Public Safety Cybersecurity: America’s 911 Centers Are At Risk
Panel Introductions

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911’s digital transformation requires lifecycle risk management, including cybersecurity.

### Cyber Incidents

37% indicated that cybersecurity incidents impacted their ability to communicate over the past five years.

### CSRIC Resources

- **Task Force on Optimal Public Safety Answering Point Architecture**
- **CSRIC V:** [Evolving 911 Services](#)
- **CSRIC VI:** [Transition Path to Next Generation 911 (NG911)](#)
- **CSRIC VII:** [911 Security Vulnerabilities – During NG911 Transition](#)

Data from the [2018 SAFECOM Nationwide Survey Results](#). The SNS is a nationwide data collection effort to obtain actionable and critical data that drives our nation’s emergency communication policies, programs, and funding.
Cyber threats to 911 centers are becoming more complex and sophisticated

- Malware
- Ransomware
- Telephony Denial of Service (TDoS)
- Spear-phishing
- Swatting
- Unauthorized Data Access
- Unauthorized Network Access
Recent recommendations developed by CSRIC consider a very broad attack surface; not just the emergency services network, but also external networks, staff, and the 911 caller

A large number of easily-preventable cyber events originate not just by malicious actors, but also passive ones (e.g., your own employees)

Implementing even basic, low-tech cybersecurity controls can greatly improve even a small, underfunded agency’s security posture

View the WG4 recommendations: https://www.fcc.gov/about-fcc/advisory-committees/communications-security-reliability-and-interoperability-council-vii
Transitional NG911 exposes the broadest attack surface

- Transitional NG911 retains a similar attack surface as a legacy environment 911, such as TDoS

- However, the system is also exposed to a modern attack surface as well, such as distributed denial of service (DDOS), Domain Name System hijacking, and Session Initiation Protocol exploits

- Transitional NG911 may also not support all security mechanisms expected for end-state NG911

- Even a legacy 911 center is vulnerable to conventional attacks not unique to 911, like ransomware
Cybersecurity Resources

Resources available at CISA.gov

- An interactive, expandable, web-based toolkit displaying 30 resources over 10 topic areas, including NG911
- Includes CISA guidance, as well as guidance from other government and industry sources
- Intended to describe emergent trends and issues, consolidate resources, educate stakeholders at all levels of government, and propose mitigations to enable resilient public safety communications
- [https://www.cisa.gov/publication/communications-resiliency](https://www.cisa.gov/publication/communications-resiliency)
For more information: www.cisa.gov

Questions?
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