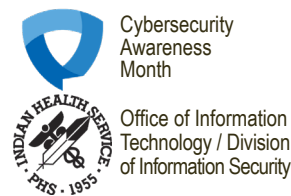


# Cybersecurity Awareness Month

OCTOBER 2021



WEEK 3

## Explore – Experience – Share

### Why is Cybersecurity Important?

Every day, the Indian Health Service (IHS) handles critical health and identity data that criminals consider high-value. According to [the HIPAA Journal](#), between the beginning of August 2020 and the end of July 2021, there have been 706 reported healthcare data breaches of 500 or more records and the healthcare data of 44,369,781 individuals has been exposed or compromised. That's an average of 58.8 data breaches and around 3.70 million records per month.

Today's computer-reliant environment promotes the lucrative and growing career field of cybersecurity. The COVID-19 pandemic has led to companies' implementing widespread telework solutions, requiring a marked increase in the need for cybersecurity professionals. Many companies plan to allow their employees to continue greater telework options after the pandemic ends.

This means that the need for qualified cybersecurity professionals will continue to grow and encompass a large number of different positions that vary from analysis to system testing to creating security policy and awareness products, to technical positions such as engineer and system architect.

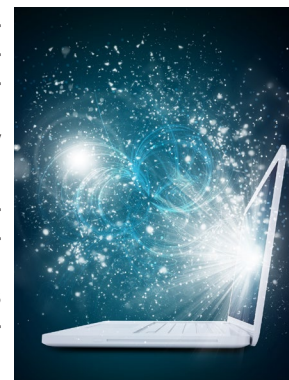
If you know someone looking for a career path, you may want to help yourself by recommending a career that will help keep your sensitive data safe.

There are many paths to getting a cybersecurity education, ranging from programs for students as young as five to degree programs to professional certifications.



### Cybersecurity Education for K-12 Students

- [GenCyber](#) is a five-day summer camp for learning about cybersecurity in a classroom environment. It is free and available in almost every state.
- [The FBI](#) provides age-appropriate games designed to teach third through eighth graders how to safely surf the Internet.
- [The National Integrated Cyber Education Research Center](#) provides a curriculum including Cyber Literacy 1, Cyber Literacy 2, Cyber Science and Cyber Society. The curriculum is free for K-12 teachers in the United States.
- Teachers can speak with the [NSA](#) to:
  - Request speakers to come to their classrooms.
  - Start cybersecurity extracurricular programs at their schools.



### Cybersecurity Education for College Students

Many colleges and universities offer both bachelor- and master-level degrees in cybersecurity. Before selecting a program, consider its accreditation and how well it meets your needs (career goals, location, subject expertise, cost, financial assistance).

To promote higher education in cybersecurity, the NSA and Department of Homeland Security (DHS) teamed up to designate a number of educational institutions as National Centers of Academic Excellence in Cyber Defense (CAE-CD). A list of these institutions is located at [NSA/DHS National CAE in Cyber Defense Designated Institutions](#).

## Cybersecurity Certifications



Information Technology certifications are a way for you to demonstrate proficiency in currently-needed skills by passing standardized exams.

Employers may require certain certifications.

Even for those employers who don't require them, having professional certification often increases your employability and salary.

Some certifications are created and awarded by vendors such as Cisco, while other certifications are vendor neutral. Certification exam requirements vary, for example, Security+ does not have prerequisites, while Certified Information Systems Security Professional (CISSP), arguably the most prestigious certification, requires five years of specific work experience, and endorsement by a current certification holder.

### Certification Awarding Organization

#### Vendor-Neutral

Security+	<a href="#">CompTIA</a>
Information Security Fundamentals (GISF)	<a href="#">Global Information Assurance Certification</a>
Certified Ethical Hacker (CEH)	<a href="#">International Council of Electronic Commerce Consultants (EC-Council)</a>
CISSP	<a href="#">International Information Systems Security Certification Consortium (ISC)<sup>2</sup></a>
Certified Information Security Manager (CISM)	<a href="#">Information Systems Audit and Control Association (ISACA)</a>

#### Vendor Specific

Cisco Certified Network Associate (CCNA) Security	<a href="#">CISCO</a>
Offensive Security Certified Professional (OSCP)	<a href="#">Offensive Security</a>

**For further information and links to web sites associated with these programs, see the IHS web site at [CSAM 2021](#).**

## Cybersecurity Job Opportunities

### Career Pathways



### The Bureau of Labor Statistics Quick Facts

#### Information Security Analysts

2020 Median Pay \$103,590 per year  
\$49.80 per hour

Typical Entry-Level Education Bachelor's degree

Work Experience in a Related Occupation Less than 5 years

On-the-job Training None

Number of Jobs, 2020 141,200

Job Growth Outlook, 2020-30 33% (Much faster than average)

Employment Change, 2020-30 47,100

The cybersecurity market reached a value of \$179.96 billion in 2021 and is estimated to grow to \$372.04 billion by 2028, according to [Grand View Research](#).

The non-profit security consortium [\(ISC\)<sup>2</sup>](#)'s [2020 Cybersecurity Workforce Study](#) predicts that the shortage of talented cybersecurity professionals, in both the private and public sectors, stands at more than 359,000 in the United States alone and more than 3 million globally. The COVID-19 pandemic's work-from-home environment coupled with the rapid increase of ransomware attacks means that this talent gap will only increase in the near future.