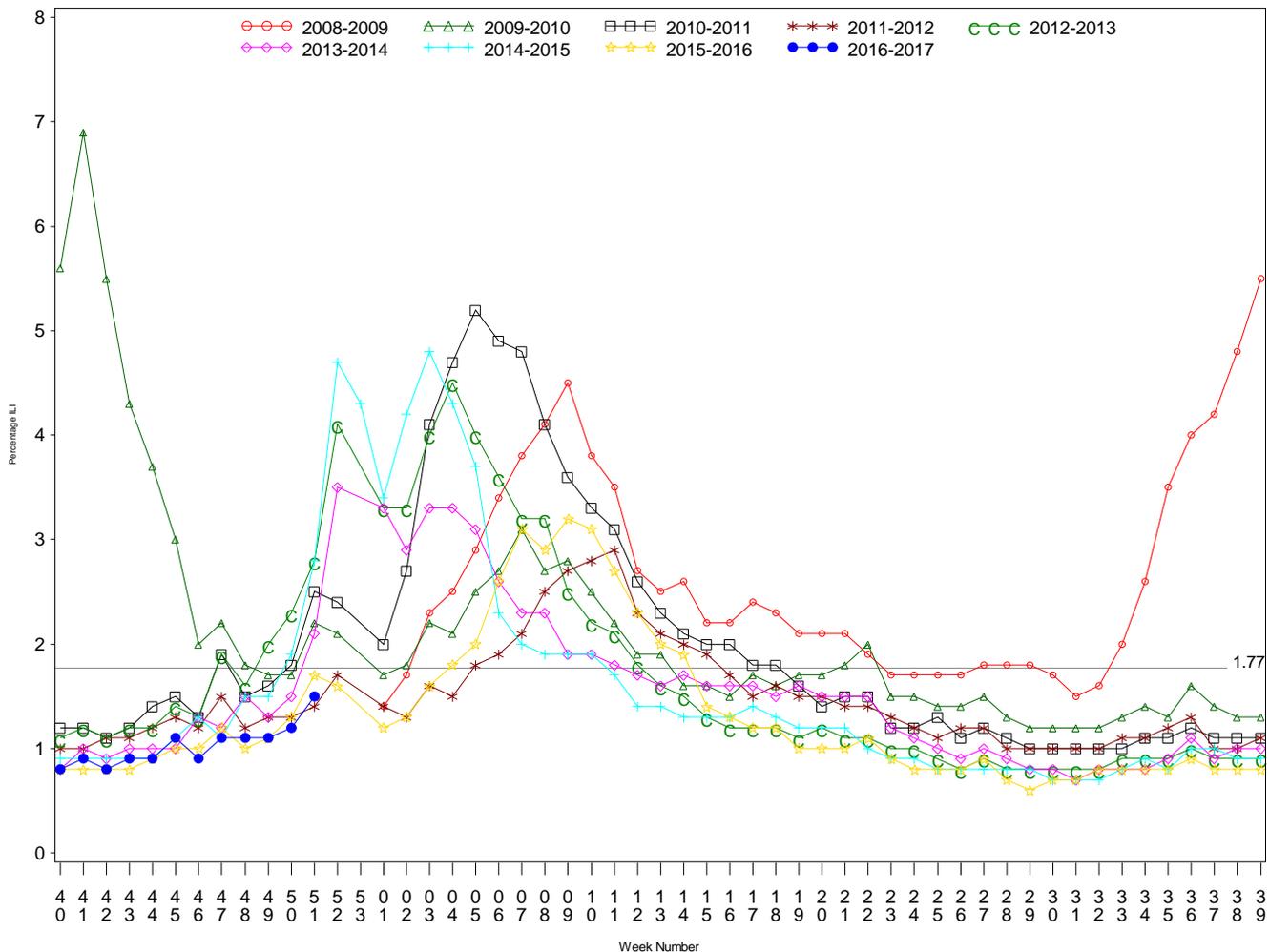




Indian Health Service
 Division of Epidemiology and Disease Prevention
Influenza Surveillance Report
IHS Influenza Awareness System (IIAS)
 (Week 51: 12/18/2016 – 12/24/2016)

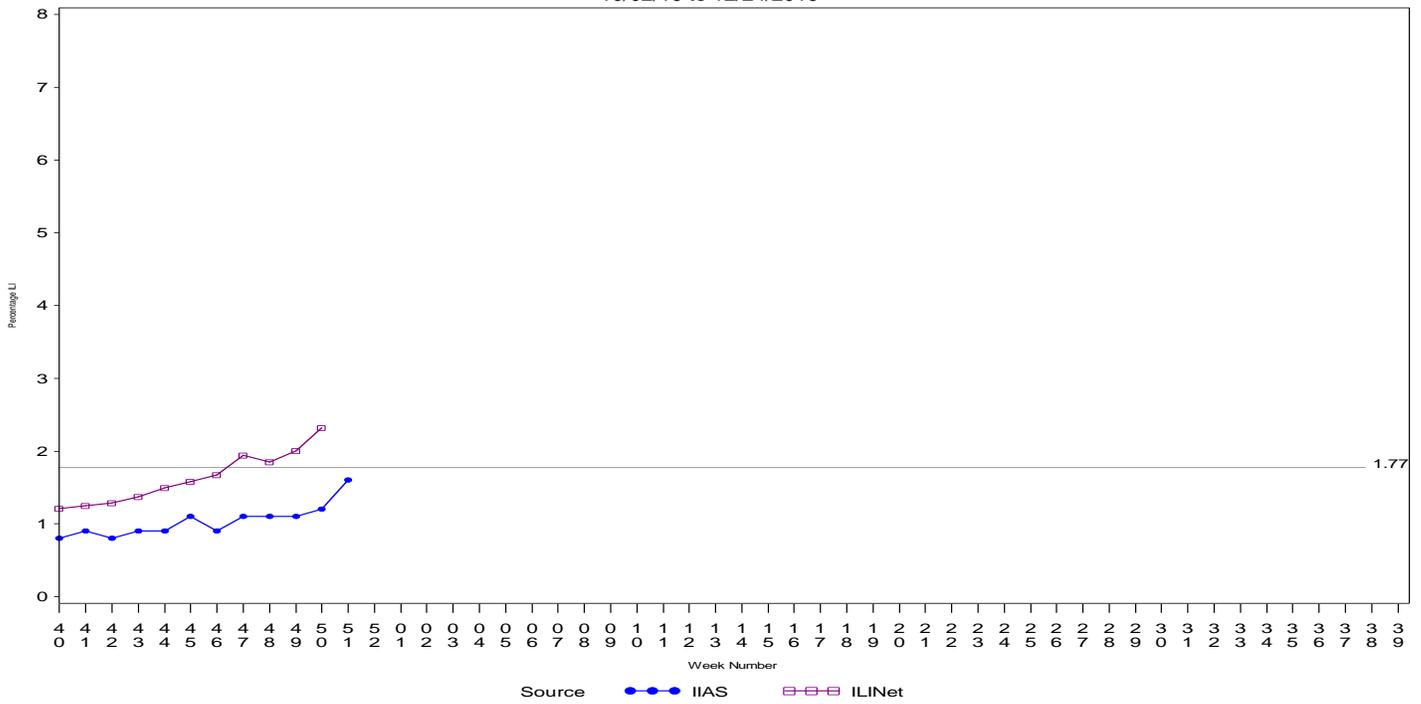
- Influenza-like-illness (ILI) activity is low but increasing across a majority of IHS Regions
 - IHS ILI activity remains below the IHS threshold of 1.77%.
- National ILI activity is generally low but increasing across a majority of US states
 - CDC's ILINet ILI activity of 2.3% is just above the ILINet baseline of 2.2% and above the IHS threshold of 1.77%.
- To date IHS has administered over 271,000 doses of influenza vaccine.
- Overall, 28% of the IHS Active Clinical population received an influenza vaccine this season.

All IHS Areas
 Influenza-Like Illness (ILI) for All Surveillance Years
 Percentage of Visits for ILI per week
 01/04/09 to 12/24/2016



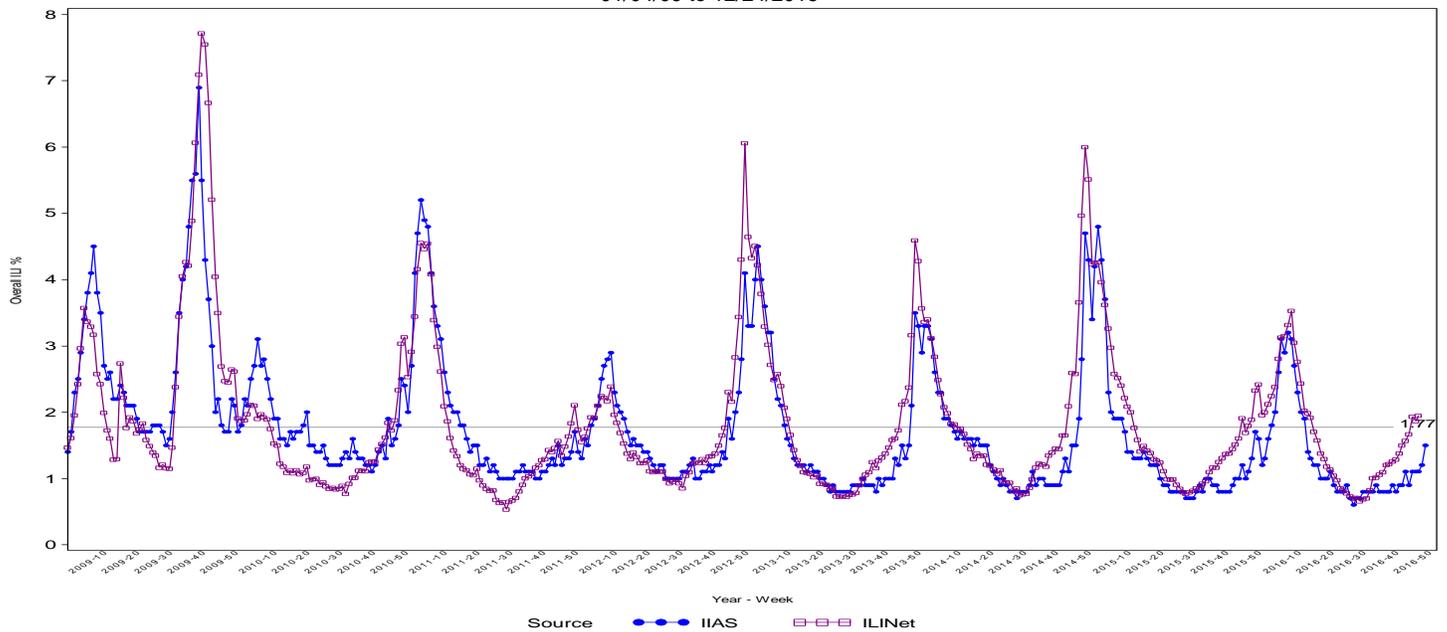
Percent ILI visits is number of ILI visits divided by total number of daily outpatient visits.
 The horizontal line represents the 2016-2017 IIAS baseline. The baseline is the mean percentage of patient visits for ILI during non-Influenza weeks for the previous three seasons plus two standard deviations.

Percentage of Outpatient Visits for Influenza-Like Illness (ILI)
 Percent ILI for Flu Year 2016 - 2017
 IIAS vs. ILINet
 10/02/16 to 12/24/2016



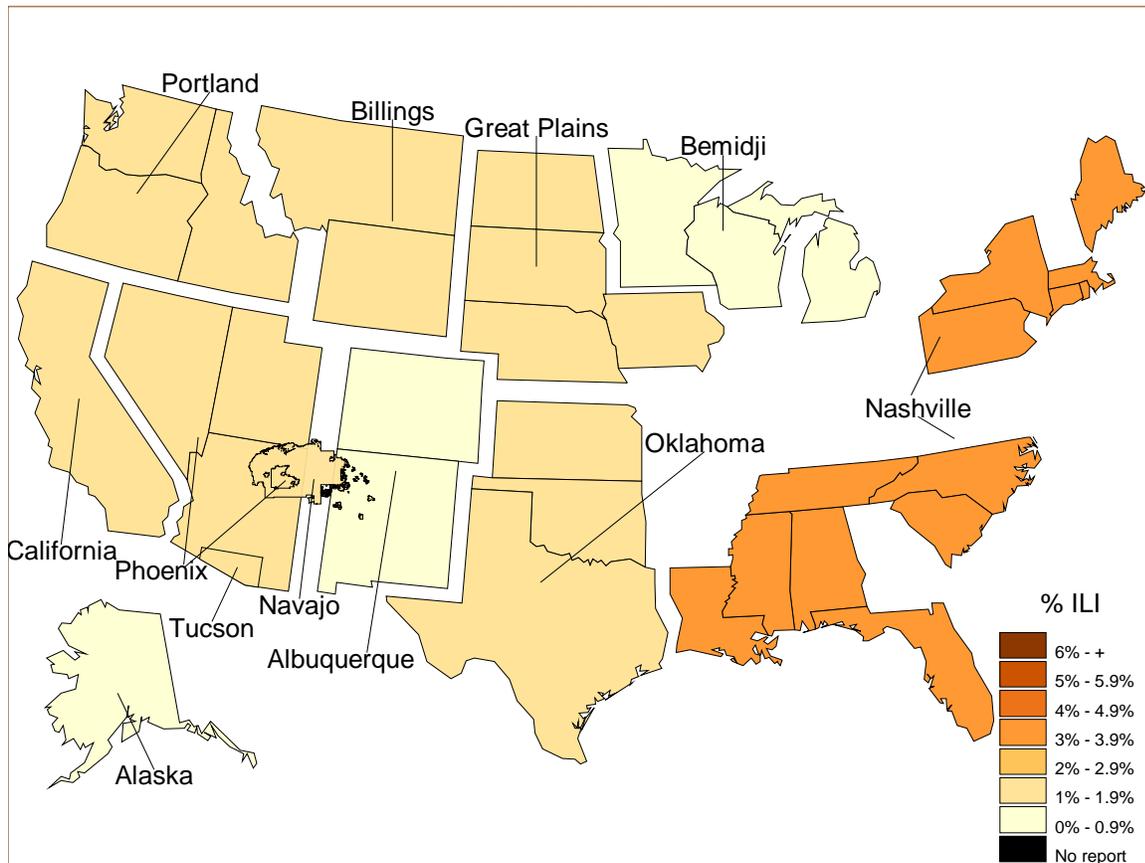
Percent ILI visits is number of ILI visits divided by total number of daily outpatient visits.
 The horizontal line is the 2016-2017 IIAS baseline. The ILINet baseline value for 2016-2017 is 2.2.
 Baselines are computed as the mean percentage of ILI patient visits during non-influenza weeks for the previous three seasons, plus two standard deviations.
 Sources: ILINet - CDC Sentinel Surveillance System for Influenza-Like Illness, IIAS - IHS Influenza Awareness System

Influenza-Like Illness (ILI) All Surveillance Years - Continuous
 Percentage of Visits for ILI per week
 IIAS vs. ILINet
 01/04/09 to 12/24/2016



Percent ILI visits is number of ILI visits divided by total number of daily outpatient visits.
 The horizontal line is the 2016-2017 IIAS baseline. The ILINet baseline value for 2016-2017 is 2.2.
 Baselines are computed as the mean percentage of ILI patient visits during non-influenza weeks for the previous three seasons, plus two standard deviations.
 Sources: ILINet - CDC Sentinel Surveillance System for Influenza-Like Illness, IIAS - IHS Influenza Awareness System

Percentage of Influenza-Like Illness Visits by Region
For Week: 51



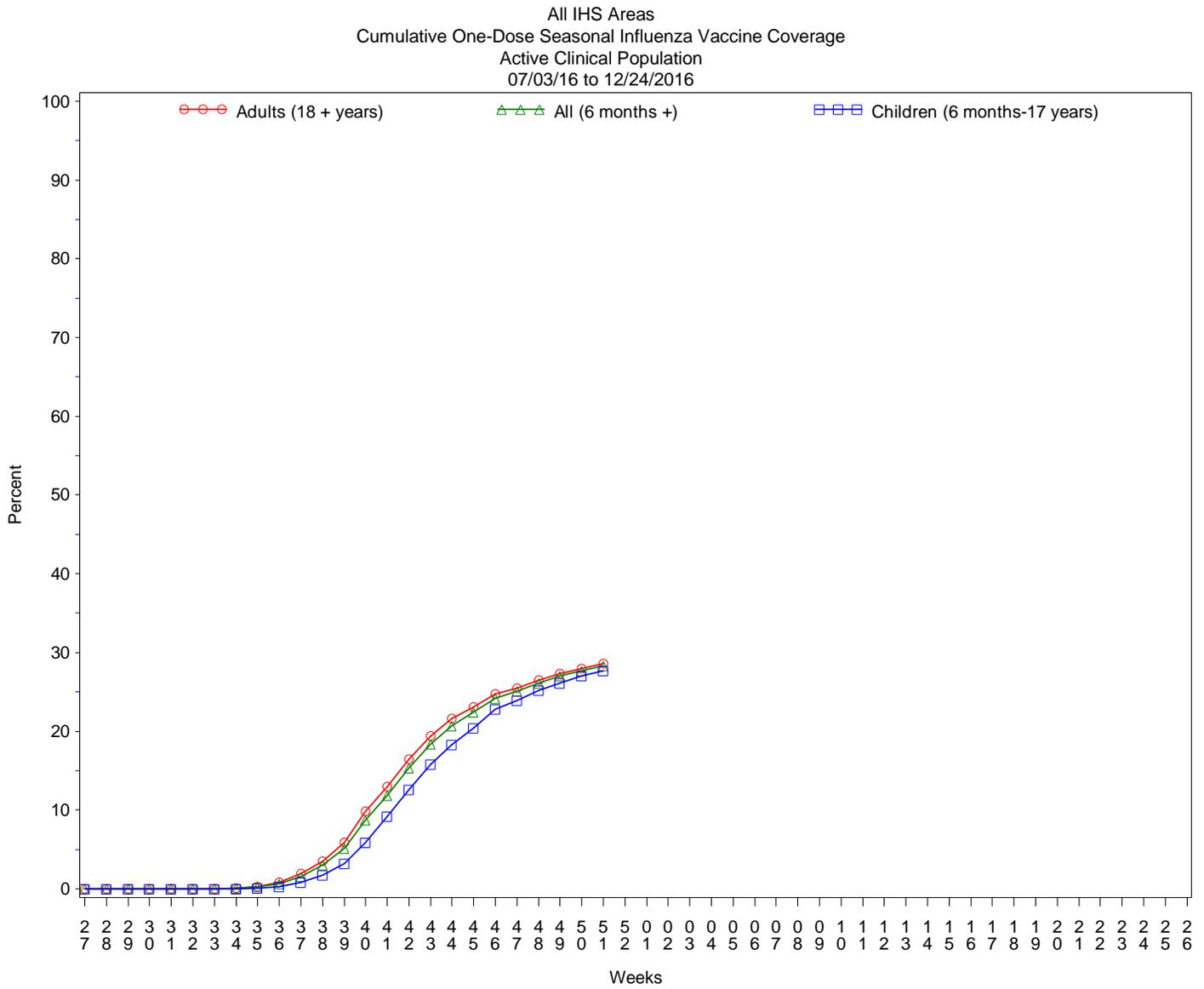
% Visits for ILI Compared to Previous Week

| IHS Areas | % in Week 50 | % in Week 51 |
|--------------|--------------|--------------|
| NATIONAL | 1.2 | 1.5 |
| ALASKA | 0.4 | 0.5 |
| ALBUQUERQUE | 1.0 | 0.9 |
| BEMIDJI | 1.0 | 0.6 |
| BILLINGS | 1.1 | 1.7 |
| CALIFORNIA | 0.7 | 1.0 |
| GREAT PLAINS | 1.1 | 1.5 |
| NASHVILLE | 3.5 | 3.8 |
| NAVAJO | 1.3 | 1.4 |
| OKLAHOMA | 0.5 | 1.1 |
| PHOENIX | 1.6 | 1.9 |
| PORTLAND | 1.1 | 1.6 |
| TUCSON | 1.3 | 1.2 |

Percentage of ILI visits is number of ILI visits divided by total number of daily visits.

IHS Influenza Vaccination Surveillance

- As of 12/24/2016, sites reporting to the IIAS have administered 271,554 doses (1st and 2nd) of seasonal influenza vaccine to Active Clinical patients.



Influenza Vaccination Coverage by Age Group*

| Age Group | Active Clinical Population** | Seasonal Flu Vaccine (At Least 1 Dose)*** | % Seasonal Flu (At Least 1 Dose) | Seasonal Flu Vaccine (At Least 2 Doses) | % Seasonal Flu (At Least 2 Doses) | Total #Doses Administered**** |
|------------------------------|------------------------------|---|----------------------------------|---|-----------------------------------|-------------------------------|
| 0 - 5 months | 4,478 | 35 | 0.8 | 0 | 0.0 | 36 |
| 6 - 23 months | 21,304 | 9,003 | 42.3 | 1,413 | 6.6 | 10,522 |
| 2 - 4 years | 52,297 | 12,109 | 23.2 | 219 | 0.4 | 12,489 |
| 5 - 17 years | 196,763 | 53,707 | 27.3 | 318 | 0.2 | 54,799 |
| 18 - 49 years | 401,242 | 88,337 | 22.0 | 389 | 0.1 | 89,813 |
| 50 - 64 years | 168,329 | 59,996 | 35.6 | 326 | 0.2 | 61,093 |
| 65 + years | 96,502 | 41,991 | 43.5 | 281 | 0.3 | 42,838 |
| Children (6 months-17 years) | 270,364 | 74,819 | 27.7 | 1,950 | 0.7 | 77,810 |
| Adults (18 + years) | 666,073 | 190,324 | 28.6 | 996 | 0.1 | 193,744 |
| All (6 months +) | 936,437 | 265,143 | 28.3 | 2,946 | 0.3 | 271,554 |

* Limited to sites that exported both doses administered and active clinical population data.

** Active Clinical is defined as patients who have had at least 2 visits in the last 3 years.

*** Number of unique patients with at least 1 dose, doses deduplicated.

**** Total # Doses Administered = All doses administered to patients including doses not included in coverage calculation due to lack of Active Clinical Population data.

Influenza Vaccine Doses Administered by Influenza Vaccine Type*

| Area | INACTIV E CVX CODES* | CVX 88 FLU-NOS** | CVX 111 FLU-LAIV3 | CVX 135 FLU-HIGH | CVX 140 FLU-IIV3pf | CVX 141 FLU-IIV3 | CVX 144 FLU-DER MAL | CVX 149 FLU-LAIV 4 | CVX 150 FLU-IIV4pf | CVX 153 FLU-ccIIV 3 | CVX 155 FLU-RIV3 | CVX 158 IIV4 | CVX 161 IIV4pf -ped | CVX 166 | Proc 99.52 Vac Inf | ICD-9 V04.8 1 Vac Inf | CPT Billing Codes+ | Cumulative # of Doses Seasonal Flu |
|------|----------------------|------------------|-------------------|------------------|--------------------|------------------|---------------------|--------------------|--------------------|---------------------|------------------|--------------|---------------------|-------------|--------------------|-----------------------|--------------------|------------------------------------|
| AKA | 3 | 237 | 0 | 388 | 36 | 543 | 1 | 0 | 5135 | 0 | 2 | 3072 | 356 | 19 | 0 | 0 | 48 | 9840 |
| ALB | 1 | 148 | 0 | 1249 | 513 | 9180 | 1 | 0 | 4184 | 0 | 6 | 1886 | 553 | 1 | 0 | 0 | 80 | 17802 |
| BEM | 260 | 82 | 0 | 368 | 9 | 1981 | 0 | 1 | 3404 | 5 | 4 | 3258 | 220 | 41 | 0 | 1 | 156 | 9790 |
| BIL | 5 | 221 | 0 | 870 | 12 | 2059 | 0 | 0 | 9441 | 0 | 0 | 1623 | 831 | 137 | 0 | 0 | 111 | 15310 |
| CAO | 8 | 171 | 0 | 1300 | 18 | 2479 | 1 | 7 | 7552 | 0 | 2 | 4395 | 1277 | 59 | 0 | 2 | 110 | 17381 |
| GPA | 3 | 388 | 0 | 1019 | 137 | 11458 | 0 | 0 | 11212 | 12 | 26 | 5082 | 928 | 9 | 0 | 0 | 87 | 30361 |
| NSA | 197 | 327 | 0 | 348 | 115 | 5206 | 213 | 0 | 3751 | 4 | 18 | 335 | 130 | 312 | 0 | 0 | 111 | 11067 |
| NAV | 24 | 284 | 1 | 1702 | 19 | 9192 | 8 | 0 | 11487 | 0 | 1 | 38300 | 2298 | 990 | 0 | 0 | 169 | 64475 |
| OKC | 253 | 1689 | 0 | 2333 | 10 | 24842 | 7 | 1 | 8014 | 1 | 13 | 2141 | 1227 | 530 | 0 | 0 | 216 | 41277 |
| PHX | 2 | 435 | 0 | 1138 | 26 | 8087 | 12 | 0 | 17696 | 0 | 19 | 389 | 1798 | 1 | 0 | 0 | 229 | 29832 |
| POR | 8 | 343 | 1 | 702 | 1133 | 7450 | 10 | 1 | 4547 | 28 | 19 | 2878 | 295 | 1084 | 0 | 0 | 747 | 19246 |
| TUC | 0 | 46 | 0 | 28 | 23 | 5 | 0 | 0 | 5663 | 1 | 0 | 34 | 353 | 0 | 0 | 0 | 35 | 6188 |
| HQ | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 |
| | 764 | 4373 | 2 | 11445 | 2051 | 82482 | 253 | 10 | 92086 | 51 | 110 | 63393 | 10266 | 3183 | 0 | 3 | 2099 | 272571 |

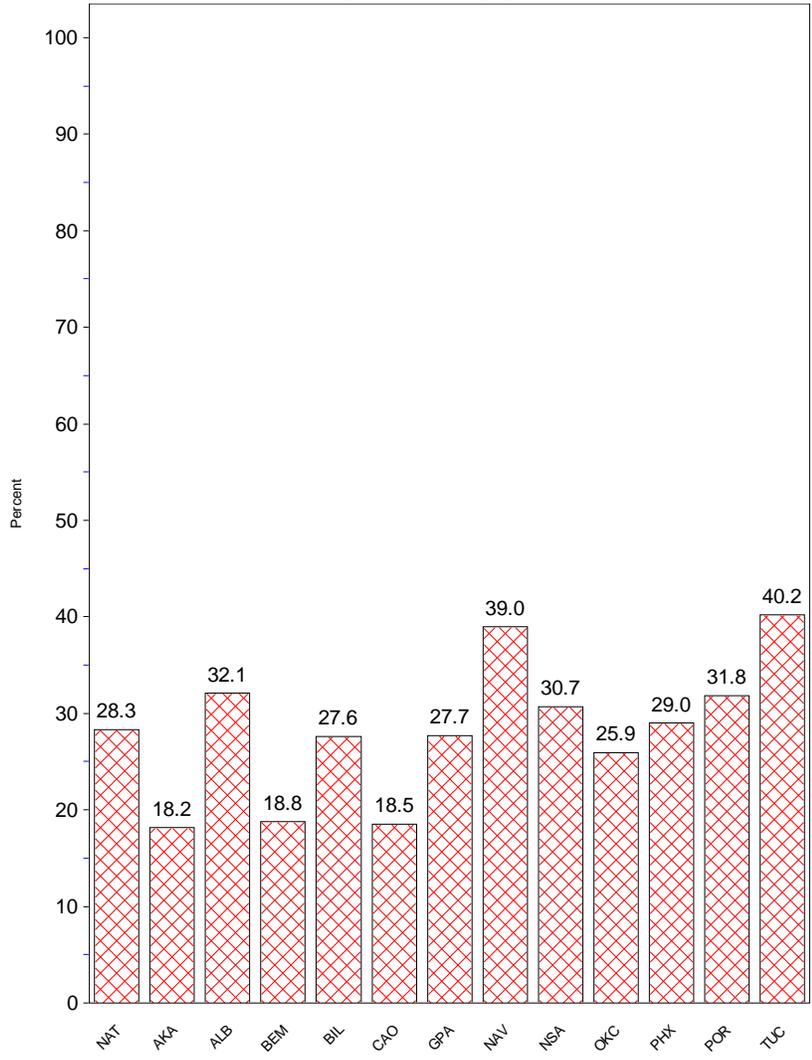
* Inactive CVX Codes 15 (FLU-TIVhx), 16 (FLU-WHOLE), 123 (FLU-H5N1), and 151 (FLU-NasNOS) should not be used to document flu vaccines given this flu season. Doses are NOT deduplicated.

** CVX Code 88 (FLU-NOS) should only be used to document flu vaccines given elsewhere when flu vaccine type is unknown.

+ CPT Flu codes include: 90654-90662, 90672-90673, 90685-90686, 90724, G0008, G8108.

^ ICD9 codes V04.8 and V06.6 are not displayed on this report and are not used in any of the influenza vaccine coverage calculations.

All IHS Areas
Influenza Vaccine Coverage by Age Groups – All (6 mons+)
%Seasonal Flu (At least 1 dose) for Active Clinical Population
07/03/16 to 12/24/2016



- This report includes data from the following number of Resource and Patient Management System (RPMS) databases:

| IHS Area | # of RPMS Databases Reporting* | # of Facilities Reporting** |
|-----------------|---------------------------------------|------------------------------------|
| NATIONAL | 155 | 274 |
| ALASKA | 7 | 45 |
| ALBUQUERQUE | 12 | 17 |
| BEMIDJI | 5 | 12 |
| BILLINGS | 12 | 20 |
| CALIFORNIA | 21 | 31 |
| GREAT PLAINS | 18 | 33 |
| NASHVILLE | 19 | 23 |
| NAVAJO | 7 | 19 |
| OKLAHOMA | 18 | 22 |
| PHOENIX | 13 | 23 |
| PORTLAND | 22 | 25 |
| TUCSON | 1 | 4 |

* Exporting databases may include data from multiple facilities.

** Includes only facility categories: Hospital, Health Center, Health Station, Health Location, and Alaska Village Clinic.