

Women in Cybersecurity Workforce 2025

A comprehensive report on representation, career pathways, and industry challenges facing women in cybersecurity today



EXECUTIVE OVERVIEW

The State of Women in Cybersecurity

The cybersecurity industry faces a critical talent shortage while women remain underrepresented. This report examines current workforce statistics, identifies key barriers to entry and advancement, and highlights successful initiatives driving meaningful change in 2025.



WORKFORCE STATISTICS

Current Representation by the Numbers

25%

Women in Cybersecurity

Up from 20% in 2019, showing slow but steady progress

3.5M

Global Workforce Gap

Unfilled cybersecurity positions worldwide in 2025

17%

Leadership Positions

Women holding C-suite or director-level security roles

\$112K

Median Salary

Average compensation for women in cybersecurity roles

While representation has improved, significant gaps remain in leadership positions and specialized technical roles. The industry must accelerate progress to meet both talent needs and equity goals.

Multiple Routes into Cybersecurity



Traditional Education

Four-year degrees in computer science, information security, or related fields provide foundational knowledge and theoretical understanding.



Certifications & Training

Industry certifications like Security+, CISSP, and CEH offer faster entry paths and demonstrate practical skills to employers.



Bootcamps & Self-Learning

Intensive programs and online platforms enable career changers to develop job-ready skills in months rather than years.



Career Transitions

Professionals from IT, law, risk management, and other fields leverage transferable skills to enter cybersecurity roles.

Challenges Women Face Entering the Field

Confidence Gap

Women often underestimate their qualifications, applying only when meeting 100% of job requirements versus 60% for men.

Educational Pipeline

Lower rates of women in STEM degree programs limit the talent pool entering cybersecurity careers.

Lack of Role Models

Limited visibility of women leaders makes it harder to envision career paths and find mentors.

Workplace Culture

Male-dominated environments and unconscious bias create unwelcoming conditions for women professionals.

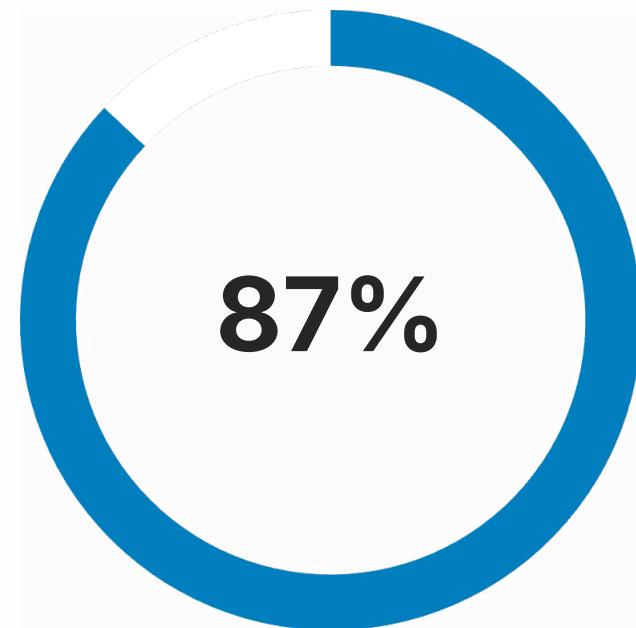
Imposter Syndrome

Persistent self-doubt affects retention and career progression despite strong performance and qualifications.

Work-Life Balance

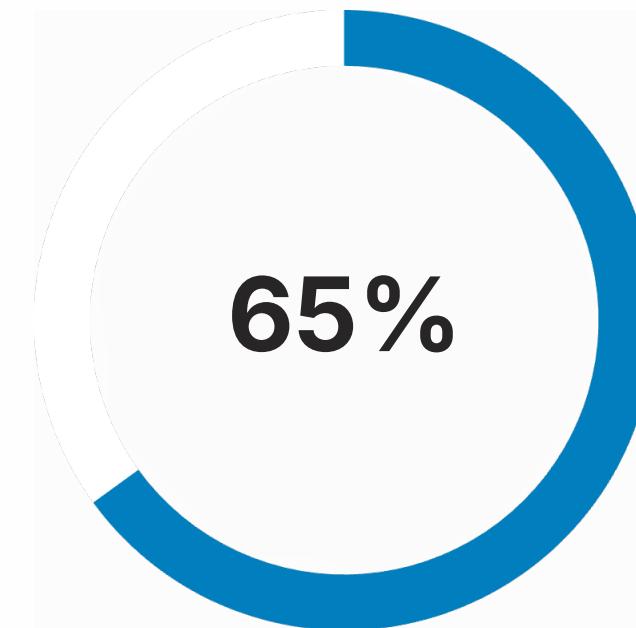
Demanding schedules and limited flexibility disproportionately impact women with caregiving responsibilities.

The Power of Mentorship & Sponsorship



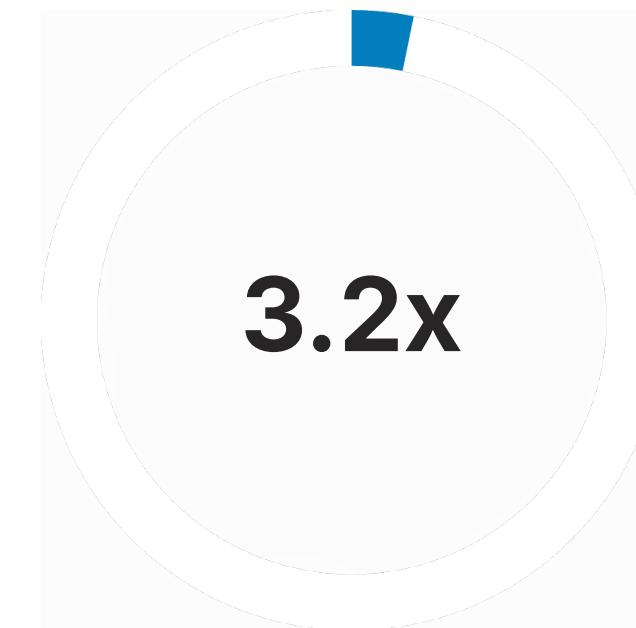
Career Confidence

Women with mentors report increased confidence in their abilities



Faster Advancement

Mentees promoted to senior roles within 5 years versus industry average



Retention Rate

Higher retention for women participating in formal mentorship programs

Effective mentorship programs pair experienced professionals with emerging talent, providing guidance on technical skills, career navigation, and leadership development. Sponsorship—where leaders actively advocate for advancement—proves even more impactful for breaking into leadership roles.

Career Advancement Strategies



Build Your Network

Actively participate in industry conferences, women in tech groups, and professional associations to create meaningful connections.



Pursue Specialization

Develop deep expertise in high-demand areas like cloud security, threat intelligence, or security architecture to stand out.



Share Your Knowledge

Present at conferences, write articles, and contribute to open source projects to establish thought leadership.



Seek Sponsorship

Identify senior leaders who can advocate for your advancement and create opportunities for visibility and growth.

Organizations Leading Diversity Efforts



Women in CyberSecurity (WiCyS)

Global community providing networking, scholarships, and career development resources for women at all stages.



(ISC)² Women's Initiative

Offers free training, mentorship programs, and scholarships specifically designed to advance women in information security.



Girls Who Code & CyberGirls

Pipeline programs introducing young women to technology and cybersecurity careers through education and hands-on experiences.

Building Inclusive Cybersecurity Teams

01

Remove Bias from Hiring

Use blind resume reviews, diverse interview panels, and skills-based assessments to evaluate candidates fairly and expand talent pools.

02

Offer Flexible Work Options

Provide remote work, flexible schedules, and family-friendly policies that support work-life integration for all employees.

03

Create Mentorship Programs

Establish formal mentoring and sponsorship initiatives pairing women with experienced leaders across the organization.

04

Invest in Development

Fund training, certifications, and conference attendance while providing clear pathways for career progression and leadership.

05

Foster Inclusive Culture

Address unconscious bias through training, celebrate diverse perspectives, and hold leaders accountable for diversity goals.

Women Leading Innovation in Cybersecurity

"Don't wait for permission to lead. Start by solving problems others aren't addressing, and your expertise will create opportunities."

— Sarah Chen, CISO at Fortune 500 Financial Services

"My non-traditional background in psychology gave me unique insights into human behavior that made me better at security awareness and social engineering defense."

— Maria Rodriguez, Threat Intelligence Director

These leaders exemplify how diverse backgrounds, persistent learning, and strong networks enable women to reach top positions and drive industry innovation.

Key Recommendations for 2025 and Beyond

For Organizations

- Set measurable diversity targets with leadership accountability
- Eliminate pay gaps through regular equity audits
- Partner with women-focused tech organizations
- Showcase women leaders in marketing and recruiting

For Women in Cybersecurity

- Build confidence through continuous skill development
- Seek mentors and become mentors to others
- Negotiate compensation and advocate for advancement
- Connect with supportive professional communities

For the Industry

- Invest in pipeline programs targeting young women
- Promote alternative pathways beyond traditional degrees
- Challenge stereotypes through awareness campaigns
- Celebrate and amplify women's achievements

Achieving gender parity in cybersecurity isn't just about fairness—it's a business imperative. Diverse teams build better security solutions, think more creatively about threats, and drive innovation that protects us all.

About Cyber Security Non-Profit

"Making cybersecurity knowledge accessible to everyone through education, community, and practical resources."

Our Programs

- **Business & Non-Profit Security**

Helping organizations of all sizes protect their operations and data

- **Family Cybersecurity, Kids Safety & Senior Digital Safety**

Empowering families to navigate the digital world securely

- **Women's Security & Parents & Educators**

Specialized resources for those protecting and educating others

Everything we offer is completely free. Visit us at csnp.org to explore our programs and access resources at csnp.org/resources

