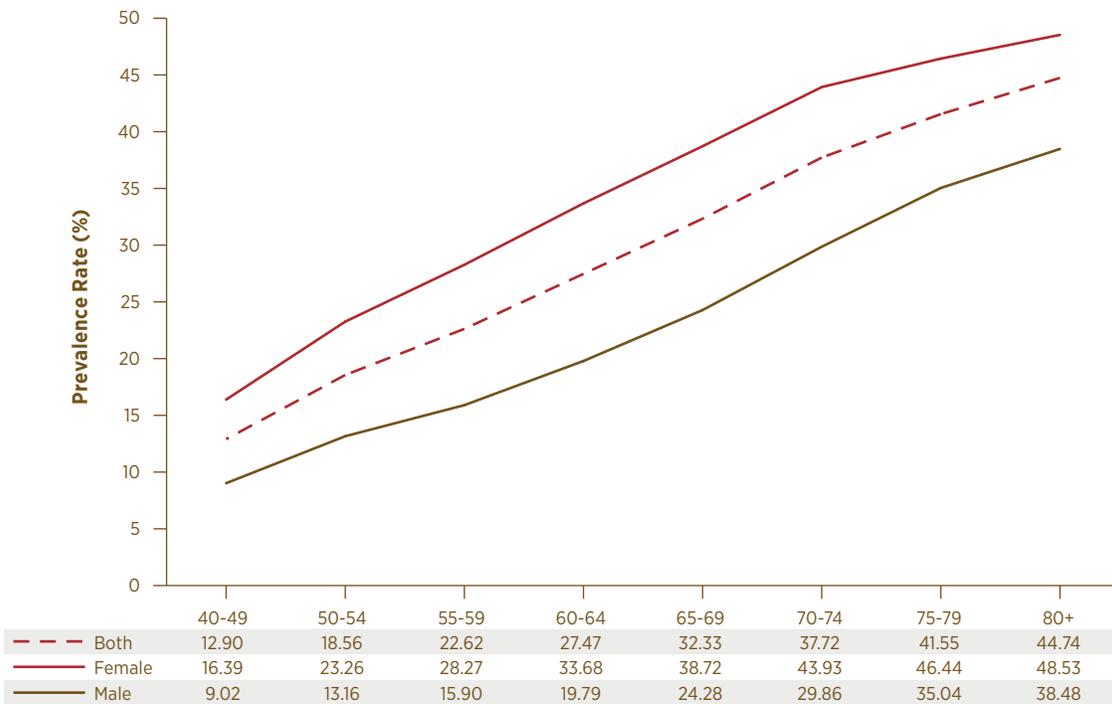


TABLE 1.20 Estimated Diagnostic Prevalence Rates of Tear Film Insufficiency¹ by Age and Gender
American Indians and Alaska Natives, IHS Service Area, 2012–2014. (Rate and 95% CI² per 100 Population)

Age Group	Both Sexes						Male			Female		
	American Indian and Alaska Native											
	FY 2012	FY 2013	FY 2014	FY 2012	FY 2013	FY 2014	FY 2012	FY 2013	FY 2014	FY 2012	FY 2013	FY 2014
Under 1 year	0.031 (0.011, 0.068)	0.016 (0.003, 0.046)	0.026 (0.008, 0.061)	0.010 (0, 0.056)	0.01 (0, 0.057)	0.010 (0, 0.056)	0.053 (0.017, 0.125)	0.022 (0.003, 0.079)	0.043 (0.012, 0.110)	0.022 (0.003, 0.079)	0.042 (0.014, 0.098)	0.026 (0.005, 0.075)
1 year	0.028 (0.011, 0.058)	0.041 (0.020, 0.076)	0.029 (0.012, 0.060)	0.023 (0.005, 0.069)	0.040 (0.013, 0.094)	0.032 (0.009, 0.082)	0.034 (0.009, 0.086)	0.042 (0.014, 0.098)	0.026 (0.005, 0.075)	0.034 (0.009, 0.082)	0.042 (0.014, 0.098)	0.026 (0.005, 0.075)
2-4 years	0.087 (0.069, 0.109)	0.079 (0.061, 0.101)	0.064 (0.048, 0.084)	0.081 (0.057, 0.112)	0.072 (0.049, 0.102)	0.062 (0.040, 0.091)	0.093 (0.066, 0.126)	0.087 (0.061, 0.120)	0.067 (0.044, 0.097)	0.087 (0.061, 0.120)	0.087 (0.061, 0.120)	0.067 (0.044, 0.097)
5 years	0.174 (0.130, 0.227)	0.167 (0.124, 0.220)	0.161 (0.119, 0.213)	0.187 (0.125, 0.269)	0.194 (0.131, 0.277)	0.158 (0.101, 0.235)	0.160 (0.102, 0.237)	0.139 (0.086, 0.213)	0.164 (0.105, 0.243)	0.139 (0.086, 0.213)	0.139 (0.086, 0.213)	0.164 (0.105, 0.243)
6-8 years	0.303 (0.268, 0.342)	0.324 (0.288, 0.364)	0.335 (0.298, 0.375)	0.342 (0.290, 0.401)	0.350 (0.298, 0.409)	0.366 (0.313, 0.425)	0.263 (0.217, 0.316)	0.298 (0.249, 0.353)	0.303 (0.254, 0.359)	0.298 (0.249, 0.353)	0.298 (0.249, 0.353)	0.303 (0.254, 0.359)
9 years	0.550 (0.466, 0.645)	0.493 (0.414, 0.583)	0.538 (0.457, 0.650)	0.608 (0.486, 0.753)	0.526 (0.413, 0.659)	0.565 (0.449, 0.702)	0.490 (0.379, 0.623)	0.460 (0.353, 0.588)	0.511 (0.401, 0.642)	0.460 (0.353, 0.588)	0.460 (0.353, 0.588)	0.511 (0.401, 0.642)
10-11 years	0.754 (0.683, 0.831)	0.769 (0.697, 0.846)	0.748 (0.678, 0.824)	0.749 (0.649, 0.859)	0.779 (0.678, 0.891)	0.760 (0.661, 0.870)	0.760 (0.66, 0.872)	0.758 (0.658, 0.870)	0.736 (0.638, 0.846)	0.758 (0.658, 0.870)	0.758 (0.658, 0.870)	0.736 (0.638, 0.846)
12-14 years	0.969 (0.903, 1.039)	1.076 (1.006, 1.150)	1.196 (1.122, 1.275)	0.939 (0.848, 1.038)	1.027 (0.931, 1.130)	1.127 (1.026, 1.234)	1.000 (0.905, 1.102)	1.126 (1.025, 1.234)	1.265 (1.158, 1.379)	1.126 (1.025, 1.234)	1.126 (1.025, 1.234)	1.265 (1.158, 1.379)
15-17 years	1.678 (1.589, 1.771)	1.689 (1.599, 1.781)	1.735 (1.645, 1.828)	1.318 (1.206, 1.436)	1.399 (1.285, 1.521)	1.453 (1.338, 1.576)	2.036 (1.898, 2.182)	1.975 (1.840, 2.118)	2.016 (1.880, 2.159)	1.975 (1.840, 2.118)	1.975 (1.840, 2.118)	2.016 (1.880, 2.159)
18-19 years	2.168 (2.047, 2.293)	2.281 (2.155, 2.412)	2.488 (2.355, 2.625)	1.724 (1.571, 1.887)	1.733 (1.578, 1.899)	1.907 (1.745, 2.083)	2.594 (2.411, 2.787)	2.810 (2.616, 3.015)	3.049 (2.845, 3.264)	2.810 (2.616, 3.015)	2.810 (2.616, 3.015)	3.049 (2.845, 3.264)
20-24 years	2.796 (2.711, 2.882)	3.053 (2.965, 3.144)	3.260 (3.167, 3.354)	1.991 (1.888, 2.098)	2.163 (2.055, 2.276)	2.315 (2.202, 2.433)	3.527 (3.397, 3.661)	3.858 (3.721, 3.998)	4.112 (3.969, 4.258)	3.858 (3.721, 3.998)	3.858 (3.721, 3.998)	4.112 (3.969, 4.258)
25-29 years	3.909 (3.803, 4.017)	4.254 (4.145, 4.366)	4.619 (4.506, 4.734)	2.500 (2.377, 2.628)	2.735 (2.607, 2.867)	2.975 (2.843, 3.112)	5.186 (5.019, 5.357)	5.625 (5.453, 5.801)	6.088 (5.912, 6.268)	5.625 (5.453, 5.801)	5.625 (5.453, 5.801)	6.088 (5.912, 6.268)
30-34 years	5.366 (5.233, 5.502)	5.842 (5.705, 5.980)	6.298 (6.158, 6.439)	3.436 (3.280, 3.596)	3.688 (3.530, 3.851)	3.959 (3.798, 4.126)	7.133 (6.923, 7.348)	7.804 (7.588, 8.023)	8.412 (8.193, 8.635)	7.804 (7.588, 8.023)	7.804 (7.588, 8.023)	8.412 (8.193, 8.635)
35-39 years	7.266 (7.098, 7.436)	7.852 (7.680, 8.027)	8.385 (8.210, 8.563)	4.984 (4.782, 5.193)	5.326 (5.119, 5.540)	5.635 (5.425, 5.851)	9.346 (9.086, 9.611)	10.155 (9.888, 10.427)	10.894 (10.622, 11.171)	10.155 (9.888, 10.427)	10.155 (9.888, 10.427)	10.894 (10.622, 11.171)
40-44 years	9.495 (9.299, 9.691)	10.232 (10.032, 10.435)	10.922 (10.716, 11.129)	6.540 (6.302, 6.784)	6.986 (6.741, 7.236)	7.365 (7.133, 7.623)	12.140 (11.842, 12.443)	13.115 (12.809, 13.426)	13.932 (13.619, 14.250)	13.115 (12.809, 13.426)	13.115 (12.809, 13.426)	13.932 (13.619, 14.250)
45-49 years	12.941 (12.723, 13.162)	14.072 (13.843, 14.304)	14.935 (14.698, 15.175)	8.961 (8.692, 9.236)	9.952 (9.666, 10.244)	10.506 (10.21, 10.808)	16.518 (16.185, 16.855)	17.769 (17.423, 18.120)	18.900 (18.541, 19.263)	17.769 (17.423, 18.120)	17.769 (17.423, 18.120)	18.900 (18.541, 19.263)
50-54 years	16.078 (15.835, 16.324)	17.433 (17.186, 17.683)	18.561 (18.310, 18.815)	11.1 (10.795, 11.41)	12.211 (11.899, 12.529)	13.157 (12.837, 13.482)	20.383 (20.018, 20.751)	21.973 (21.603, 22.345)	23.265 (22.891, 23.642)	21.973 (21.603, 22.345)	21.973 (21.603, 22.345)	23.265 (22.891, 23.642)
55-59 years	19.755 (19.465, 20.047)	21.347 (21.055, 21.642)	22.617 (22.325, 22.911)	13.483 (13.114, 13.858)	14.698 (14.324, 15.078)	15.896 (15.520, 16.278)	24.948 (24.522, 25.378)	26.900 (26.471, 27.332)	28.273 (27.846, 28.702)	26.900 (26.471, 27.332)	26.900 (26.471, 27.332)	28.273 (27.846, 28.702)
60-64 years	24.528 (24.174, 24.885)	26.065 (25.712, 26.420)	27.468 (27.117, 27.821)	17.536 (17.069, 18.011)	18.639 (18.173, 19.113)	19.793 (19.326, 20.267)	30.176 (29.667, 30.688)	32.082 (31.577, 32.590)	33.683 (33.182, 34.186)	32.082 (31.577, 32.590)	32.082 (31.577, 32.590)	33.683 (33.182, 34.186)
65-69 years	29.043 (28.604, 29.485)	30.727 (30.293, 31.164)	32.329 (31.903, 32.757)	21.782 (21.183, 22.390)	23.163 (22.566, 23.767)	24.281 (23.696, 24.873)	34.806 (34.188, 35.427)	36.714 (36.106, 37.326)	38.719 (38.125, 39.315)	36.714 (36.106, 37.326)	36.714 (36.106, 37.326)	38.719 (38.125, 39.315)
70-74 years	34.264 (33.725, 34.805)	36.115 (35.582, 36.651)	37.719 (37.190, 38.249)	27.214 (26.453, 27.985)	28.564 (27.809, 29.328)	29.861 (29.111, 30.619)	39.777 (39.034, 40.523)	42.046 (41.312, 42.782)	43.930 (43.205, 44.657)	42.046 (41.312, 42.782)	42.046 (41.312, 42.782)	43.930 (43.205, 44.657)
75-79 years	36.510 (35.858, 37.165)	39.233 (38.586, 39.883)	41.546 (40.906, 42.188)	29.680 (28.731, 30.636)	32.587 (31.642, 33.544)	35.044 (34.100, 35.997)	41.630 (40.746, 42.518)	44.247 (43.374, 45.123)	46.444 (45.584, 47.304)	44.247 (43.374, 45.123)	44.247 (43.374, 45.123)	46.444 (45.584, 47.304)
80-84 years	39.775 (38.946, 40.609)	42.200 (41.382, 43.021)	44.376 (43.567, 45.187)	33.637 (32.375, 34.916)	35.213 (33.962, 36.480)	37.370 (36.122, 38.632)	43.885 (42.797, 44.978)	46.827 (45.759, 47.897)	48.997 (47.946, 50.049)	46.827 (45.759, 47.897)	46.827 (45.759, 47.897)	48.997 (47.946, 50.049)
85 years +	40.008 (39.137, 40.884)	42.456 (41.592, 43.323)	45.154 (44.296, 46.014)	34.891 (33.444, 36.359)	37.337 (35.900, 38.790)	39.874 (38.453, 41.307)	42.668 (41.583, 43.759)	45.162 (44.085, 46.242)	48.038 (46.965, 49.112)	45.162 (44.085, 46.242)	45.162 (44.085, 46.242)	48.038 (46.965, 49.112)
Crude Total (All)	8.375 (8.331, 8.419)	9.154 (9.108, 9.200)	9.865 (9.818, 9.912)	5.746 (5.693, 5.799)	6.311 (6.255, 6.367)	6.848 (6.790, 6.905)	10.791 (10.722, 10.859)	11.762 (11.691, 11.832)	12.650 (12.558, 12.702)	11.762 (11.691, 11.832)	11.762 (11.691, 11.832)	12.650 (12.558, 12.702)
Age-adj ³ (All)	10.661 (10.603, 10.720)	11.425 (11.366, 11.485)	12.105 (12.045, 12.166)	7.306 (7.236, 7.376)	7.860 (7.788, 7.931)	8.373 (8.301, 8.446)	13.718 (13.627, 13.810)	14.674 (14.581, 14.768)	15.510 (15.415, 15.605)	14.674 (14.581, 14.768)	14.674 (14.581, 14.768)	15.510 (15.415, 15.605)
Crude Total (40+)	20.007 (19.897, 20.117)	21.605 (21.494, 21.717)	23.027 (22.914, 23.140)	14.359 (14.217, 14.502)	15.627 (15.481, 15.774)	16.796 (16.648, 16.945)	24.709 (24.549, 24.870)	26.582 (26.420, 26.744)	28.225 (28.062, 28.389)	26.582 (26.420, 26.744)	26.582 (26.420, 26.744)	28.225 (28.062, 28.389)
Age-adj ³ (40+)	20.978 (20.849, 21.106)	22.453 (22.323, 22.584)	23.742 (23.609, 23.874)	14.966 (14.806, 15.127)	16.117 (15.953, 16.281)	17.167 (17.001, 17.334)	25.972 (25.778, 26.166)	27.722 (27.525, 27.919)	29.223 (29.023, 29.422)	27.722 (27.525, 27.919)	27.722 (27.525, 27.919)	29.223 (29.023, 29.422)

¹ Codes used are given in the glossary of ICD-9 and CPT codes used in this report.

² Confidence intervals (CIs) are calculated by Clopper Pearson Exact method.

³ Age adjustment was based on projected U.S. population by Bureau of the Census for the year 2000.

CONJUNCTIVITIS

In Fiscal Year 2014, the estimated age-adjusted diagnostic prevalence of conjunctivitis for both sexes is 3.608 percent for all ages, and 3.693 percent for ages forty and above. In fiscal year 2014, the estimated age-adjusted diagnostic prevalence of conjunctivitis for all ages in females is 4.189 percent and 2.952 percent in males. For ages 40 and above in fiscal year 2014, the estimated age-adjusted diagnostic prevalence of the condition in females is 4.621 percent and 2.563 percent in males.

CHART 1.21A Diagnostic Prevalence Rates for Conjunctivitis by Age and Gender
American Indian and Alaska Native, FY 2014

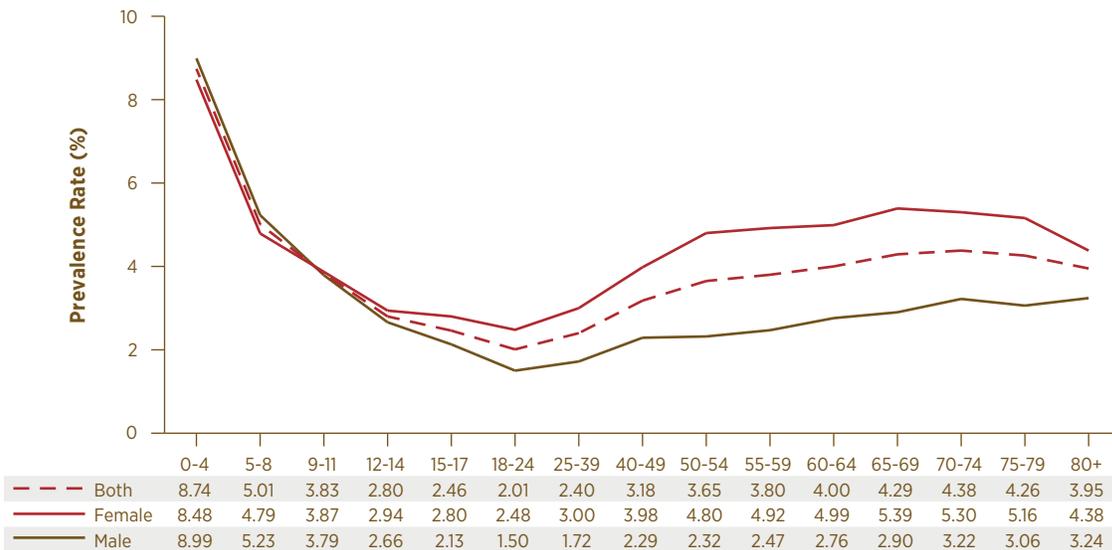


CHART 1.21B Diagnostic Prevalence Rates for Conjunctivitis by Age and Gender (Age 40 and Older)
American Indian and Alaska Native, FY 2014

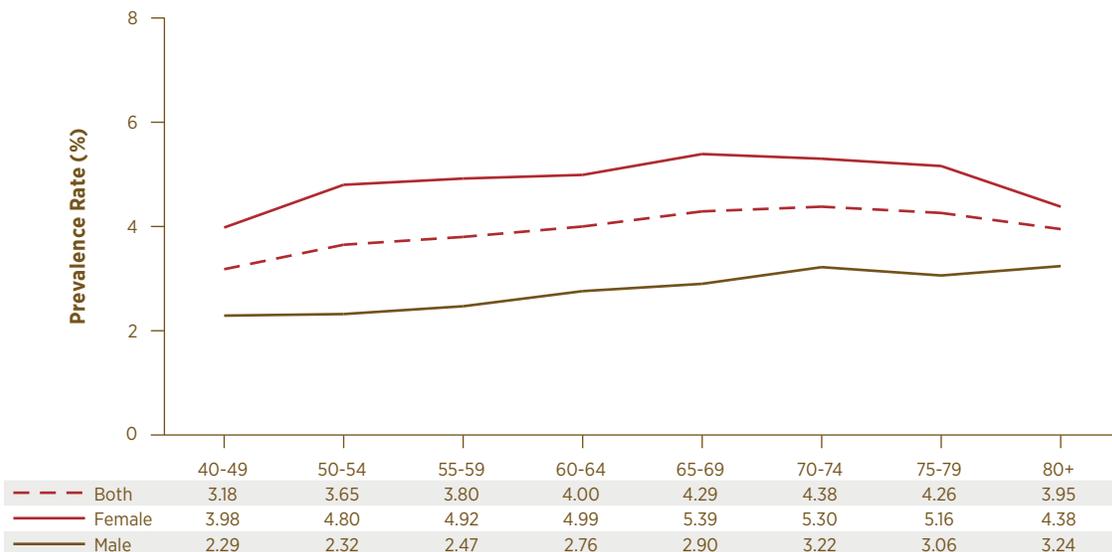


TABLE 1.21 Estimated Diagnostic Prevalence Rates of Conjunctivitis¹ by Age and Gender
American Indians and Alaska Natives, IHS Service Area, 2012-2014. (Rate and 95% CI² per 100 Population)

Age Group	American Indian and Alaska Native											
	Both Sexes						Male			Female		
	FY 2012	FY 2013	FY 2014	FY 2012	FY 2013	FY 2014	FY 2012	FY 2013	FY 2014	FY 2012	FY 2013	FY 2014
Under 1 year	9.603 (9.190, 10.028)	8.781 (8.381, 9.193)	8.393 (8.004, 8.795)	10.222 (9.631, 10.837)	9.244 (8.677, 9.856)	8.643 (8.096, 9.215)	8.95 (8.379, 9.547)	8.286 (7.729, 8.870)	8.127 (7.579, 8.701)	13.250 (12.639, 13.879)	14.094 (13.473, 14.735)	13.250 (12.639, 13.879)
1 year	15.615 (15.164, 16.074)	14.529 (14.088, 14.979)	13.901 (13.466, 14.344)	16.457 (15.818, 17.111)	14.946 (14.322, 15.585)	14.51 (13.895, 15.141)	14.71 (14.079, 15.360)	14.094 (13.473, 14.735)	13.250 (12.639, 13.879)	7.193 (6.943, 7.450)	7.795 (7.539, 8.058)	7.193 (6.943, 7.450)
2-4 years	8.233 (8.051, 8.417)	8.054 (7.871, 8.240)	7.314 (7.157, 7.494)	8.421 (8.164, 8.683)	8.303 (8.044, 8.567)	7.450 (7.181, 7.685)	8.040 (7.785, 8.300)	7.795 (7.539, 8.058)	7.193 (6.943, 7.450)	5.295 (4.938, 5.670)	5.918 (5.547, 6.306)	5.295 (4.938, 5.670)
5 years	6.175 (5.907, 6.450)	6.078 (5.812, 6.352)	5.726 (5.465, 5.996)	6.190 (5.815, 6.581)	6.234 (5.858, 6.627)	6.144 (5.767, 6.538)	6.159 (5.780, 6.555)	5.918 (5.547, 6.306)	5.295 (4.938, 5.670)	4.619 (4.426, 4.819)	4.811 (4.613, 5.015)	4.619 (4.426, 4.819)
6-8 years	5.216 (5.070, 5.365)	4.957 (4.816, 5.102)	4.779 (4.641, 4.920)	5.374 (5.166, 5.588)	5.100 (4.899, 5.307)	4.934 (4.738, 5.136)	5.054 (4.849, 5.264)	4.811 (4.613, 5.015)	4.619 (4.426, 4.819)	4.128 (3.808, 4.467)	4.138 (3.811, 4.485)	4.128 (3.808, 4.467)
9 years	4.239 (4.003, 4.484)	4.107 (3.877, 4.347)	4.046 (3.820, 4.280)	4.425 (4.088, 4.781)	4.077 (3.751, 4.417)	3.963 (3.650, 4.296)	4.048 (3.721, 4.394)	4.138 (3.811, 4.485)	4.128 (3.808, 4.467)	3.727 (3.504, 3.959)	3.728 (3.504, 3.963)	3.727 (3.504, 3.959)
10-11 years	3.786 (3.626, 3.950)	3.671 (3.514, 3.833)	3.71 (3.555, 3.873)	3.732 (3.509, 3.965)	3.615 (3.396, 3.844)	3.696 (3.478, 3.925)	3.839 (3.612, 4.077)	3.728 (3.504, 3.963)	3.727 (3.504, 3.959)	2.944 (2.781, 3.114)	2.944 (2.781, 3.114)	2.944 (2.781, 3.114)
12-14 years	3.335 (3.212, 3.461)	3.050 (2.932, 3.171)	2.803 (2.690, 2.919)	2.869 (2.709, 3.036)	2.884 (2.725, 3.051)	2.664 (2.510, 2.826)	3.809 (3.624, 4.001)	3.218 (3.047, 3.395)	2.944 (2.781, 3.114)	2.796 (2.636, 2.963)	2.796 (2.636, 2.963)	2.796 (2.636, 2.963)
15-17 years	3.027 (2.907, 3.150)	2.692 (2.580, 2.808)	2.464 (2.357, 2.574)	2.211 (2.066, 2.362)	2.119 (1.978, 2.267)	2.131 (1.991, 2.278)	3.838 (3.649, 4.034)	3.260 (3.087, 3.441)	2.796 (2.636, 2.963)	2.624 (2.435, 2.824)	2.624 (2.435, 2.824)	2.624 (2.435, 2.824)
18-19 years	2.277 (2.154, 2.405)	2.315 (2.188, 2.447)	2.094 (1.973, 2.221)	1.686 (1.536, 1.848)	1.698 (1.545, 1.863)	1.546 (1.398, 1.705)	2.844 (2.652, 3.045)	2.911 (2.713, 3.120)	2.624 (2.435, 2.824)	2.434 (2.323, 2.548)	2.434 (2.323, 2.548)	2.434 (2.323, 2.548)
20-24 years	2.110 (2.037, 2.186)	2.049 (1.976, 2.124)	1.980 (1.908, 2.055)	1.512 (1.422, 1.605)	1.466 (1.377, 1.559)	1.478 (1.387, 1.573)	2.655 (2.542, 2.772)	2.576 (2.464, 2.691)	2.434 (2.323, 2.548)	2.266 (2.154, 2.378)	2.266 (2.154, 2.378)	2.266 (2.154, 2.378)
25-29 years	2.365 (2.280, 2.448)	2.282 (2.202, 2.365)	2.170 (2.092, 2.250)	1.641 (1.541, 1.745)	1.577 (1.480, 1.678)	1.618 (1.520, 1.720)	3.017 (2.889, 3.150)	2.919 (2.794, 3.049)	2.664 (2.546, 2.786)	3.077 (2.942, 3.218)	3.077 (2.942, 3.218)	3.077 (2.942, 3.218)
30-34 years	2.567 (2.474, 2.663)	2.492 (2.401, 2.584)	2.426 (2.338, 2.516)	1.804 (1.691, 1.922)	1.781 (1.671, 1.896)	1.705 (1.599, 1.817)	3.266 (3.121, 3.415)	3.159 (3.000, 3.283)	3.077 (2.942, 3.218)	3.384 (3.227, 3.546)	3.384 (3.227, 3.546)	3.384 (3.227, 3.546)
35-39 years	2.571 (2.469, 2.676)	2.709 (2.606, 2.816)	2.672 (2.570, 2.776)	1.789 (1.666, 1.918)	2.008 (1.879, 2.143)	1.892 (1.768, 2.021)	3.284 (3.126, 3.448)	3.349 (3.190, 3.512)	3.384 (3.227, 3.546)	3.851 (3.678, 4.030)	3.851 (3.678, 4.030)	3.851 (3.678, 4.030)
40-44 years	2.905 (2.792, 3.017)	3.046 (2.933, 3.162)	3.068 (2.955, 3.184)	1.979 (1.846, 2.119)	2.188 (2.049, 2.334)	2.194 (2.055, 2.339)	3.731 (3.559, 3.909)	3.808 (3.635, 3.986)	3.851 (3.678, 4.030)	4.117 (3.936, 4.304)	4.117 (3.936, 4.304)	4.117 (3.936, 4.304)
45-49 years	3.229 (3.115, 3.347)	3.368 (3.250, 3.489)	3.296 (3.178, 3.417)	2.174 (2.038, 2.317)	2.318 (2.176, 2.467)	2.379 (2.233, 2.531)	4.178 (4.000, 4.362)	4.310 (4.127, 4.499)	4.117 (3.936, 4.304)	4.801 (4.613, 4.994)	4.801 (4.613, 4.994)	4.801 (4.613, 4.994)
50-54 years	3.523 (3.401, 3.647)	3.657 (3.535, 3.782)	3.646 (3.525, 3.769)	2.174 (2.034, 2.321)	2.383 (2.239, 2.534)	2.318 (2.177, 2.465)	4.689 (4.499, 4.884)	4.764 (4.576, 4.958)	4.801 (4.613, 4.994)	4.916 (4.713, 5.125)	4.916 (4.713, 5.125)	4.916 (4.713, 5.125)
55-59 years	3.775 (3.637, 3.917)	3.938 (3.800, 4.079)	3.796 (3.663, 3.932)	2.530 (2.363, 2.706)	2.451 (2.290, 2.621)	2.465 (2.307, 2.631)	4.806 (4.597, 5.021)	5.179 (4.967, 5.398)	4.916 (4.713, 5.125)	5.288 (5.048, 5.536)	5.288 (5.048, 5.536)	5.288 (5.048, 5.536)
60-64 years	3.865 (3.707, 4.027)	4.068 (3.911, 4.230)	3.996 (3.843, 4.153)	2.550 (2.359, 2.752)	2.563 (2.376, 2.760)	2.764 (2.575, 2.964)	4.926 (4.689, 5.172)	5.288 (5.048, 5.536)	5.288 (5.048, 5.536)	5.390 (5.118, 5.673)	5.390 (5.118, 5.673)	5.390 (5.118, 5.673)
65-69 years	3.994 (3.806, 4.188)	4.218 (4.030, 4.411)	4.286 (4.104, 4.475)	2.750 (2.517, 2.998)	2.725 (2.499, 2.966)	2.896 (2.671, 3.134)	4.981 (4.703, 5.271)	5.399 (5.117, 5.691)	5.390 (5.118, 5.673)	5.298 (4.976, 5.635)	5.298 (4.976, 5.635)	5.298 (4.976, 5.635)
70-74 years	3.911 (3.693, 4.137)	4.162 (3.943, 4.389)	4.380 (4.160, 4.609)	2.711 (2.439, 3.003)	2.966 (2.689, 3.264)	3.218 (2.935, 3.521)	4.849 (4.528, 5.185)	5.100 (4.779, 5.437)	5.298 (4.976, 5.635)	5.164 (4.790, 5.588)	5.164 (4.790, 5.588)	5.164 (4.790, 5.588)
75-79 years	3.705 (3.454, 3.970)	4.250 (3.987, 4.526)	4.258 (4.000, 4.528)	2.812 (2.481, 3.175)	3.340 (2.987, 3.723)	3.055 (2.724, 3.415)	4.375 (4.016, 4.756)	4.937 (4.564, 5.331)	5.164 (4.790, 5.588)	4.718 (4.284, 5.183)	4.718 (4.284, 5.183)	4.718 (4.284, 5.183)
80-84 years	3.767 (3.451, 4.103)	4.039 (3.719, 4.377)	4.120 (3.803, 4.456)	2.747 (2.327, 3.220)	2.963 (2.534, 3.441)	3.214 (2.774, 3.701)	4.449 (4.009, 4.923)	4.751 (4.308, 5.226)	4.718 (4.284, 5.183)	4.032 (3.621, 4.475)	4.032 (3.621, 4.475)	4.032 (3.621, 4.475)
85 years +	3.131 (2.829, 3.456)	3.734 (3.411, 4.080)	3.762 (3.441, 4.103)	2.900 (2.412, 3.455)	2.997 (2.512, 3.546)	3.267 (2.771, 3.822)	3.252 (2.874, 3.663)	4.124 (3.706, 4.575)	4.032 (3.621, 4.475)			
Crude Total (All)	3.795 (3.765, 3.826)	3.747 (3.717, 3.777)	3.610 (3.580, 3.639)	3.216 (3.176, 3.257)	3.162 (3.123, 3.203)	3.068 (3.029, 3.108)	4.328 (4.283, 4.373)	4.284 (4.239, 4.328)	4.106 (4.063, 4.149)			
Age-adj ³ (All)	3.704 (3.674, 3.734)	3.714 (3.683, 3.744)	3.608 (3.578, 3.637)	3.013 (2.975, 3.052)	3.017 (2.979, 3.056)	2.952 (2.914, 2.990)	4.313 (4.267, 4.358)	4.330 (4.284, 4.376)	4.189 (4.144, 4.234)			
Crude Total (40+)	3.504 (3.454, 3.555)	3.707 (3.656, 3.758)	3.699 (3.648, 3.749)	2.358 (2.296, 2.420)	2.492 (2.430, 2.556)	2.550 (2.488, 2.613)	4.460 (4.383, 4.537)	4.718 (4.641, 4.796)	4.657 (4.581, 4.734)			
Age-adj ³ (40+)	3.489 (3.437, 3.540)	3.699 (3.647, 3.751)	3.693 (3.642, 3.744)	2.365 (2.302, 2.427)	2.511 (2.447, 2.575)	2.563 (2.499, 2.626)	4.403 (4.326, 4.480)	4.670 (4.591, 4.748)	4.621 (4.543, 4.698)			

¹ Codes used are given in the glossary of ICD-9 and CPT codes used in this report.

² Confidence intervals (CIs) are calculated by Clopper Pearson Exact method.

³ Age adjustment was based on projected U.S. population by Bureau of the Census for the year 2000.

PTERYGIUM

In Fiscal Year 2014, the estimated age-adjusted diagnostic prevalence of pterygium for both sexes is 2.579 percent for all ages, and 5.529 percent for ages forty and above. In fiscal year 2014, the estimated age-adjusted diagnostic prevalence for all ages in females is 2.800 percent and 2.345 percent in males. For ages 40 and above in fiscal year 2014, the estimated age-adjusted diagnostic prevalence of the condition in females is 5.781 percent and 5.235 percent in males.

CHART 1.22A Diagnostic Prevalence Rates for Pterygium by Age and Gender

American Indian and Alaska Native, FY 2014

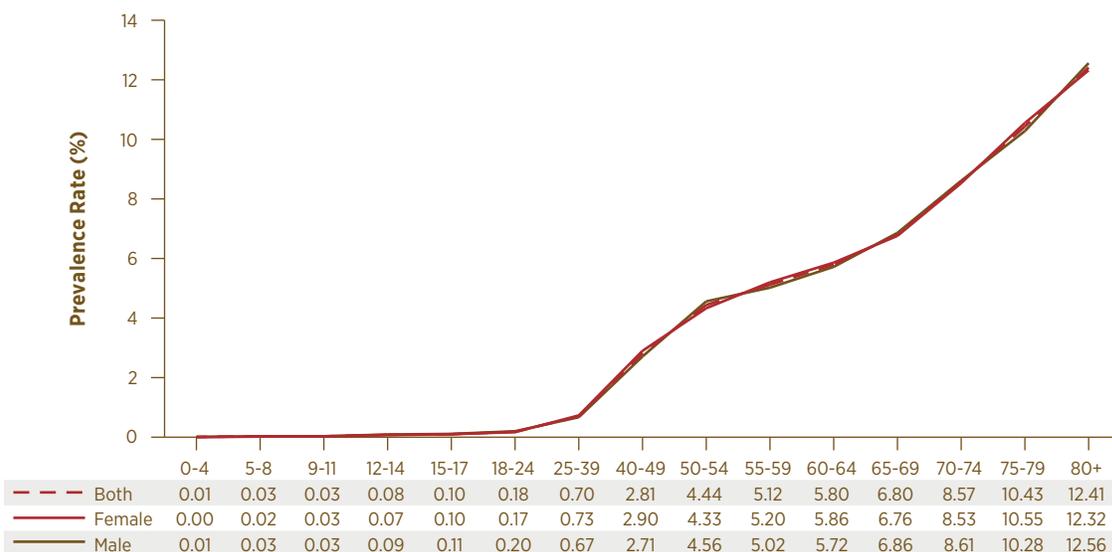


CHART 1.22B Diagnostic Prevalence Rates for Pterygium by Age and Gender (Age 40 and Older)

American Indian and Alaska Native, FY 2014



TABLE 1.22 Estimated Diagnostic Prevalence Rates of Pterygium¹ by Age and Gender
American Indians and Alaska Natives, IHS Service Area, 2012–2014. (Rate and 95% CI² per 100 Population)

Age Group	American Indian and Alaska Native								
	Both Sexes			Male			Female		
	FY 2012	FY 2013	FY 2014	FY 2012	FY 2013	FY 2014	FY 2012	FY 2013	FY 2014
Under 1 year	0 (0, 0.019)	0.01 (0.001, 0.038)	0 (0, 0.019)	0 (0, 0.037)	0.01 (0, 0.057)	0 (0, 0.037)	0 (0, 0.0359)	0.01 (0, 0.061)	0 (0, 0.040)
1 year	0.04 (0, 0.023)	0 (0, 0.015)	0.008 (0.001, 0.030)	0.008 (0, 0.044)	0 (0, 0.030)	0.008 (0, 0.045)	0 (0, 0.031)	0 (0, 0.031)	0.009 (0, 0.048)
2-4 years	0.06 (0.002, 0.013)	0.008 (0.003, 0.017)	0.006 (0.002, 0.014)	0.011 (0.004, 0.026)	0.016 (0.007, 0.033)	0.007 (0.001, 0.021)	0 (0, 0.009)	0 (0, 0.009)	0.005 (0.001, 0.018)
5 years	0.10 (0.002, 0.029)	0.007 (0.001, 0.024)	0.023 (0.009, 0.048)	0 (0, 0.024)	0.013 (0.002, 0.047)	0.040 (0.015, 0.086)	0.020 (0.004, 0.058)	0 (0, 0.024)	0.007 (0, 0.038)
6-8 years	0.33 (0.022, 0.047)	0.027 (0.017, 0.040)	0.028 (0.018, 0.041)	0.036 (0.021, 0.058)	0.022 (0.011, 0.041)	0.026 (0.014, 0.046)	0.030 (0.016, 0.051)	0.032 (0.017, 0.053)	0.029 (0.016, 0.050)
9 years	0.15 (0.004, 0.038)	0.040 (0.020, 0.071)	0.024 (0.010, 0.050)	0.022 (0.004, 0.063)	0.050 (0.020, 0.102)	0.021 (0.004, 0.061)	0.007 (0, 0.041)	0.029 (0.008, 0.075)	0.028 (0.008, 0.072)
10-11 years	0.060 (0.041, 0.084)	0.043 (0.027, 0.064)	0.033 (0.019, 0.052)	0.063 (0.037, 0.101)	0.048 (0.025, 0.082)	0.040 (0.020, 0.071)	0.056 (0.031, 0.093)	0.038 (0.018, 0.069)	0.026 (0.010, 0.053)
12-14 years	0.094 (0.074, 0.118)	0.087 (0.068, 0.110)	0.078 (0.060, 0.100)	0.093 (0.066, 0.128)	0.091 (0.064, 0.126)	0.086 (0.060, 0.120)	0.095 (0.067, 0.130)	0.083 (0.057, 0.116)	0.070 (0.046, 0.101)
15-17 years	0.115 (0.092, 0.141)	0.100 (0.079, 0.125)	0.101 (0.080, 0.125)	0.119 (0.087, 0.159)	0.105 (0.076, 0.143)	0.106 (0.076, 0.143)	0.111 (0.080, 0.149)	0.094 (0.066, 0.130)	0.096 (0.068, 0.131)
18-19 years	0.122 (0.095, 0.155)	0.157 (0.125, 0.195)	0.150 (0.119, 0.188)	0.145 (0.103, 0.198)	0.166 (0.120, 0.224)	0.161 (0.115, 0.218)	0.100 (0.066, 0.145)	0.149 (0.107, 0.203)	0.140 (0.099, 0.193)
20-24 years	0.202 (0.179, 0.226)	0.198 (0.176, 0.223)	0.194 (0.172, 0.219)	0.217 (0.184, 0.255)	0.218 (0.184, 0.256)	0.214 (0.180, 0.252)	0.187 (0.158, 0.220)	0.181 (0.152, 0.214)	0.177 (0.148, 0.210)
25-29 years	0.314 (0.284, 0.347)	0.318 (0.288, 0.350)	0.326 (0.296, 0.358)	0.289 (0.248, 0.335)	0.300 (0.258, 0.346)	0.326 (0.283, 0.374)	0.337 (0.294, 0.384)	0.334 (0.292, 0.380)	0.326 (0.285, 0.371)
30-34 years	0.744 (0.694, 0.797)	0.702 (0.654, 0.753)	0.677 (0.630, 0.726)	0.714 (0.643, 0.790)	0.630 (0.564, 0.700)	0.618 (0.554, 0.687)	0.771 (0.701, 0.847)	0.769 (0.700, 0.843)	0.730 (0.664, 0.801)
35-39 years	1.334 (1.261, 1.411)	1.316 (1.244, 1.391)	1.262 (1.193, 1.335)	1.310 (1.205, 1.421)	1.318 (1.215, 1.428)	1.219 (1.120, 1.324)	1.356 (1.255, 1.464)	1.314 (1.215, 1.420)	1.303 (1.205, 1.406)
40-44 years	2.245 (2.145, 2.344)	2.212 (2.116, 2.312)	2.160 (2.065, 2.258)	2.212 (2.071, 2.359)	2.140 (2.002, 2.284)	2.062 (1.928, 2.203)	2.271 (2.136, 2.412)	2.277 (2.143, 2.417)	2.247 (2.114, 2.386)
45-49 years	3.418 (3.300, 3.538)	3.464 (3.344, 3.586)	3.478 (3.357, 3.603)	3.295 (3.128, 3.469)	3.592 (3.220, 3.570)	3.372 (3.199, 3.553)	3.528 (3.364, 3.698)	3.528 (3.362, 3.700)	3.573 (3.404, 3.748)
50-54 years	4.353 (4.219, 4.491)	4.371 (4.238, 4.507)	4.435 (4.303, 4.571)	4.309 (4.113, 4.512)	4.400 (4.205, 4.601)	4.558 (4.362, 4.760)	4.391 (4.207, 4.581)	4.346 (4.166, 4.532)	4.329 (4.150, 4.513)
55-59 years	4.839 (4.684, 4.998)	4.926 (4.772, 5.083)	5.117 (4.964, 5.273)	4.659 (4.434, 4.894)	4.750 (4.527, 4.981)	5.019 (4.796, 5.250)	4.988 (4.775, 5.207)	5.072 (4.862, 5.289)	5.199 (4.990, 5.413)
60-64 years	5.648 (5.460, 5.842)	5.834 (5.646, 6.025)	5.797 (5.614, 5.984)	5.695 (5.412, 5.988)	5.837 (5.558, 6.125)	5.723 (5.453, 6.003)	5.611 (5.358, 5.872)	5.831 (5.580, 6.090)	5.856 (5.610, 6.110)
65-69 years	6.812 (6.570, 7.060)	6.801 (6.566, 7.043)	6.804 (6.577, 7.037)	6.756 (6.395, 7.150)	6.853 (6.498, 7.220)	6.857 (6.516, 7.212)	6.857 (6.533, 7.192)	6.761 (6.447, 7.085)	6.762 (6.459, 7.075)
70-74 years	8.575 (8.260, 8.899)	8.612 (8.303, 8.929)	8.566 (8.263, 8.876)	8.491 (8.019, 8.982)	8.601 (8.137, 9.082)	8.613 (8.158, 9.085)	8.641 (8.220, 9.077)	8.621 (8.209, 9.047)	8.528 (8.125, 8.945)
75-79 years	10.097 (9.692, 10.512)	10.306 (9.907, 10.716)	10.432 (10.039, 10.836)	10.049 (9.435, 10.689)	10.032 (9.453, 10.656)	10.276 (9.682, 10.894)	10.132 (9.598, 10.686)	10.514 (9.981, 11.065)	10.550 (10.028, 11.090)
80-84 years	12.052 (11.506, 12.615)	12.073 (11.539, 12.623)	12.313 (11.783, 12.858)	11.788 (10.938, 12.679)	12.065 (11.223, 12.947)	12.180 (11.348, 13.051)	12.23 (11.521, 12.965)	12.079 (11.392, 12.792)	12.400 (11.718, 13.108)
85 years +	11.025 (10.474, 11.594)	11.781 (11.224, 12.356)	12.523 (11.959, 13.104)	11.814 (10.850, 12.832)	12.377 (11.415, 13.390)	13.044 (12.083, 14.053)	10.614 (9.949, 11.309)	11.466 (10.787, 12.172)	12.238 (11.545, 12.958)
Crude Total (All)	1.899 (1.877, 1.920)	1.957 (1.935, 1.979)	2.005 (1.983, 2.028)	1.754 (1.724, 1.784)	1.814 (1.783, 1.844)	1.864 (1.834, 1.895)	2.031 (2.000, 2.063)	2.088 (2.057, 2.120)	2.135 (2.104, 2.166)
Age-adjusted (All)	2.532 (2.503, 2.561)	2.559 (2.530, 2.588)	2.579 (2.550, 2.607)	2.303 (2.263, 2.343)	2.329 (2.289, 2.368)	2.345 (2.306, 2.384)	2.747 (2.705, 2.790)	2.776 (2.734, 2.818)	2.800 (2.758, 2.841)
Crude Total (40+)	5.086 (5.025, 5.146)	5.192 (5.132, 5.253)	5.286 (5.226, 5.346)	4.912 (4.825, 5.001)	5.034 (4.947, 5.123)	5.137 (5.050, 5.225)	5.230 (5.147, 5.313)	5.324 (5.242, 5.407)	5.410 (5.328, 5.493)
Age-adjusted (40+)	5.394 (5.328, 5.460)	5.468 (5.403, 5.533)	5.529 (5.465, 5.594)	5.100 (5.006, 5.193)	5.176 (5.083, 5.268)	5.235 (5.143, 5.327)	5.643 (5.551, 5.735)	5.717 (5.626, 5.808)	5.781 (5.690, 5.871)

¹ Codes used are given in the glossary of ICD-9 and CPT codes used in this report.
² Confidence intervals (CIs) are calculated by Clopper Pearson Exact method.
³ Age adjustment was based on projected U.S. population by Bureau of the Census for the year 2000.

IRIDOCYCLITIS

In Fiscal Year 2014, the estimated age-adjusted diagnostic prevalence of iridocyclitis for both sexes is 0.252 percent for all ages, and 0.426 percent for ages forty and above. In fiscal year 2014, the estimated age-adjusted diagnostic prevalence for all ages of males is 0.263 percent and 0.243 percent for females. For ages 40 and above in fiscal year 2014, the estimated age-adjusted diagnostic prevalence of the condition in males is 0.445 percent and 0.412 percent in females.

CHART 1.23A Diagnostic Prevalence Rates for Iridocyclitis by Age and Gender
American Indian and Alaska Native, FY 2014

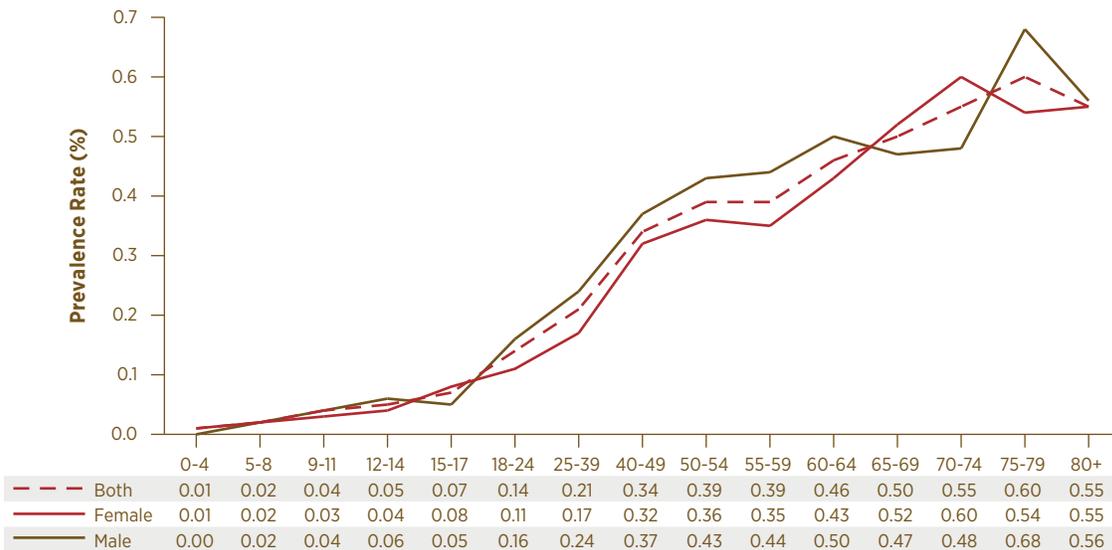


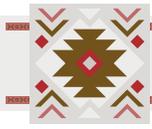
CHART 1.23B Diagnostic Prevalence Rates for Iridocyclitis by Age and Gender (Age 40 and Older)
American Indian and Alaska Native, FY 2014



TABLE 1.23 Estimated Diagnostic Prevalence Rates of Iridocyclitis¹ by Age and Gender
American Indians and Alaska Natives, IHS Service Area, 2012–2014. (Rate and 95% CI² per 100 Population)

Age Group	American Indian and Alaska Native											
	Both Sexes				Male				Female			
	FY 2012	FY 2013	FY 2014	FY 2012	FY 2013	FY 2014	FY 2012	FY 2013	FY 2014	FY 2012	FY 2013	FY 2014
Under 1 year	0 (0, 0.019)	0.005 (0, 0.029)	0 (0, 0.019)	0 (0, 0.037)	0 (0, 0.038)	0 (0, 0.037)	0 (0, 0.0359)	0.011 (0, 0.061)	0 (0, 0.040)			
1 year	0 (0, 0.015)	0 (0, 0.015)	0.004 (0, 0.023)	0 (0, 0.029)	0 (0, 0.030)	0.008 (0, 0.045)	0 (0, 0.031)	0 (0, 0.032)				
2-4 years	0.010 (0.005, 0.020)	0.008 (0.003, 0.017)	0.010 (0.004, 0.019)	0.014 (0.005, 0.029)	0.009 (0.003, 0.024)	0.005 (0.001, 0.017)	0.007 (0.001, 0.020)	0.007 (0.001, 0.021)	0.015 (0.005, 0.032)			
5 years	0.026 (0.011, 0.052)	0.007 (0.001, 0.024)	0.017 (0.005, 0.039)	0.039 (0.014, 0.084)	0.006 (0, 0.036)	0.033 (0.011, 0.077)	0.013 (0.002, 0.048)	0.007 (0, 0.037)	0 (0, 0.025)			
6-8 years	0.024 (0.015, 0.037)	0.017 (0.009, 0.028)	0.022 (0.014, 0.034)	0.025 (0.012, 0.044)	0.016 (0.006, 0.032)	0.017 (0.008, 0.034)	0.023 (0.011, 0.042)	0.018 (0.008, 0.036)	0.027 (0.014, 0.047)			
9 years	0.037 (0.018, 0.067)	0.018 (0.006, 0.042)	0.021 (0.008, 0.046)	0.036 (0.012, 0.084)	0.028 (0.008, 0.075)	0.014 (0.002, 0.050)	0.037 (0.012, 0.087)	0.007 (0, 0.041)	0.028 (0.008, 0.072)			
10-11 years	0.028 (0.016, 0.046)	0.035 (0.021, 0.055)	0.046 (0.030, 0.067)	0.037 (0.018, 0.068)	0.048 (0.025, 0.082)	0.058 (0.033, 0.094)	0.019 (0.006, 0.044)	0.023 (0.008, 0.049)	0.033 (0.015, 0.063)			
12-14 years	0.053 (0.039, 0.072)	0.051 (0.037, 0.069)	0.052 (0.037, 0.070)	0.071 (0.048, 0.102)	0.064 (0.042, 0.094)	0.059 (0.038, 0.088)	0.035 (0.019, 0.059)	0.038 (0.021, 0.062)	0.045 (0.027, 0.071)			
15-17 years	0.111 (0.089, 0.137)	0.065 (0.049, 0.086)	0.065 (0.049, 0.086)	0.114 (0.083, 0.153)	0.082 (0.056, 0.116)	0.050 (0.031, 0.078)	0.108 (0.078, 0.146)	0.048 (0.029, 0.076)	0.081 (0.055, 0.114)			
18-19 years	0.106 (0.080, 0.137)	0.104 (0.079, 0.136)	0.089 (0.065, 0.118)	0.138 (0.097, 0.190)	0.124 (0.085, 0.174)	0.098 (0.063, 0.145)	0.075 (0.046, 0.115)	0.086 (0.054, 0.129)	0.080 (0.049, 0.122)			
20-24 years	0.161 (0.141, 0.183)	0.142 (0.123, 0.163)	0.154 (0.134, 0.176)	0.168 (0.139, 0.202)	0.165 (0.136, 0.198)	0.185 (0.154, 0.221)	0.154 (0.128, 0.185)	0.121 (0.097, 0.149)	0.125 (0.101, 0.153)			
25-29 years	0.206 (0.182, 0.232)	0.192 (0.169, 0.217)	0.164 (0.143, 0.188)	0.263 (0.224, 0.307)	0.228 (0.192, 0.269)	0.207 (0.173, 0.246)	0.154 (0.126, 0.187)	0.159 (0.130, 0.192)	0.126 (0.101, 0.156)			
30-34 years	0.250 (0.221, 0.281)	0.237 (0.210, 0.267)	0.202 (0.177, 0.230)	0.295 (0.250, 0.346)	0.279 (0.237, 0.328)	0.235 (0.196, 0.279)	0.208 (0.172, 0.249)	0.199 (0.164, 0.238)	0.173 (0.141, 0.209)			
35-39 years	0.302 (0.267, 0.340)	0.279 (0.246, 0.315)	0.274 (0.242, 0.309)	0.361 (0.307, 0.423)	0.341 (0.289, 0.399)	0.308 (0.259, 0.363)	0.248 (0.205, 0.297)	0.222 (0.182, 0.268)	0.243 (0.202, 0.290)			
40-44 years	0.364 (0.325, 0.407)	0.334 (0.297, 0.375)	0.325 (0.289, 0.365)	0.387 (0.329, 0.452)	0.374 (0.318, 0.438)	0.350 (0.296, 0.412)	0.344 (0.293, 0.402)	0.298 (0.250, 0.352)	0.303 (0.255, 0.357)			
45-49 years	0.380 (0.341, 0.422)	0.356 (0.317, 0.397)	0.361 (0.322, 0.404)	0.391 (0.334, 0.455)	0.404 (0.345, 0.469)	0.398 (0.340, 0.465)	0.370 (0.318, 0.429)	0.313 (0.264, 0.368)	0.328 (0.278, 0.385)			
50-54 years	0.388 (0.348, 0.431)	0.373 (0.334, 0.415)	0.393 (0.353, 0.435)	0.428 (0.367, 0.497)	0.383 (0.326, 0.447)	0.430 (0.370, 0.497)	0.353 (0.301, 0.411)	0.364 (0.312, 0.422)	0.360 (0.309, 0.417)			
55-59 years	0.439 (0.392, 0.490)	0.415 (0.370, 0.463)	0.394 (0.351, 0.440)	0.480 (0.408, 0.561)	0.450 (0.382, 0.527)	0.445 (0.379, 0.519)	0.405 (0.345, 0.473)	0.385 (0.328, 0.450)	0.351 (0.297, 0.411)			
60-64 years	0.520 (0.463, 0.583)	0.453 (0.401, 0.511)	0.458 (0.406, 0.514)	0.515 (0.430, 0.611)	0.444 (0.368, 0.532)	0.497 (0.418, 0.587)	0.525 (0.448, 0.611)	0.460 (0.390, 0.540)	0.426 (0.360, 0.501)			
65-69 years	0.644 (0.569, 0.726)	0.569 (0.500, 0.644)	0.500 (0.438, 0.568)	0.540 (0.439, 0.658)	0.507 (0.412, 0.619)	0.472 (0.383, 0.576)	0.726 (0.620, 0.845)	0.617 (0.522, 0.724)	0.522 (0.438, 0.617)			
70-74 years	0.818 (0.719, 0.926)	0.715 (0.624, 0.815)	0.550 (0.472, 0.637)	0.710 (0.574, 0.869)	0.612 (0.489, 0.757)	0.483 (0.376, 0.611)	0.902 (0.764, 1.057)	0.796 (0.669, 0.939)	0.603 (0.495, 0.727)			
75-79 years	0.833 (0.715, 0.966)	0.794 (0.680, 0.920)	0.604 (0.508, 0.713)	0.800 (0.627, 1.007)	0.764 (0.598, 0.961)	0.682 (0.529, 0.866)	0.858 (0.701, 1.040)	0.816 (0.666, 0.990)	0.545 (0.426, 0.687)			
80-84 years	0.648 (0.519, 0.798)	0.775 (0.637, 0.934)	0.652 (0.528, 0.797)	0.650 (0.453, 0.902)	0.750 (0.541, 1.012)	0.657 (0.465, 0.900)	0.646 (0.483, 0.847)	0.792 (0.614, 1.005)	0.650 (0.492, 0.841)			
85 years +	0.467 (0.354, 0.605)	0.538 (0.418, 0.682)	0.438 (0.332, 0.568)	0.407 (0.237, 0.651)	0.595 (0.389, 0.870)	0.436 (0.266, 0.672)	0.498 (0.356, 0.678)	0.508 (0.366, 0.686)	0.440 (0.310, 0.606)			
Crude Total (All)	0.244 (0.236, 0.252)	0.228 (0.220, 0.236)	0.217 (0.210, 0.224)	0.251 (0.240, 0.263)	0.237 (0.226, 0.248)	0.228 (0.218, 0.239)	0.238 (0.227, 0.249)	0.220 (0.210, 0.230)	0.206 (0.197, 0.216)			
Age-adj ³ (All)	0.292 (0.282, 0.301)	0.272 (0.263, 0.281)	0.252 (0.243, 0.260)	0.295 (0.281, 0.308)	0.278 (0.265, 0.291)	0.263 (0.250, 0.275)	0.291 (0.277, 0.304)	0.267 (0.255, 0.280)	0.243 (0.231, 0.255)			
Crude Total (40+)	0.477 (0.458, 0.496)	0.448 (0.430, 0.466)	0.420 (0.403, 0.438)	0.475 (0.447, 0.503)	0.452 (0.426, 0.480)	0.443 (0.417, 0.470)	0.479 (0.454, 0.506)	0.444 (0.420, 0.469)	0.401 (0.378, 0.425)			
Age-adj ³ (40+)	0.493 (0.474, 0.513)	0.464 (0.446, 0.483)	0.426 (0.409, 0.444)	0.484 (0.455, 0.512)	0.463 (0.435, 0.490)	0.445 (0.419, 0.472)	0.503 (0.476, 0.530)	0.467 (0.441, 0.493)	0.412 (0.388, 0.435)			

¹ Codes used are given in the glossary of ICD-9 and CPT codes used in this report. Determined at clinical level and cannot be disambiguated by plus minus cylinder considerations.
² Confidence intervals (CIs) are calculated by Clopper Pearson Exact method.
³ Age adjustment was based on projected U.S. population by Bureau of the Census for the year 2000.





PART II

SURGICAL PROCEDURES AND OPHTHALMIC MEDICATIONS PRESCRIBED, FY 2010-FY 2013, AND FY 2012-FY 2014, FREQUENCY, RATE

INDIAN HEALTH SERVICE VISION CARE
2018 EDITION

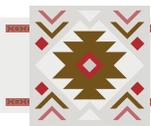


CHART 2.1 Spectacle Dispense Encounters - by Age
American Indians and Alaska Natives, IHS Service Area, 2012-2014

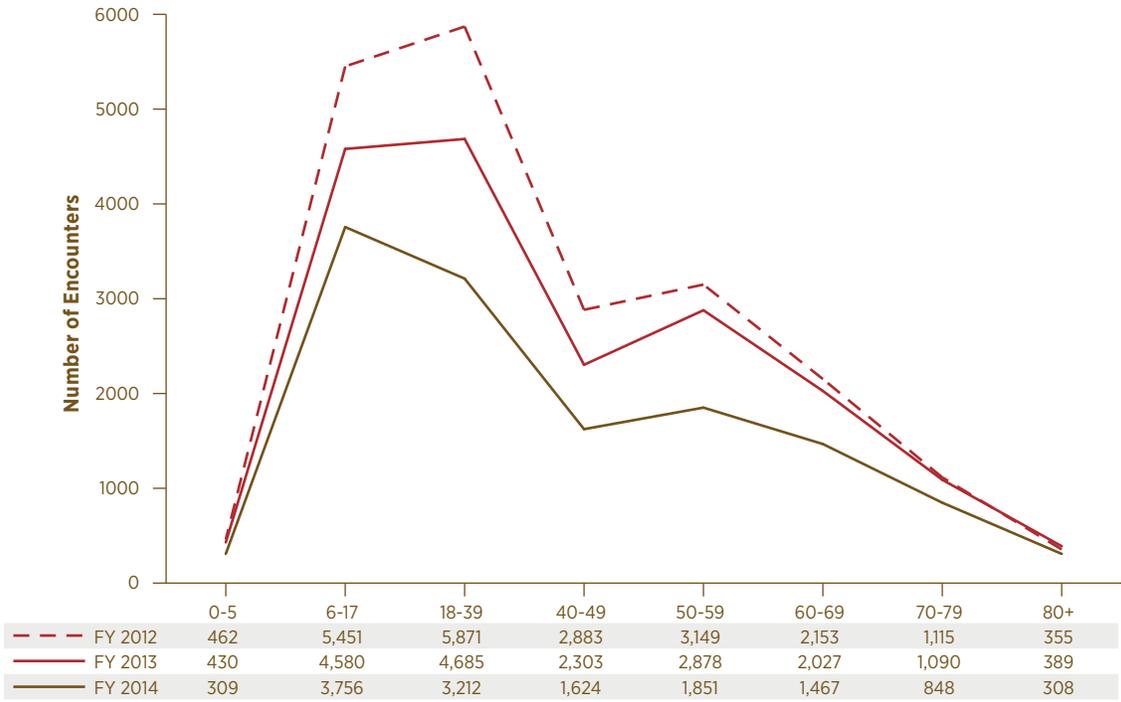


TABLE 2.1 Spectacle Dispense Encounters – Summary Data
American Indians and Alaska Natives, IHS Service Area, 2012-2014

Location	TOTAL	AGE GROUPS							
		Ages 0-5	Ages 6-17	Ages 18-39	Ages 40-49	Ages 50-59	Ages 60-69	Ages 70-79	Ages 80+
FY 2012									
Alaska	4,836	80	1,396	1,719	597	526	309	167	42
Albuquerque	749	15	95	188	113	167	120	45	6
Bemidji	994	45	327	342	122	90	43	17	8
Billings	2,717	97	602	802	406	395	256	125	34
California	48	1	5	8	9	9	14	0	2
Great Plains	3,989	37	765	1,157	645	681	444	224	36
Navajo	5,471	117	1,659	1,108	643	818	601	350	175
Oklahoma City	1,081	7	115	224	171	237	199	101	27
Phoenix	358	4	113	67	48	45	48	23	10
Portland	987	36	242	221	124	175	115	60	14
Tucson	209	23	132	35	5	6	4	3	1
TOTAL	21,439	462	5,451	5,871	2,883	3,149	2,153	1,115	355
FY 2013									
Alaska	1,646	11	458	584	211	187	117	63	15
Albuquerque	872	20	102	202	160	175	123	68	22
Bemidji	1,315	59	415	390	175	144	86	36	10
Billings	3,280	97	713	979	469	549	303	120	50
California	46	1	3	21	8	7	3	2	1
Great Plains	2,176	24	408	658	340	363	239	116	28
Navajo	4,951	117	1,479	1,083	488	722	511	384	167
Oklahoma City	2,315	28	330	447	310	513	432	199	56
Phoenix	235	2	77	45	22	28	33	17	11
Portland	1,288	35	391	259	120	190	179	85	29
Tucson	258	36	204	17	0	0	1	0	0
TOTAL	18,382	430	4,580	4,685	2,303	2,878	2,027	1,090	389
FY 2014									
Alaska	144	7	48	52	9	10	8	7	3
Albuquerque	834	12	129	190	145	154	131	55	18
Bemidji	776	32	304	242	99	58	23	12	6
Billings	2,017	46	592	593	258	243	176	75	34
California	57	0	7	15	9	7	12	6	1
Great Plains	1,598	15	314	458	240	264	183	94	30
Nashville	1	0	0	1	0	0	0	0	0
Navajo	5,016	103	1,507	1,024	553	696	579	396	158
Oklahoma City	1,074	29	193	234	140	206	164	85	23
Phoenix	331	3	123	82	22	41	29	18	13
Portland	1,071	31	335	218	105	145	141	81	15
Tucson	456	31	204	103	44	27	21	19	7
TOTAL	13,375	309	3,756	3,212	1,624	1,851	1,467	848	308

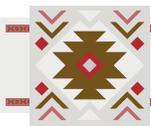


CHART 2.2 Eye Care Entounters - by Age
American Indians and Alaska Natives, IHS Service Area, 2012-2014

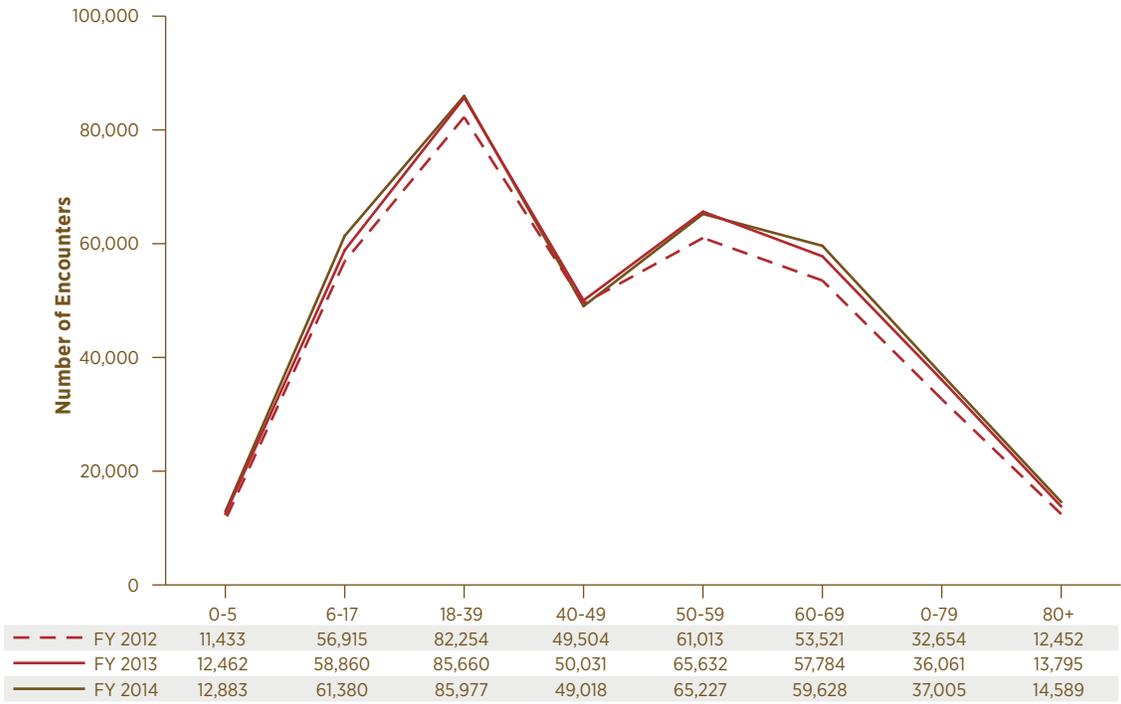


TABLE 2.2 Eye Care Entounters – Summary Data
American Indians and Alaska Natives, IHS Service Area, 2012-2014

Location	TOTAL	AGE GROUPS							
		Ages 0-5	Ages 6-17	Ages 18-39	Ages 40-49	Ages 50-59	Ages 60-69	Ages 70-79	Ages 80+
FY 2012									
Alaska	40,119	1,366	8,392	12,453	5,132	5,466	4,033	2,381	896
Albuquerque	21,410	1,028	2,579	4,543	3,069	3,850	3,406	2,062	873
Bemidji	22,706	483	3,977	6,477	3,342	3,472	2,809	1,596	550
Billings	19,833	1,039	3,600	4,695	2,678	3,227	2,584	1,574	436
California	8,186	210	1,314	2,156	1,172	1,512	1,147	541	134
Great Plains	25,492	1,015	4,191	6,344	3,797	4,268	3,433	1,869	575
Nashville	6,789	168	1,394	1,939	1,020	974	777	405	112
Navajo	74,555	2,375	11,972	14,393	9,333	12,442	11,642	8,489	3,909
Oklahoma City	69,698	1,458	7,801	12,699	9,390	13,472	13,269	8,392	3,217
Phoenix	52,716	1,724	8,575	12,057	8,151	9,228	7,658	4,006	1,317
Portland	13,464	415	2,493	3,457	1,757	2,128	1,966	935	313
Tucson	4,778	152	627	1,041	663	974	797	404	120
TOTAL	359,746	11,433	56,915	82,254	49,504	61,013	53,521	32,654	12,452
FY 2013									
Alaska	45,615	1,813	8,829	14,157	5,707	6,177	4,970	2,845	1,117
Albuquerque	23,586	1,145	2,767	4,931	3,343	4,348	3,766	2,280	1,006
Bemidji	23,445	655	4,274	6,541	3,152	3,620	2,904	1,750	549
Billings	20,290	1,170	3,634	4,737	2,533	3,431	2,617	1,656	512
California	8,413	216	1,280	2,182	1,237	1,593	1,165	573	167
Great Plains	25,289	1,196	4,155	6,195	3,556	4,274	3,414	1,882	617
Nashville	5,707	132	1,298	1,784	795	784	610	246	58
Navajo	77,934	2,121	12,567	15,525	9,330	13,114	11,917	9,087	4,273
Oklahoma City	76,216	1,815	8,178	12,878	9,779	14,690	15,349	9,842	3,685
Phoenix	52,671	1,496	7,978	12,024	7,835	10,052	7,721	4,227	1,338
Portland	14,400	447	2,880	3,314	1,769	2,317	2,189	1,138	346
Tucson	6,719	256	1,020	1,392	995	1,232	1,162	535	127
TOTAL	380,285	12,462	58,860	85,660	50,031	65,632	57,784	36,061	13,795
FY 2014									
Alaska	44,034	1,627	9,069	13,268	5,047	5,996	4,937	2,905	1,185
Albuquerque	27,010	1,257	3,257	5,667	3,675	4,934	4,366	2,703	1,151
Bemidji	22,794	667	4,239	6,419	2,988	3,400	2,827	1,699	555
Billings	18,961	1,073	3,701	4,571	2,199	2,960	2,520	1,475	462
California	7,677	216	1,199	1,880	997	1,555	1,151	542	137
Great Plains	22,716	1,337	3,770	5,242	2,975	3,702	3,330	1,807	553
Nashville	8,947	182	1,827	2,683	1,273	1,236	986	605	155
Navajo	80,587	2,399	12,986	15,715	9,705	13,446	12,332	9,361	4,643
Oklahoma City	75,329	1,870	8,711	12,822	9,188	13,998	15,344	9,667	3,729
Phoenix	56,013	1,563	8,612	12,816	8,200	10,451	8,377	4,471	1,523
Portland	15,463	495	3,070	3,569	1,878	2,442	2,391	1,281	337
Tucson	6,176	197	939	1,325	893	1,107	1,067	489	159
TOTAL	385,707	12,883	61,380	85,977	49,018	65,227	59,628	37,005	14,589

TABLE 2.3 Patient Counts and Rates of Capsulotomy¹ by Age
American Indians and Alaska Natives, IHS Service Area, 2012-2014 (Rate per 100 Population)

Age Group	American Indian and Alaska Native								
	FY 2012			FY 2013			FY 2014		
	Direct	Contract	All IHS ²	Direct	Contract	All IHS ²	Direct	Contract	All IHS ²
Under 1 year	8 (0.042)	0 (0)	8 (0.042)	0 (0)	0 (0)	0 (0)	0 (0)	1 (0.005)	1 (0.005)
1 year	3 (0.012)	0 (0)	3 (0.012)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
2-4 years	1 (0.001)	0 (0)	1 (0.001)	0 (0)	0 (0)	0 (0)	1 (0.001)	0 (0)	1 (0.001)
5 years	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
6-8 years	0 (0)	0 (0)	0 (0)	0 (0)	1 (0.001)	1 (0.001)	0 (0)	0 (0)	0 (0)
9 years	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
10-11 years	1 (0.002)	0 (0)	1 (0.002)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
12-14 years	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	1 (0.001)	1 (0.001)
15-17 years	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	1 (0.001)	0 (0)	1 (0.001)
18-19 years	0 (0)	0 (0)	0 (0)	1 (0.002)	0 (0)	1 (0.002)	0 (0)	0 (0)	0 (0)
20-24 years	5 (0.003)	1 (0.001)	6 (0.004)	0 (0)	1 (0.001)	1 (0.001)	1 (0.001)	0 (0)	1 (0.001)
25-29 years	2 (0.002)	1 (0.001)	3 (0.002)	1 (0.001)	3 (0.002)	4 (0.003)	0 (0)	1 (0.001)	1 (0.001)
30-34 years	2 (0.002)	1 (0.001)	3 (0.003)	2 (0.002)	2 (0.002)	4 (0.004)	0 (0)	1 (0.001)	1 (0.001)
35-39 years	4 (0.004)	1 (0.001)	5 (0.005)	2 (0.002)	4 (0.004)	6 (0.006)	3 (0.003)	5 (0.005)	8 (0.008)
40-44 years	3 (0.003)	4 (0.005)	7 (0.008)	5 (0.006)	2 (0.002)	7 (0.008)	3 (0.003)	6 (0.007)	9 (0.010)
45-49 years	7 (0.008)	12 (0.013)	18 (0.020)	2 (0.002)	10 (0.011)	12 (0.014)	8 (0.009)	3 (0.003)	11 (0.013)
50-54 years	19 (0.022)	23 (0.026)	42 (0.048)	18 (0.020)	17 (0.019)	35 (0.039)	17 (0.019)	14 (0.015)	30 (0.033)
55-59 years	17 (0.024)	25 (0.035)	42 (0.058)	26 (0.035)	38 (0.051)	63 (0.084)	25 (0.032)	27 (0.034)	51 (0.065)
60-64 years	42 (0.074)	48 (0.085)	90 (0.159)	40 (0.067)	62 (0.104)	102 (0.172)	47 (0.076)	48 (0.077)	94 (0.152)
65-69 years	44 (0.107)	56 (0.137)	98 (0.239)	39 (0.090)	62 (0.143)	101 (0.233)	47 (0.101)	54 (0.116)	100 (0.215)
70-74 years	35 (0.117)	38 (0.127)	73 (0.245)	50 (0.160)	61 (0.196)	109 (0.349)	49 (0.151)	60 (0.185)	105 (0.324)
75-79 years	47 (0.224)	40 (0.191)	86 (0.410)	41 (0.187)	50 (0.228)	90 (0.410)	59 (0.258)	61 (0.267)	119 (0.521)
80-84 years	32 (0.238)	29 (0.216)	61 (0.454)	36 (0.256)	37 (0.263)	73 (0.519)	36 (0.247)	32 (0.220)	67 (0.460)
85 years +	19 (0.156)	14 (0.115)	33 (0.270)	17 (0.135)	25 (0.198)	40 (0.316)	30 (0.231)	26 (0.200)	54 (0.415)
Total	291 (0.019)	293 (0.019)	580 (0.038)	280 (0.018)	375 (0.024)	649 (0.042)	327 (0.021)	340 (0.022)	655 (0.042)
40+	265 (0.052)	289 (0.057)	550 (0.108)	274 (0.052)	364 (0.070)	632 (0.121)	321 (0.060)	331 (0.062)	640 (0.119)

¹ Codes used are given in the glossary of ICD-9 and CPT codes used in this report.

² All IHS could be less than the sum of Direct and Contract when the same patient had the procedure in both Direct and Contract.

TABLE 2.4 Patient Counts and Rates of Cataract Surgery¹ by Age
American Indians and Alaska Natives, IHS Service Area, 2012-2014 (Rate per 100 Population)

Age Group	American Indian and Alaska Native								
	FY 2012			FY 2013			FY 2014		
	Direct	Contract	All IHS ²	Direct	Contract	All IHS ²	Direct	Contract	All IHS ²
Under 1 year	0 (0)	1 (0.005)	1 (0.005)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
1 year	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
2-4 years	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
5 years	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
6-8 years	0 (0)	0 (0)	0 (0)	0 (0)	1 (0.001)	1 (0.001)	1 (0.001)	0 (0)	1 (0.001)
9 years	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	1 (0.003)	0 (0)	1 (0.003)
10-11 years	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
12-14 years	0 (0)	1 (0.001)	1 (0.001)	0 (0)	2 (0.002)	2 (0.002)	1 (0.001)	1 (0.001)	2 (0.002)
15-17 years	0 (0)	0 (0)	0 (0)	2 (0.003)	0 (0)	2 (0.003)	2 (0.003)	0 (0)	2 (0.003)
18-19 years	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
20-24 years	3 (0.002)	2 (0.001)	5 (0.003)	2 (0.001)	1 (0.001)	3 (0.002)	1 (0.001)	2 (0.001)	3 (0.002)
25-29 years	7 (0.005)	5 (0.004)	12 (0.009)	7 (0.005)	4 (0.003)	10 (0.008)	7 (0.005)	3 (0.002)	10 (0.008)
30-34 years	10 (0.009)	9 (0.008)	17 (0.016)	4 (0.004)	7 (0.006)	11 (0.010)	7 (0.006)	5 (0.004)	12 (0.010)
35-39 years	6 (0.007)	10 (0.011)	16 (0.018)	13 (0.014)	12 (0.013)	23 (0.025)	11 (0.012)	12 (0.013)	21 (0.022)
40-44 years	30 (0.035)	12 (0.014)	39 (0.045)	32 (0.037)	29 (0.033)	55 (0.063)	33 (0.037)	16 (0.018)	43 (0.049)
45-49 years	50 (0.055)	50 (0.055)	90 (0.100)	48 (0.055)	37 (0.042)	75 (0.085)	53 (0.062)	24 (0.028)	75 (0.087)
50-54 years	82 (0.094)	92 (0.106)	167 (0.192)	109 (0.121)	94 (0.105)	183 (0.204)	110 (0.120)	69 (0.075)	158 (0.173)
55-59 years	158 (0.219)	160 (0.222)	291 (0.403)	174 (0.231)	134 (0.178)	288 (0.383)	187 (0.237)	118 (0.150)	282 (0.358)
60-64 years	235 (0.416)	253 (0.448)	456 (0.807)	264 (0.445)	234 (0.394)	451 (0.760)	313 (0.505)	217 (0.350)	478 (0.771)
65-69 years	315 (0.768)	282 (0.688)	560 (1.365)	354 (0.818)	260 (0.601)	567 (1.310)	410 (0.883)	255 (0.549)	612 (1.318)
70-74 years	332 (1.113)	266 (0.891)	569 (1.907)	375 (1.202)	242 (0.776)	571 (1.831)	394 (1.217)	228 (0.704)	564 (1.742)
75-79 years	265 (1.262)	220 (1.048)	461 (2.196)	292 (1.332)	225 (1.026)	491 (2.239)	323 (1.413)	209 (0.915)	487 (2.131)
80-84 years	143 (1.065)	129 (0.960)	256 (1.906)	141 (1.003)	93 (0.661)	219 (1.557)	164 (1.126)	87 (0.597)	234 (1.607)
85 years +	75 (0.615)	47 (0.385)	117 (0.959)	87 (0.688)	49 (0.388)	121 (0.957)	77 (0.592)	39 (0.300)	109 (0.838)
Total	1,711 (0.112)	1,539 (0.101)	3,058 (0.200)	1,904 (0.124)	1,424 (0.092)	3,073 (0.199)	2,095 (0.134)	1,285 (0.082)	3,094 (0.198)
40+	1,685 (0.330)	1,511 (0.296)	3,006 (0.589)	1,876 (0.359)	1,397 (0.267)	3,021 (0.578)	2,064 (0.385)	1,262 (0.236)	3,042 (0.568)

¹ Codes used are given in the glossary of ICD-9 and CPT codes used in this report.

²All IHS could be less than the sum of Direct and Contract when the same patient had the procedure in both Direct and Contract.

TABLE 2.5 Patient Counts and Rates of Intravitreal Injection¹ by Age
American Indians and Alaska Natives, IHS Service Area, 2012-2014 (Rate per 100 Population)

Age Group	American Indian and Alaska Native								
	FY 2012			FY 2013			FY 2014		
	Direct	Contract	All IHS ²	Direct	Contract	All IHS ²	Direct	Contract	All IHS ²
Under 1 year	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
1 year	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
2-4 years	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
5 years	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
6-8 years	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
9 years	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
10-11 years	0 (0)	0 (0)	0 (0)	0 (0)	1 (0.002)	1 (0.002)	0 (0)	1 (0.002)	1 (0.002)
12-14 years	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
15-17 years	0 (0)	1 (0.001)	1 (0.001)	0 (0)	0 (0)	0 (0)	1 (0.001)	1 (0.001)	2 (0.003)
18-19 years	0 (0)	1 (0.002)	1 (0.002)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
20-24 years	0 (0)	3 (0.002)	3 (0.002)	1 (0.001)	6 (0.004)	7 (0.005)	0 (0)	7 (0.005)	7 (0.005)
25-29 years	1 (0.001)	7 (0.005)	8 (0.006)	2 (0.002)	9 (0.007)	11 (0.008)	0 (0)	8 (0.006)	8 (0.006)
30-34 years	0 (0)	16 (0.015)	16 (0.015)	1 (0.001)	8 (0.007)	9 (0.008)	2 (0.002)	7 (0.006)	9 (0.008)
35-39 years	1 (0.001)	21 (0.023)	22 (0.024)	1 (0.001)	16 (0.017)	17 (0.018)	1 (0.001)	10 (0.010)	11 (0.012)
40-44 years	0 (0)	28 (0.032)	28 (0.032)	2 (0.002)	34 (0.039)	36 (0.041)	3 (0.003)	31 (0.035)	34 (0.039)
45-49 years	1 (0.001)	32 (0.035)	33 (0.037)	4 (0.005)	46 (0.052)	50 (0.057)	5 (0.006)	44 (0.051)	49 (0.057)
50-54 years	5 (0.006)	53 (0.061)	58 (0.067)	4 (0.004)	76 (0.085)	80 (0.089)	8 (0.009)	63 (0.069)	71 (0.078)
55-59 years	7 (0.01)	80 (0.111)	87 (0.121)	10 (0.013)	97 (0.129)	107 (0.142)	11 (0.014)	100 (0.127)	111 (0.141)
60-64 years	6 (0.011)	73 (0.129)	79 (0.14)	8 (0.013)	106 (0.179)	113 (0.190)	15 (0.024)	116 (0.187)	131 (0.211)
65-69 years	5 (0.012)	79 (0.193)	84 (0.205)	7 (0.016)	83 (0.192)	90 (0.208)	8 (0.017)	93 (0.200)	101 (0.218)
70-74 years	7 (0.023)	67 (0.225)	74 (0.248)	9 (0.029)	88 (0.282)	96 (0.308)	13 (0.040)	74 (0.229)	86 (0.266)
75-79 years	11 (0.052)	47 (0.224)	58 (0.276)	6 (0.027)	60 (0.274)	66 (0.301)	11 (0.048)	65 (0.284)	76 (0.333)
80-84 years	7 (0.052)	43 (0.320)	50 (0.372)	11 (0.078)	58 (0.412)	68 (0.484)	9 (0.062)	49 (0.336)	58 (0.398)
85 years +	2 (0.016)	36 (0.295)	38 (0.311)	5 (0.040)	32 (0.253)	37 (0.293)	7 (0.054)	36 (0.277)	43 (0.331)
Total	53 (0.003)	587 (0.038)	640 (0.042)	71 (0.005)	720 (0.047)	788 (0.051)	94 (0.006)	705 (0.045)	798 (0.051)
40+	51 (0.010)	538 (0.105)	589 (0.115)	66 (0.013)	680 (0.130)	743 (0.142)	90 (0.017)	671 (0.125)	760 (0.142)

¹ Codes used are given in the glossary of ICD-9 and CPT codes used in this report.

²All IHS could be less than the sum of Direct and Contract when the same patient had the procedure in both Direct and Contract.

TABLE 2.6 Patient Counts and Rates of Photocoagulation¹ by Age
American Indians and Alaska Natives, IHS Service Area, 2012-2014 (Rate per 100 Population)

Age Group	American Indian and Alaska Native								
	FY 2012			FY 2013			FY 2014		
	Direct	Contract	All IHS ²	Direct	Contract	All IHS ²	Direct	Contract	All IHS ²
Under 1 year	0 (0)	0 (0)	0 (0)	1 (0.005)	0 (0)	1 (0.005)	0 (0)	0 (0)	0 (0)
1 year	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
2-4 years	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
5 years	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
6-8 years	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
9 years	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
10-11 years	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
12-14 years	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
15-17 years	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
18-19 years	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
20-24 years	0 (0)	4 (0.003)	4 (0.003)	0 (0)	0 (0)	0 (0)	2 (0.001)	0 (0)	2 (0.001)
25-29 years	2 (0.002)	5 (0.004)	7 (0.005)	4 (0.003)	1 (0.001)	5 (0.004)	1 (0.001)	1 (0.001)	2 (0.002)
30-34 years	7 (0.006)	12 (0.011)	18 (0.017)	5 (0.004)	14 (0.012)	18 (0.016)	7 (0.006)	12 (0.010)	19 (0.016)
35-39 years	8 (0.009)	20 (0.022)	28 (0.031)	9 (0.010)	19 (0.020)	27 (0.029)	9 (0.009)	7 (0.007)	16 (0.017)
40-44 years	16 (0.018)	29 (0.034)	45 (0.052)	18 (0.021)	33 (0.038)	51 (0.058)	15 (0.017)	36 (0.041)	48 (0.054)
45-49 years	21 (0.023)	45 (0.050)	66 (0.073)	32 (0.036)	58 (0.066)	87 (0.099)	28 (0.033)	52 (0.060)	77 (0.089)
50-54 years	31 (0.036)	70 (0.080)	99 (0.114)	37 (0.041)	92 (0.102)	126 (0.140)	28 (0.031)	51 (0.056)	78 (0.085)
55-59 years	34 (0.047)	80 (0.111)	112 (0.155)	37 (0.049)	76 (0.101)	111 (0.148)	34 (0.043)	70 (0.089)	100 (0.127)
60-64 years	38 (0.067)	83 (0.147)	117 (0.207)	33 (0.056)	66 (0.111)	94 (0.158)	30 (0.048)	67 (0.108)	95 (0.153)
65-69 years	23 (0.056)	65 (0.158)	87 (0.212)	20 (0.046)	51 (0.118)	66 (0.153)	21 (0.045)	50 (0.108)	68 (0.146)
70-74 years	13 (0.044)	31 (0.104)	44 (0.147)	14 (0.045)	24 (0.077)	38 (0.122)	15 (0.046)	27 (0.083)	41 (0.127)
75-79 years	5 (0.024)	10 (0.048)	15 (0.071)	7 (0.032)	14 (0.064)	20 (0.091)	7 (0.031)	17 (0.074)	24 (0.105)
80-84 years	2 (0.015)	5 (0.037)	7 (0.052)	1 (0.007)	3 (0.021)	4 (0.028)	2 (0.014)	5 (0.034)	7 (0.048)
85 years +	0 (0)	0 (0)	0 (0)	0 (0)	2 (0.016)	2 (0.016)	0 (0)	2 (0.015)	2 (0.015)
Total	200 (0.013)	459 (0.030)	649 (0.043)	218 (0.014)	453 (0.029)	650 (0.042)	199 (0.013)	397 (0.025)	579 (0.037)
40+	183 (0.036)	418 (0.082)	592 (0.116)	199 (0.038)	419 (0.080)	599 (0.115)	180 (0.034)	377 (0.070)	540 (0.101)

¹ Codes used are given in the glossary of ICD-9 and CPT codes used in this report.

² All IHS could be less than the sum of Direct and Contract when the same patient had the procedure in both Direct and Contract.

TABLE 2.7 Patient Counts and Rates of Photocoagulation¹ by Age
American Indians and Alaska Natives, IHS Service Area, 2012-2014 (*Rate per 100 Population*)

Age Group	American Indian and Alaska Native		
	FY 2012	FY 2013	FY 2014
	All IHS ²	All IHS ²	All IHS ²
Under 1 year	0 (0)	2 (0.011)	0 (0)
1 year	0 (0)	1 (0.004)	1 (0.004)
2-4 years	11 (0.013)	3 (0.004)	12 (0.015)
5 years	8 (0.026)	4 (0.013)	12 (0.040)
6-8 years	33 (0.038)	23 (0.026)	29 (0.032)
9 years	15 (0.055)	9 (0.032)	8 (0.028)
10-11 years	23 (0.043)	27 (0.050)	18 (0.033)
12-14 years	28 (0.035)	26 (0.032)	23 (0.028)
15-17 years	39 (0.050)	32 (0.041)	23 (0.029)
18-19 years	30 (0.055)	20 (0.038)	26 (0.050)
20-24 years	154 (0.106)	102 (0.071)	92 (0.066)
25-29 years	137 (0.108)	156 (0.121)	140 (0.106)
30-34 years	133 (0.123)	166 (0.147)	126 (0.109)
35-39 years	130 (0.143)	110 (0.118)	117 (0.123)
40-44 years	144 (0.166)	124 (0.142)	127 (0.144)
45-49 years	175 (0.194)	162 (0.184)	127 (0.148)
50-54 years	137 (0.157)	139 (0.155)	147 (0.161)
55-59 years	113 (0.157)	104 (0.138)	137 (0.174)
60-64 years	93 (0.165)	81 (0.136)	59 (0.095)
65-69 years	55 (0.134)	69 (0.159)	65 (0.140)
70-74 years	39 (0.131)	43 (0.138)	44 (0.136)
75-79 years	34 (0.162)	36 (0.164)	40 (0.175)
80-84 years	16 (0.119)	21 (0.149)	24 (0.165)
85 years +	10 (0.082)	13 (0.103)	11 (0.085)
Total	1,557 (0.102)	1,473 (0.096)	1,408 (0.090)
40+	816 (0.160)	792 (0.151)	781 (0.146)

¹ Codes used are given in the glossary of ICD-9 and CPT codes used in this report.

² All IHS could be less than the sum of Direct and Contract when the same patient had the procedure in both Direct and Contract.

TABLE 2.8 Patient Counts and Rates of Removal Foreign Body_CPT-DX-PROC¹ by Age
American Indians and Alaska Natives, IHS Service Area, 2012-2014 (Rate per 100 Population)

Age Group	American Indian and Alaska Native		
	FY 2012	FY 2013	FY 2014
	All IHS ²	All IHS ²	All IHS ²
Under 1 year	5 (0.026)	9 (0.048)	4 (0.021)
1 year	10 (0.041)	7 (0.029)	13 (0.054)
2-4 years	49 (0.056)	39 (0.046)	53 (0.064)
5 years	29 (0.095)	19 (0.062)	24 (0.080)
6-8 years	90 (0.103)	58 (0.065)	76 (0.084)
9 years	29 (0.106)	24 (0.086)	24 (0.084)
10-11 years	47 (0.088)	57 (0.106)	48 (0.088)
12-14 years	79 (0.098)	79 (0.098)	72 (0.089)
15-17 years	97 (0.125)	99 (0.127)	62 (0.078)
18-19 years	66 (0.120)	63 (0.12)	60 (0.116)
20-24 years	307 (0.212)	270 (0.189)	233 (0.166)
25-29 years	270 (0.212)	301 (0.233)	297 (0.225)
30-34 years	265 (0.244)	310 (0.275)	262 (0.226)
35-39 years	264 (0.290)	235 (0.253)	252 (0.264)
40-44 years	270 (0.312)	251 (0.287)	234 (0.265)
45-49 years	330 (0.366)	293 (0.333)	266 (0.309)
50-54 years	288 (0.330)	299 (0.333)	290 (0.317)
55-59 years	215 (0.298)	228 (0.303)	274 (0.348)
60-64 years	186 (0.329)	160 (0.270)	133 (0.214)
65-69 years	119 (0.290)	137 (0.317)	124 (0.267)
70-74 years	75 (0.251)	89 (0.285)	97 (0.300)
75-79 years	59 (0.281)	67 (0.306)	69 (0.302)
80-84 years	36 (0.268)	39 (0.277)	41 (0.282)
85 years +	26 (0.213)	21 (0.166)	22 (0.169)
Total	3,211 (0.210)	3,154 (0.205)	3,030 (0.194)
40+	1,604 (0.314)	1,584 (0.303)	1,550 (0.289)

¹ Codes used are given in the glossary of ICD-9 and CPT codes used in this report.

² All IHS could be less than the sum of Direct and Contract when the same patient had the procedure in both Direct and Contract.

TABLE 2.9 Patient Counts and Rates of Trabeculoplasty¹ by Age
American Indians and Alaska Natives, IHS Service Area, 2012-2014 (Rate per 100 Population)

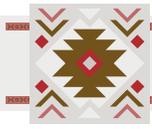
Age Group	American Indian and Alaska Native								
	FY 2012			FY 2013			FY 2014		
	Direct	Contract	All IHS ²	Direct	Contract	All IHS ²	Direct	Contract	All IHS ²
Under 1 year	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
1 year	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
2-4 years	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
5 years	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
6-8 years	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
9 years	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
10-11 years	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
12-14 years	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
15-17 years	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
18-19 years	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
20-24 years	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
25-29 years	0 (0)	1 (0.001)	1 (0.001)	1 (0.001)	1 (0.001)	2 (0.002)	0 (0)	0 (0)	0 (0)
30-34 years	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	2 (0.002)	0 (0)	2 (0.002)
35-39 years	0 (0)	1 (0.001)	1 (0.001)	0 (0)	0 (0)	0 (0)	0 (0)	2 (0.002)	2 (0.002)
40-44 years	3 (0.003)	0 (0)	3 (0.003)	2 (0.002)	3 (0.003)	5 (0.006)	0 (0)	1 (0.001)	1 (0.001)
45-49 years	0 (0)	3 (0.003)	3 (0.003)	1 (0.001)	6 (0.007)	7 (0.008)	0 (0)	4 (0.005)	4 (0.005)
50-54 years	2 (0.002)	4 (0.005)	6 (0.007)	2 (0.002)	5 (0.006)	7 (0.008)	3 (0.003)	7 (0.008)	10 (0.011)
55-59 years	1 (0.001)	12 (0.017)	13 (0.018)	6 (0.008)	9 (0.012)	15 (0.020)	5 (0.006)	4 (0.005)	9 (0.011)
60-64 years	4 (0.007)	19 (0.034)	23 (0.041)	3 (0.005)	17 (0.029)	19 (0.032)	7 (0.011)	10 (0.016)	17 (0.027)
65-69 years	2 (0.005)	13 (0.032)	15 (0.037)	4 (0.009)	13 (0.030)	17 (0.039)	5 (0.011)	10 (0.022)	15 (0.032)
70-74 years	5 (0.017)	9 (0.03)	14 (0.047)	5 (0.016)	8 (0.026)	13 (0.042)	2 (0.006)	11 (0.034)	13 (0.040)
75-79 years	3 (0.014)	14 (0.067)	17 (0.081)	4 (0.018)	8 (0.036)	12 (0.055)	3 (0.013)	4 (0.018)	7 (0.031)
80-84 years	0 (0)	4 (0.03)	4 (0.030)	2 (0.014)	4 (0.028)	6 (0.043)	2 (0.014)	3 (0.021)	5 (0.034)
85 years +	0 (0)	12 (0.098)	12 (0.098)	0 (0)	4 (0.032)	4 (0.032)	2 (0.015)	3 (0.023)	5 (0.038)
Total	20 (0.001)	92 (0.006)	112 (0.007)	30 (0.002)	78 (0.005)	107 (0.007)	31 (0.002)	59 (0.004)	90 (0.006)
40+	20 (0.004)	90 (0.018)	110 (0.022)	29 (0.006)	77 (0.015)	105 (0.020)	29 (0.005)	57 (0.011)	86 (0.016)

¹ Codes used are given in the glossary of ICD-9 and CPT codes used in this report.

² All IHS could be less than the sum of Direct and Contract when the same patient had the procedure in both Direct and Contract.

TABLE 2.10 Top 25 Ophthalmic Medications Prescribed
American Indians and Alaska Natives, FY 2010 to FY 2013

	Fiscal Years			
	2010	2011	2012	2013
GRAND TOTAL	86,095	84,457	82,436	85,817
Eye Washes/Lubricants	28,653	29,380	30,771	33,096
Anti-Inflammatories, Topical Ophthalmic	10,620	10,379	10,101	10,125
Antiglaucoma, Other	11,382	9,818	9,165	9,055
Ophthalmics, Other	7,606	7,254	6,404	7,377
Antibacterials, Topical Ophthalmic	7,076	7,364	6,993	6,878
Anti-Infective/Anti-Inflammatory Combinations, Topical Ophthalmic	5,396	5,544	5,107	5,416
Anti-Infective, Topical Ophthalmic, Other	3,247	3,227	2,785	2,707
Mydriatics/Cycloplegics, Topical Ophthalmic	2,103	1,925	1,936	1,762
Beta-Blockers, Topical Ophthalmic	2,043	1,781	1,604	1,517
Antiglaucoma Combinations, Topical Ophthalmic	1,387	1,289	1,301	1,366
Tetracyclines	932	803	727	635
Penicillins, Amino Derivatives	413	405	469	500
Cephalosporin 1st Generation	469	571	378	438
Glucocorticoids	358	348	365	367
Opioid Analgesics	356	337	274	319
Non-Opioid Analgesics	344	355	351	308
Multivitamins with Minerals	246	310	268	250
Carbonic Anhydrase Inhibitor Diuretics	320	265	253	210
Antihistamines, Other	250	196	159	205
Multivitamins	68	101	172	203
Antivirals	234	205	200	185
Anti-Inflammatory, Topical	190	197	154	166
Herbs/Alternative Therapies	20	25	78	153
All Other Medications (N=188 Categories)	2,382	2,378	2,421	2,579





GLOSSARY OF ACRONYMS AND DEFINITIONS

INDIAN HEALTH SERVICE VISION CARE
2018 EDITION

Area—A defined geographic region for Indian Health Service (IHS) administrative purposes. Each Area Office administers several service units.

Amblyopia (lazy eye)—a decrease in best corrected visual acuity in an eye which has no obvious pathology in the visual pathway; attributed to ‘form vision deprivation’, most commonly due to strabismus or unequal refraction in the two eyes (anisometropia).

AMD—(see also Macular Degeneration) age-related macular degeneration.

Anisometropia—unequal refraction in the two eyes. One eye sees better/more clearly than the other.

Astigmatism—the refractive state of an eye when the outer corneal surface is not spherical because the radii of curvature of two perpendicular meridians are unequal. Illustration at <http://bit.ly/2vacvBX> Less frequently astigmatism may have an optical or mechanical basis deriving from conditions other than corneal curvature.

Blindness—(WHO definition) visual acuity of less than 3/60 (or equivalent) in the better eye with best correction or visual field in each eye restricted to less than 10 degrees from fixation.

Capsulotomy—a surgical incision of the posterior capsule of the lens of the eye.

Cataracts—a clouding of the natural lens of the eye. The clouding may become severe enough to cause blurred vision. Cataracts tend to “grow” slowly, so vision gets worse gradually. Most cataracts are related to aging and are very common in older people. By age 80, more than half of all Americans either have a cataract or have had cataract surgery. Cataracts usually occur in both eyes, but frequently are worse in one eye. They do not “spread” from one eye to the other. Illustration at <http://bit.ly/2tyicn9>.

Census—Definitions for census information including: unemployment, median household income, and poverty can be found on the census website: <http://www.census.gov>.

Comparability Ratios—Adjustment factors designed to measure the effects of a new revision of the ICD on the comparability with the previous revision of mortality statistics cause of death.⁷

Confidence Interval—a way of expressing with statistics the degree of uncertainty associated with a sample statistic. It is an interval estimate combined with a probability statement (p value or see Type I Error). For example, suppose a statistician conducted a survey and computed an interval estimate, based on survey data. The statistician might use a confidence level to describe uncertainty associated with the interval estimate. He/she might describe the interval estimate as a “95% confidence interval”. This means that if we used the same sampling method to select different samples and computed an interval estimate for each sample, we would expect the true population parameter to fall within the interval estimates 95% (19/20 trials) of the time. Confidence intervals are preferred to point estimates and to interval estimates, because only confidence intervals indicate (a) the precision of the estimate and (b) the uncertainty of the estimate.

Conjunctivitis—(sometimes called pink eye) an inflammation of the conjunctiva (the usually transparent, outermost layer of the eye and inner surface of the eyelids). It is commonly caused by an infection (usually viral, but sometimes bacteria) or an allergic reaction. Conjunctivitis resolves in 65% of cases without treatment, within two to five days. The prescription of antibiotics is not necessary in most cases [Rose P “Management strategies for acute infective conjunctivitis in primary care: a systematic review”. *Expert Opin Pharmacother* 2007; 8 (12): 1903–21. doi:10.1517/14656566.8.12.1903.].

Contract Care—Services not available directly from IHS or Tribes that are purchased under contract from community hospitals and practitioners.

Diabetes—[also known as diabetes mellitus (DM)] is a group of metabolic diseases in which a person has high blood sugar, either because the pancreas does not produce enough insulin, or because cells do not respond properly to the insulin that is produced. This high blood sugar produces the classical symptoms of polyuria (frequent urination), polydipsia (increased thirst) and polyphagia (increased hunger).

There are three main types of diabetes mellitus:

Type 1 DM results from the body’s failure to produce insulin, and currently requires the person to inject insulin or wear an insulin pump. This form was previously referred to as “insulin-dependent diabetes mellitus” (IDDM) or “juvenile diabetes”.

Type 2 DM results from insulin resistance, a condition in which cells fail to use insulin properly, sometimes combined with an absolute insulin deficiency. This form was previously referred to as non-insulin-dependent diabetes mellitus (NIDDM) or “adult-onset diabetes”.

The third main form, gestational diabetes, occurs when pregnant women without a previous diagnosis of diabetes develop a high blood glucose level. It may precede development of type 2 DM.

Other forms of diabetes mellitus include congenital diabetes, which is due to genetic defects of insulin secretion, cystic fibrosis-related diabetes, steroid diabetes induced by high doses of glucocorticoids, and several forms of monogenic diabetes.

Untreated, diabetes can cause many complications. Acute complications include diabetic ketoacidosis and nonketotic hyperosmolar coma. Serious long-term complications include diabetic retinopathy (retinal damage), cardiovascular disease, chronic renal failure, cerebrovascular disease, and neuropathy. Adequate treatment of diabetes is thus important, as well as blood pressure control and lifestyle factors such as stopping smoking and maintaining a healthy body weight.

All forms of diabetes have been treatable since insulin became available in 1921, and type 2 diabetes may be controlled with oral medications. Insulin and some oral medications can cause hypoglycemia (low blood sugars), which can be dangerous if severe. Both types 1 and 2 are chronic conditions that cannot be cured. Pancreas transplants have been tried with limited success in type 1 DM; gastric bypass surgery has been successful in many with morbid obesity and type 2 DM. Gestational diabetes usually resolves after delivery. Illustration at <http://bit.ly/2u2799r>.

Diabetic Macular Edema—(see also Macular Edema) edema or inflammation with fluid excess in the macular area of the Retina thought to be caused principally as a complication of diabetes. Illustration at: <http://mayoclinic.in/2uBtLPu>.

Diabetic Retinopathy—the most common diabetic eye disease and a leading cause of new blindness in working age American adults. It is caused by changes in the blood vessels of the retina associated with elevated blood glucose. In some people with diabetic retinopathy,

blood vessels may swell and leak fluid. In other people, abnormal new blood vessels grow on the surface of the retina. The retina is the light-sensitive tissue at the back of the eye. A healthy and normally positioned retina is necessary for good vision. People who have diabetic retinopathy at first may not notice changes in their vision, but over time, diabetic retinopathy can get worse and cause vision loss. This condition usually affects both eyes.

There are four main clinical stages of diabetic retinopathy:

1. **Mild Nonproliferative Retinopathy.** At this earliest stage, microaneurysms occur. They are small areas of balloon-like swelling in the retina’s tiny blood vessels.
2. **Moderate Nonproliferative Retinopathy.** As the disease progresses, retinal blood vessel damage increases with development of more microaneurysms, intra-retinal hemorrhages, and other vascular changes.
3. **Severe Nonproliferative Retinopathy.** Small retinal capillaries are blocked, depriving increasingly large areas of the retina of their blood supply. These areas of the retina send signals to the body to grow new blood vessels for nourishment. Microaneurysms and intra-retinal hemorrhages are much increased as compared to lesser levels of nonproliferative retinopathy, and shunt vessels between arterioles and venules may occur.
4. **Proliferative Retinopathy.** At this advanced stage, the signals sent by the retina for nourishment trigger the growth of new blood vessels. This condition is called proliferative retinopathy. These new blood vessels are abnormal and fragile. They grow along the retina and along the surface of the clear, vitreous gel that fills the inside of the eye. By themselves, these blood vessels do not cause symptoms or vision loss. However, they have thin, fragile walls. If they leak blood or scar, severe vision loss and even blindness can result.

Blood vessels damaged from diabetic retinopathy can cause vision loss in two ways:

1. Fragile, abnormal blood vessels can develop and leak blood into the center of the eye, blurring vision. This is proliferative retinopathy and is the fourth and most advanced stage of the disease and if untreated leads to blindness in most cases.

- Fluid can leak into the center of the macula, the part of the eye where sharp, straight-ahead vision occurs. The fluid makes the macula swell, blurring vision. This condition is called diabetic macular edema, and results in moderate vision loss. It can occur at any stage of diabetic retinopathy, although it is more likely to occur as the disease progresses. About half of the people with proliferative retinopathy also have macular edema.

Who is at risk for diabetic retinopathy?

All people with diabetes—both type 1 and type 2—are at risk. That’s why everyone with diabetes should get a comprehensive dilated eye exam at least once a year. The longer someone has diabetes, the more likely he or she will get diabetic retinopathy. Between 40 to 45 percent of Americans diagnosed with diabetes have some stage of diabetic retinopathy. Serious vision loss from diabetic retinopathy is preventable in 95% of cases by timely diagnosis and treatment. Illustration at <http://bit.ly/2uBi8I9>.

Diagnostic Prevalence—the annualized proportion of unique patient identities in a database table of electronic medical records which have had a diagnosis code in the range studied divided by the total number of unique patient identities for that year.

Glaucoma—a group of diseases that results from characteristic damage to the optic nerve and can result in characteristic visual field defects, vision loss, and blindness due to glaucomatous optic neuropathy (optic neuropathy). The optic nerve is a bundle of more than 1 million nerve fibers connecting the retina to the brain. The retina is the light-sensitive tissue at the back of the eye. A healthy optic nerve is necessary for good vision. Glaucoma is characterized by a progressive type of damage of the optic nerve resulting in a characteristic loss of the visual field. With early detection and treatment, serious vision loss usually can be prevented.

Glaucoma can be roughly divided into two main categories, “open-angle” and “closed-angle” (or “angle closure”) glaucoma. The angle refers to the area between the iris and cornea, through which fluid must flow to escape the eye via the trabecular meshwork. Closed-angle glaucoma is the less common type. It results from abnormal fluid dynamics in the eye that pushes the iris forward and blocks the angle (angle closure) resulting

in high intraocular pressure. It can appear suddenly and is often painful; visual loss can progress quickly, but the discomfort often leads patients to seek medical attention before permanent damage occurs. Open-angle, chronic glaucoma tends to progress at a slower rate and patients may not notice they have lost vision until the disease has progressed significantly. It is frequently associated with elevated intraocular pressure resulting from primary resistance to fluid outflow through a widely open angle that does not function normally for reasons that are incompletely understood as of this writing. Primary open-angle glaucoma accounts for 90% of glaucoma cases in the United States. Yet, among Alaska Natives, angle-closure glaucoma is thought to be seen more frequently than in the general U.S. population. [van Rens G, Arkell SM, Charlton W, Doesburg W. *Doc Ophthalmol* 1988;70(2-3):265-276] Glaucoma can also be seen in eyes with normal or low intraocular pressure giving rise to the vascular versus mechanical theories of mechanism.

Glaucoma has been called the “silent thief of sight” because the loss of vision often occurs gradually over a long period of time, and symptoms only occur when the disease is quite advanced. Once lost, vision cannot normally be recovered, so treatment is aimed at preventing further loss. Worldwide, glaucoma is the second-leading cause of blindness after cataracts. Glaucoma affects one half percent of people aged 50 and younger, and ten percent aged 80 and older.

Several large studies have shown that eye pressure is a major risk factor for optic nerve damage, but progressive glaucomatous damage may occur in the presence of normal or low intraocular pressure. Abnormally thin corneas are associated with glaucomatous progression and may reflect a structural basis for the disease. Family history is a predisposing factor in many cases. Another risk factor for optic nerve damage relates to blood pressure. Not every person with increased eye pressure will develop glaucoma. Some eyes can tolerate higher levels of eye pressure better than others. Also, a certain level of eye pressure may be damaging for one person but normal for another. Whether glaucoma develops depends on the level of pressure an individual’s optic nerve can tolerate without being damaged. This level is individual, and only a comprehensive dilated eye exam can help an eye care professional determine the risks for glaucoma. If the condition is detected early enough, it is possible to arrest the development or slow the progression with medical and surgical means. Most

medical treatments are aimed at lowering intraocular pressure. Other medical treatments are neuroprotective. Illustration at <http://bit.ly/2vaDRUB>.

Health Center—A facility, physically separated from a hospital, with a full range of ambulatory services including at least primary care physicians, nursing, pharmacy, laboratory, and x-ray, which are available at least forty hours a week for ambulatory care.

Health Station—A facility, physically separated from a hospital or health center where primary care physician services are available on a regularly scheduled basis but for less than forty hours a week.

Hospital—A permanent facility which contains inpatient beds, organized staff including physician services, and continuous nursing services.

Hypermetropia or Hyperopia—a condition where the unaccommodated eye forms the image of a distant object behind the retina. Illustration at <http://bit.ly/2vaklHz>.

IHS—Indian Health Service.

International Classification of Diseases—The Ninth Revision (ICD-9) codes are used for years prior to 1999. The Tenth Revision (ICD-10) codes are used for data years 1999 onward.

Intravitreal Injection of Pharmaceutical Agent—Injection of a medication (most commonly in this context for age related macular degeneration, but less frequently for macular edema from other causes) into the vitreous cavity of the eye which is located immediately behind the lens and surrounded by the retina, it may be done in the office setting or in combination with other surgical procedures in the operating room.

Iridocyclitis—a form of anterior uveitis consisting of inflammation of the iris and ciliary body (just behind the iris) of the eye. Uveitis is a complex collection of inflammatory diseases of the eye that vary by clinical presentation, location, severity, mode and course of treatment. The majority of cases of uveitis presenting for care in private practices in the U.S. general population are presumed to be auto-inflammatory, based on the absence of evidence for infection and the response to corticosteroid and immunosuppressive drug therapies. It is thought to be a rare disease in the general population. See this link for a photo of a patient with the condition: <http://bit.ly/2t945FF>.

Laser Trabeculoplasty—a focused beam of light is used to treat the drainage angle (trabecular meshwork, Illustration at <http://bit.ly/2u1VVQq>) of the eye in some patients who have glaucoma. This surgery makes it easier for fluid to flow out of the trabecular meshwork in the front part of the eye, decreasing pressure in the eye.

There are two main types of laser trabeculoplasty currently in popular use:

- » Argon laser trabeculoplasty (ALT) uses a green laser to photocoagulate the drainage angle of the eye to increase the outflow setting up legal expectations.
- » Selective laser trabeculoplasty (SLT) uses a neodymium-doped yttrium aluminum garnet (Nd: YAG) laser to photodisrupt (clear) the drainage angle of the eye resulting in increased outflow.

A special microscope (slit lamp) and lens (goniols) are used to guide the laser beam to the trabecular meshwork where fluid drains from the eye. The doctor makes small laser applications to the trabecular meshwork. Laser trabeculoplasty may helpful in treating patients with open-angle glaucoma who are not adequately treated by medications alone. Alternatively, it may be used as a primary treatment in some cases. Laser trabeculoplasty for open-angle glaucoma is usually done following failure of maximum tolerated medical treatment, and before more invasive surgical procedures are tried.

This method of laser surgery lowers the pressure in the eye about 75% of the time. Research comparing ALT and the newer SLT has shown that SLT lowers pressure in the eye about the same or slightly better than ALT.

Macular Degeneration—The macula is in the center of the retina, the layer of tissue on the inside back wall of the eye. With aging it may degenerate resulting in loss of fine central vision. This condition generally happens in people over age 50, and it is most common in people over 65 years old. There are two types of age related macular degeneration (AMD). Involutional or “dry” AMD is the more common form of the disease. Dry AMD is marked by deterioration of the macula without edema, resulting in worsening quality of life from blurred central vision or a blind spot in central vision. Loss of central vision is particularly troublesome since it prevents fine visual tasks such as reading or driving. The other major form of this condition is “wet” macular degeneration. This less common type of AMD is characterized by the presence of abnormal blood vessels that grow under the retina in

the back of the eye, leaking blood and fluid, and causing severe loss of central vision. The wet form can occur and progress quickly, but the dry form usually develops gradually. Treatment of AMD is the subject of extensive research. There is no established treatment for early-stage dry macular degeneration. Wet AMD may be treated with repeated injections of medication inside the eye. If wet AMD occurs in one eye, a combination of certain vitamins may reduce the risk of developing similar progression in the remaining eye. When vision loss results from AMD, visual function may be improved by special lenses or surgery. Illustration at <http://bit.ly/2vuZ4be>.

Macular Edema—occurs when fluid and protein deposits collect on or under the macula of the eye causing it to swell. The macula is a very small area at the center of the retina—a thin layer of light-sensitive tissue that lines the back of the eye. Light rays are focused onto the retina, where they are transmitted to the brain and interpreted as the images you see. It is the macula that is responsible for sharp vision needed for reading and other fine visual tasks. The swelling prevents normal function of the macula resulting in distorted central vision and moderate vision loss, but does not affect peripheral vision. Macular edema can also occur in other conditions such as following cataract surgery or with occlusion of large retinal vessels, but is relatively common in diabetic retinopathy. Macular edema can be treated by laser photocoagulation with moderate success. More recently new treatments for this disorder have been developed using medications injected inside the eye.

Mild Vision Loss—partially sighted individuals have a visual acuity of 20/30 to 20/70 or a visual field of less than thirty degrees. No special aids are needed, but the person might need reading glasses.

Moderate Vision Loss—visual acuity is rated as being 20/80 to 20/160 and special aids are needed for some tasks.

Myopia—when the un-accommodated eye forms the image of a distant object in front of the retina. Illustration at <http://bit.ly/2vaklHz>.

Near Total Blindness—individuals with this level of visual acuity can detect hand motion and light perception. They rely on other senses and cannot benefit from magnification.

Occurrence—Place where the event occurred.

Photocoagulation—application of an intense laser beam of light to disrupt tissue and condense protein material to a residual mass, used especially in ophthalmic applications such as the treatment of retinal detachment or destruction of lesions of the cornea and retina, among many other uses. Illustration at <http://bit.ly/2t8PM3D>.

Presbyopia—age-related decline in range of accommodation of the eye. Illustration at <http://bit.ly/2vaB5hU>.

Prevalence—of a disease in a population is the proportion of individuals who have the disease at a given time.

Profound Vision Loss—visual acuity greater than moderate or severe with a rating of 20/500 to 20/1,000. Such individuals have reading and mobility impairment and must rely on other senses for some tasks.

Pterygium—a scar-like, non-cancerous growth that starts in the conjunctiva, a clear, thin, almost invisible tissue which covers the surface of the eye beyond the cornea. This growth covers the white part of the eye (sclera) and extends onto the cornea, the transparent front part of the eye that covers the iris, pupil, and anterior chamber. It is often slightly raised, inflamed, and contains visible blood vessels. The problem may occur on one or both eyes. It is associated with and thought to be caused by ultraviolet-light exposure (e.g., sunlight), low humidity, and dust. Illustration at <http://bit.ly/2u26MLT>.

Race—Federal Register Notice (October 30, 1997), Revision to the Standards for the Classification of Federal Data on Race and Ethnicity.

The revised standards have five minimum categories for data on race: American Indian or Alaska Native, Asian, Black or African American, Native Hawaiian or Other Pacific Islander, and White. There will be two categories for data on ethnicity: “Hispanic or Latino: and “Not Hispanic or Latino.”

Persons are offered the option to select one or more races.

<https://www.whitehouse.gov/wp-content/uploads/2017/11/Revisions-to-the-Standards-for-the-Classification-of-Federal-Data-on-Race-and-Ethnicity-October30-1997.pdf>

Refractive Error—occurs when the shape of the eye prevents light from focusing properly on the retina. The length of the eyeball (longer or shorter), changes in the shape of the cornea, or aging of the lens can cause refractive errors. The most common types of refractive errors are myopia (nearsightedness), hyperopia (farsightedness), presbyopia, and astigmatism. Refractive errors can be corrected with eyeglasses, contact lenses, or in some cases, surgical procedures. Illustration at <http://bit.ly/2usfBQc>

Removal of Foreign Body—an object (a “foreign body”) is lodged in or on the surface of the eye or nearby it in surrounding tissue is subsequently extracted from the eye and the lacerated tissue repaired with suturing or other appropriate surgical method(s).

Reservation State—A State in which IHS has responsibilities for providing health care to American Indians or Alaska Natives.

Residence—Usual place of residence of person to whom an event occurred. For births and deaths, residence is defined as the mother’s place of residence.

Retinal Detachment—is a disorder of the eye in which the retina peels away from its underlying layer of support and nutrition tissue. The retina is a thin layer of light sensitive tissue on the back wall of the eye. The optical system of the eye focuses light on the retina much like light is focused on the film or sensor in a camera. The retina translates that focused image into electrical impulses and sends them to the brain via the optic nerve. Initial detachment may be localized, but without timely treatment the entire retina may detach, leading to vision loss and blindness. The vitreous humor is a clear jelly like substance that fills the back of the eye. With aging or injury the vitreous may detach from the back of the eye and be displaced toward the front. This is a relatively common event that usually causes no permanent problem but in some cases may result in retinal tear or retinal detachment. Illustration at <http://bit.ly/2tjAsFt>.

Service Area—The geographic areas in which IHS has responsibilities—“on or near” reservations, i.e., contract health service delivery areas.

Service Population—AI/AN people identified to be eligible for IHS services.

Service Unit—The local administrative unit of IHS.

Severe Vision Loss (legally blind)—visual acuity of 20/200 to 20/400 or a visual field of less than 20 degrees. Individuals with this level of vision loss can read only with special aids at reduced speed and endurance.

Strabismus—misalignment of the eyes due to an imbalance of the extraocular muscles. Illustration at <http://bit.ly/2uB3BFH>.

Tear Film Insufficiency—insufficient tear production and/or increased evaporation of tears can lead to tear insufficiency or “dry eye”. Normal tears are composed of three layers working together to protect and nourish the surface of the eye. A variety of lid, conjunctival, and lacrimal gland abnormalities can exist to alter these tear layers resulting in poor tear performance and damage of the ocular surface. Increasing age and female sex have been associated with this set of conditions. The Beaver Dam Eye Study of 3,722 over the age of 47 years of age has a prevalence of 14.4 percent with dry eye disease with 17 percent of females and 11.1 percent of males [Moss SE, Klein R, and Klein BE. “Prevalence of and risk factors for dry eye syndrome.” Arch Ophthalmol 2002;86:1347-1351. doi:10.1001/archophth.118.9.1264.]. Illustration at <http://bit.ly/2uBHlgr>.

Total Blindness—such individuals have no light perception and no vision. They rely completely on other senses.

Type 1 Error—wrong conclusion drawn from the result of a statistical significance test—rejecting the null hypothesis when it is in fact true. The probability of this type of error is denoted by alpha, and is equal to the critical p-value used for the conclusion (see also Confidence Interval).

User Population—AI/AN people who have used IHS services at least once during the last three-year period according to their community of residence.

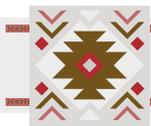
WHO—World Health Organization.





GLOSSARY OF ICD-9 AND CPT CODES USED IN THIS REPORT

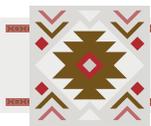
INDIAN HEALTH SERVICE VISION CARE
2018 EDITION



GLOSSARY OF ICD-9 AND CPT CODES USED IN THIS REPORT

Comorbidities	ICD-9 Codes
Alcohol Abuse	291.0-291.3, 291.5, 291.8, 291.81, 291.82, 291.89, 291.9, 303.00-303.93, 305.00-305.03
Blood Loss Anemia	280.0, 648.20-648.24
Chronic Peptic Ulcer Disease (includes bleeding only if obstruction is also present)	531.41, 531.51, 531.61, 531.70, 531.71, 531.91, 532.41, 532.51, 532.61, 532.70, 532.71, 532.91, 533.41, 533.51, 533.61, 533.70, 533.71, 533.91, 534.41, 534.51, 534.61, 534.70, 534.71, 534.91
Chronic Pulmonary Disease	490-492.8, 493.0-493.92, 494-494.1, 495.0-505, 506.4
Coagulation Deficiency	286.0-286.9, 287.1, 287.3-287.5, 289.84, 649.30-649.34
Congestive Heart Failure	398.91, 402.01, 402.11, 402.91, 404.01, 404.03, 404.11, 404.13, 404.91, 404.93, 428.0-428.9
Deficiency Anemias	280.1-281.9, 285.21-285.29, 285.9
Depression	300.4, 301.12, 309.0, 309.1, 311
Diabetes with Chronic Complications	249.40-249.91, 250.40-250.93, 775.1
Diabetes without Chronic Complications	249.00-249.31, 250.00-250.33, 648.00- 648.04
Drug Abuse	292.0, 292.82-292.89, 292.9, 304.00-304.93, 305.20-305.93, 648.30-648.34
Fluid and Electrolyte Disorders	276.0-276.9
HIV and AIDS (Acquired immune deficiency syndrome)	042-044.9
Hypertension (combine uncomplicated and complicated)	401.1, 401.9, 642.00-642.04, 401.0, 402.00-405.99, 437.2, 642.10-642.24, 642.70-642.94
Hypothyroidism	243-244.2, 244.8, 244.9
Liver Disease	070.22, 070.23, 070.32, 070.33, 070.44, 070.54, 456.0, 456.1, 456.20, 456.21, 571.0, 571.2, 571.3, 571.40- 571.49, 571.5, 571.6, 571.8, 571.9, 572.3, 572.8, 573.5, V42.7
Lymphoma	200.00-202.38, 202.50-203.01, 203.02-203.82, 203.8-203.81, 238.6, 273.3
Metastatic Cancer	196.0-199.1, 209.70, 209.71, 209.72, 209.73, 209.74, 209.75, 209.79, 789.51
Obesity	278.0, 278.00, 278.01, 278.03, 649.10-649.14, 793.91, V85.30-V85.39, V85.41-V85.45, V85.54
Other Neurological Disorders	330.1-331.9, 332.0, 333.4, 333.5, 333.71, 333.72, 333.79, 333.85, 333.94, 334.0-335.9, 338.0, 340, 341.1-341.9, 345.00-345.11, 345.2-345.3, 345.40-345.91, 347.00-347.01, 347.10-347.11, 649.40-649.44, 768.7, 768.70, 768.71, 768.72, 780.3, 780.31, 780.32, 780.33, 780.39, 780.97, 784.3
Paralysis	342.0-344.9, 438.20-438.53, 780.72
Peripheral Vascular Disease	440-440.9, 441.00-441.9, 442.0-442.9, 443.1-443.9, 444.21-444.22, 447.1, 449, 557.1, 557.9, V43.4
Psychoses	295.00-298.9, 299.10, 299.11
Pulmonary Circulation Disorders	415.11-415.19, 416.0-416.9, 417.9

Comorbidities	ICD-9 Codes
Renal Failure	403.01, 403.11, 403.90, 403.91, 404.02, 404.03, 404.12, 404.13, 404.92, 404.93, 585.3, 585.4, 585.5, 585.6, 585.9, 586, V42.0, V45.1, V45.11, V45.12, V56.0-V56.32, V56.8
Rheumatoid Arthritis/Collagen Vascular Diseases	701.0, 710.0-710.9, 714.0-714.9, 720.0-720.9, 725
Solid Tumor without Metastasis	140.0-172.9, 174.0-175.9, 179-195.8, 209.00-209.24, 209.25-209.3, 209.30-209.36, 258.01-258.03
Valvular Disease	093.20-093.24, 394.0-397.1, 397.9, 424.0-424.99, 746.3-746.6, V42.2, V43.3
Weight Loss	260-263.9, 783.21, 783.22
Amblyopia	368.00, 368.01, 368.02, 368.03
Anisometropia	367.31
Astigmatism	367.2x
Myopia with Astigmatism	367.2x, 367.1x
Blindness	369.0, 369.00, 369.01, 369.02, 369.03, 369.04, 369.05, 369.06, 369.07, 369.08, 369.09, 369.3, 369.10, 369.4, 369.12, 369.14, 369.22
Cataract	366.x
Conjunctivitis	372.0x-372.3x
Diabetes	249.x or 250.x
Diabetic Macular Edema	362.07
Diabetic Retinopathy	362.x-362.29
Glaucoma	365.x excluding 365.0x
Hypermetropia	367.0
Iridocyclitis	364.0x-364.3x
Low Vision Diagnosis	369.20, 369.70, 369.9
Macular Degeneration	362.5x
Pterygium	372.4x
Retinal Detachment	361.x
Strabismus	378.50, 378.60, 378.62, 378.73
Tear Film Insufficiency	375.15



GLOSSARY OF ICD-9 AND CPT CODES USED IN THIS REPORT

Type of Procedure	CPT Codes
Cataract Surgery	66982, 66983, 66984, 66920, 66930, 66940 or 66850
Capsulotomy	66821
Intravitreal Injection	67028
Photo Coagulation	67228 or 67210
Removal Foreign Body	65210, 65220, 65222, 65265, 65275, 67413, 67430, 67938, 68530, or ICD-9 diagnosis codes: 930.x, 871.5x-871.6x, 870.4x, or ICD-9 procedure codes: 08.99, 09.99, 10.0, 11.1, 11.51, 12.00, 12.01, 12.02, 12.81, 12.97, 12.98, 13.01, 14.01, 14.02, 16.01, 16.09, 16.1
Trabeculoplasty	65855



APPENDIX

PREVALENCE OF ADULT VISION IMPAIRMENT AND AGE RELATED EYE DISEASES IN THE UNITED STATES

INDIAN HEALTH SERVICE VISION CARE
2018 EDITION

A Estimated Diagnostic Prevalence Rates of Macular Degeneration¹ by Age and Gender (55+, 65+ and 75+)

American Indians and Alaska Natives, IHS Service Area, FY 2014
(Rate and 95% CIs² per 100 Population)³

Age Group	American Indian and Alaska Native		
	Both Sexes	Male	Female
Crude Total (55+)	12.837 (12.711, 12.964)	11.375 (11.195, 11.557)	13.985 (13.811, 14.161)
Crude Total (65+)	20.533 (20.313, 20.754)	18.405 (18.082, 18.731)	22.111 (21.813, 22.412)
Crude Total (75+)	29.668 (29.270, 30.069)	27.462 (26.847, 28.083)	31.143 (30.622, 31.669)
Age-Adjusted (55+)	15.422 (15.260, 15.585)	13.155 (12.933, 13.376)	17.222 (16.990, 17.454)
Age-Adjusted (65+)	22.075 (21.809, 22.341)	19.399 (19.021, 19.776)	24.020 (23.652, 24.388)
Age-Adjusted (75+)	29.694 (29.218, 30.170)	27.203 (26.487, 27.919)	31.327 (30.694, 31.960)

¹ Codes used are given in the glossary of ICD-9 and CPT codes used in this report.
² Confidence intervals (CIs) are calculated by Clopper Pearson Exact method.
³ Age adjustment was based on projected U.S. population by Bureau of the Census for the year 2000.

B Population Based Prevalence of Selected Diagnosed Eye Conditions, FY 2010

Condition	Group	Rate *
All Vision Impairment (BSVI)	All Races, 40 +	2.94
Cataract	All Races, 40 +	17.11
Diabetic Retinopathy	All Races, 40 +	5.39
Glaucoma (Open Angle)	All Races, 40 +	1.91
Hyperopia	All Races, 40 +	9.95
Low Vision	All Races, 40 +	2.04
Macular Degeneration (Age Related)	All Races, 40 +	2.09
Myopia	All Races, 40 +	23.92
Pterygium	Indigenous Australians, all ages	3.4
Tear Film Insufficiency	Beaver Dam Eye Study, 48 -91 years	14.4
Uveitis (Iridocyclitis is one form)	N. California, 30-49 years	0.04

* Per 100 Population

SOURCES:
https://nei.nih.gov/eyedata/vision_impaired/tables
<https://nei.nih.gov/eyedata/cataract/tables#1>
<https://nei.nih.gov/eyedata/diabetic/tables#1>
<https://nei.nih.gov/eyedata/glaucoma/tables#1>
<https://nei.nih.gov/eyedata/hyperopia/tables#1>
<https://nei.nih.gov/eyedata/lowvision/tables>
<https://nei.nih.gov/eyedata/amd/tables>
<https://nei.nih.gov/eyedata/myopia/tables#1>
 doi:10.1076/oep.6.3.219.1504
 doi:10.1001/archophth.118.9.1264
 doi:10.1016/j.ophtha.2003.06.014



U.S. Department of Health and Human Services
Indian Health Service
Indian Health Service Vision Care 2018 Edition
Released: February 2019
ISSN 2639-5584 (Print)
ISSN 2639-5592 (Online)