CISA | CYBERSECURITY AND INFRASTRUCTURE SECURITY AGENCY

# OREGON CYBER RESILIENCE SUMMIT

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# A RUSH TO THE BALL...

## CISA ROLE

## Cyber Threat Landscape

## How Do we Fix the Cyber Gap?

## Best Practices

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# Cybersecurity and Infrastructure Security Agency (CISA)

**VISION**

Secure and resilient infrastructure for the American people.

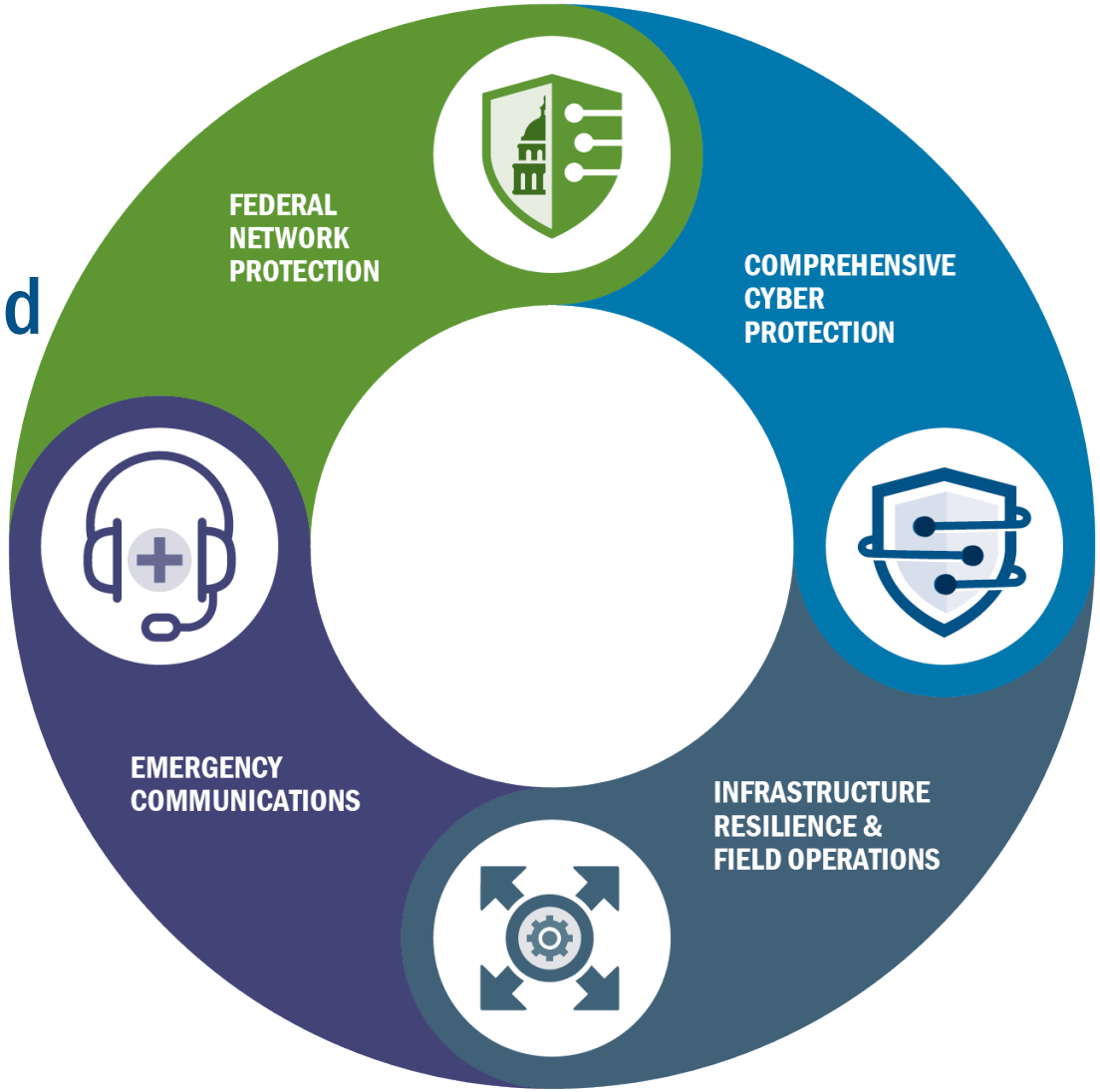
**MISSION**

Lead the Nation's efforts to understand and manage risk to our critical infrastructure.

# We are the Nation's Risk Advisors

- PARTNERSHIP DEVELOPMENT
- INFORMATION AND DATA SHARING
- CAPACITY BUILDING
- INCIDENT MANAGEMENT & RESPONSE
- RISK ASSESSMENT AND ANALYSIS
- NETWORK DEFENSE
- EMERGENCY COMMUNICATIONS

CISA leads national risk management for cyber and physical infrastructure

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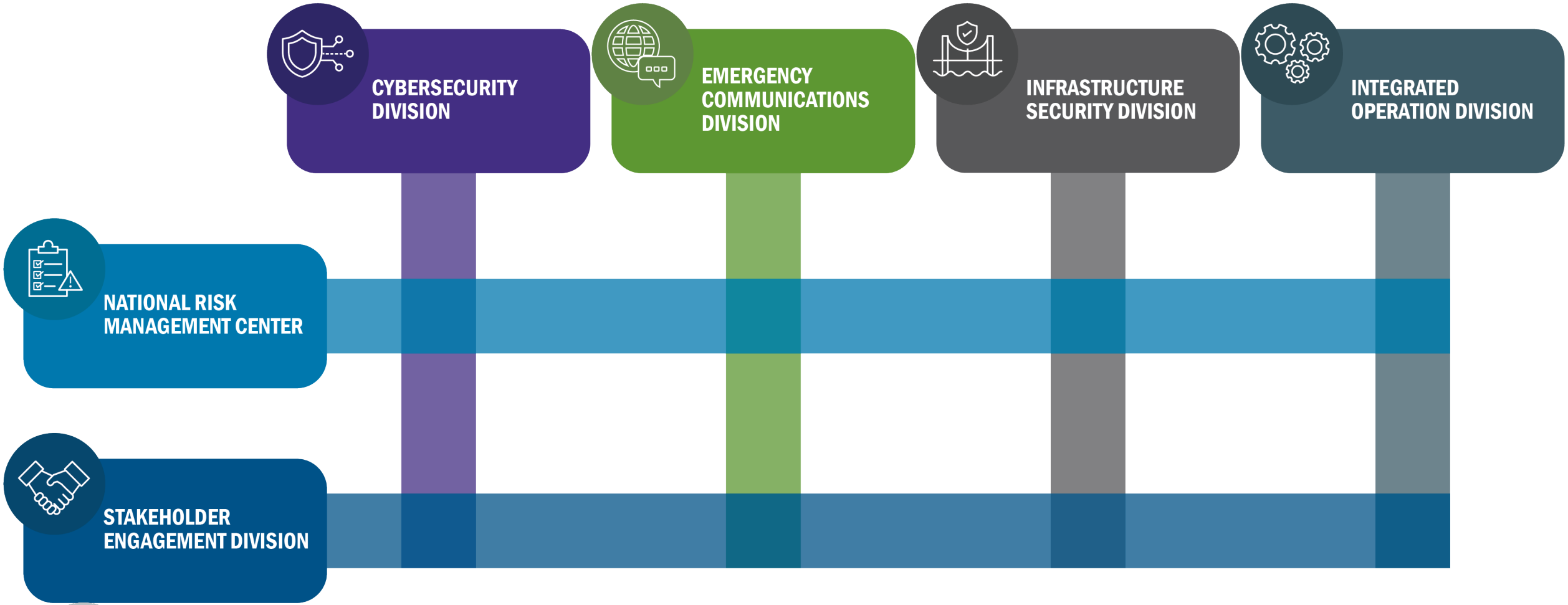
# CISA DIVISIONS

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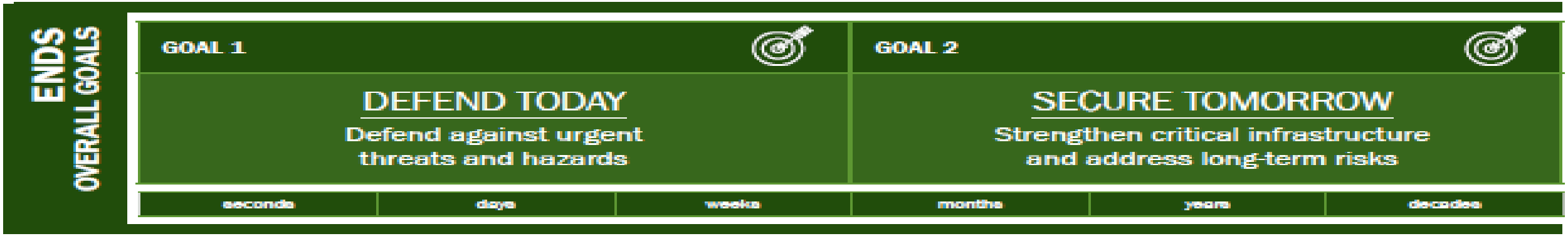
# “DEFEND TODAY, SECURE TOMORROW”

We lead the Nation’s risk management efforts by bringing together diverse stakeholders to collaboratively identify risks, prioritize them, develop solutions, and drive those solutions to ensure the stability of our national critical functions. As the nation’s risk advisor, CISA is unique in its position to partner with private industry, researchers, international governments, emergency responders, intelligence, defense, and other communities.

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# MISSION ESSENTIAL FUNCTIONS

**INCIDENT MANAGEMENT:**
Support management of physical, cyber and communications incidents in real time
Help mitigate impacts and reduce risks to critical systems

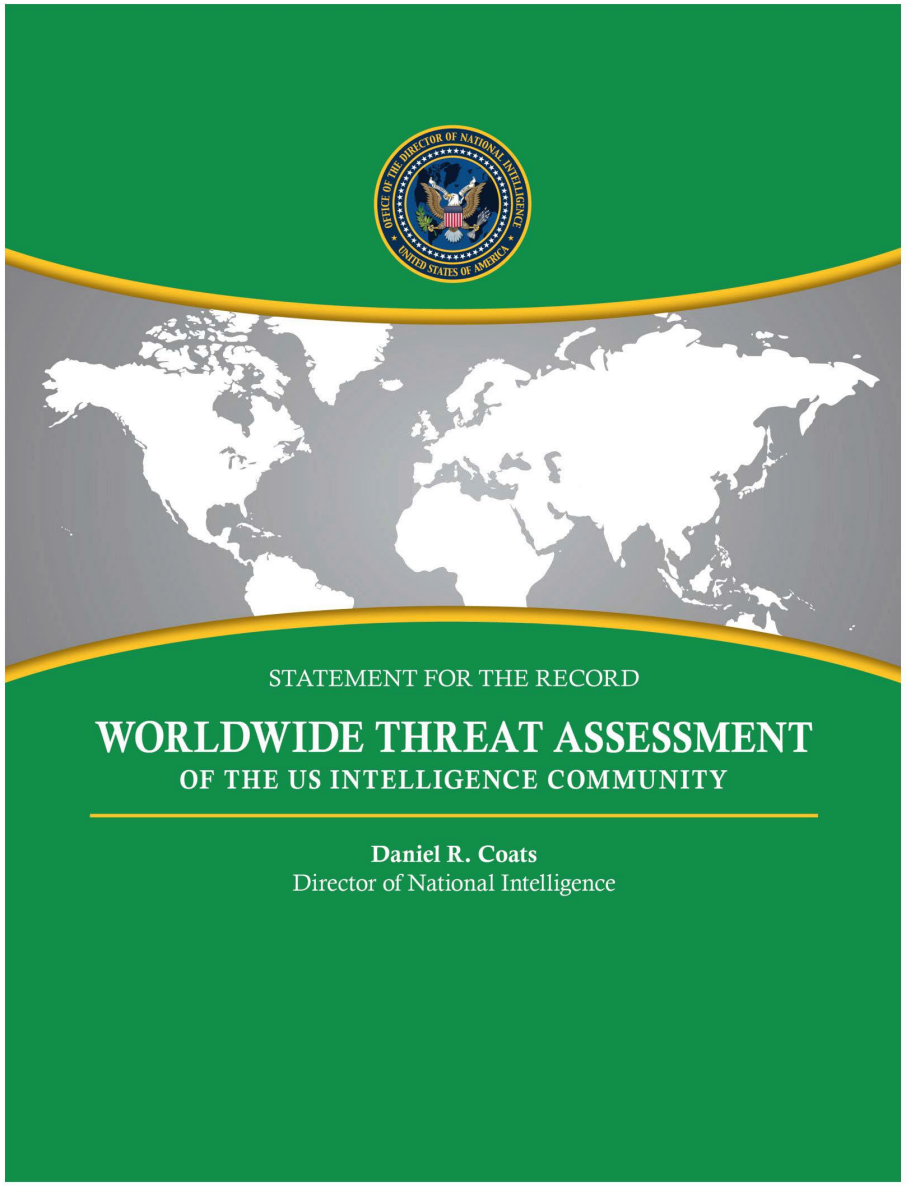
**ANALYSIS:**
Conduct analyses to recognize threats and vulnerabilities, identify countermeasures, and develop situational awareness

**CAPACITY BUILDING:**
Build capacity across all levels of government and the private sector to improve management of physical, cyber and communications risks

**INFORMATION EXCHANGE:**
Share information about physical, cyber and communications risks to support stakeholder decisions and actions

# Cyber

# A Top Threat

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# Today's Risk Landscape

America remains at risk from a variety of threats:

INSIDER THREAT

ACTS OF TERRORISM

CYBER ATTACKS

EXTREME WEATHER

PANDEMICS

ACCIDENTS OR TECHNICAL FAILURES

# Cyber Interconnectivity

- Complex cyber ecosystem of digital business

- North Korea targets financial institutions
  - Pattern for future – increase activity
  - High need to generate revenue
  - U.S. critical infrastructure disruptions
  - Healthcare, finance, government and emergency service sectors

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- ISC$^2$ reports Global Cybersecurity Workforce Shortage of 3 Million – 500,000+ in the US
- Cyberseek cites over 300,000+ Cybersecurity openings in the US
- Lack of a skilled workforce leaves Public and Private Sector organizations vulnerable to ever-increasing cyber threats

    - So where should we focus?

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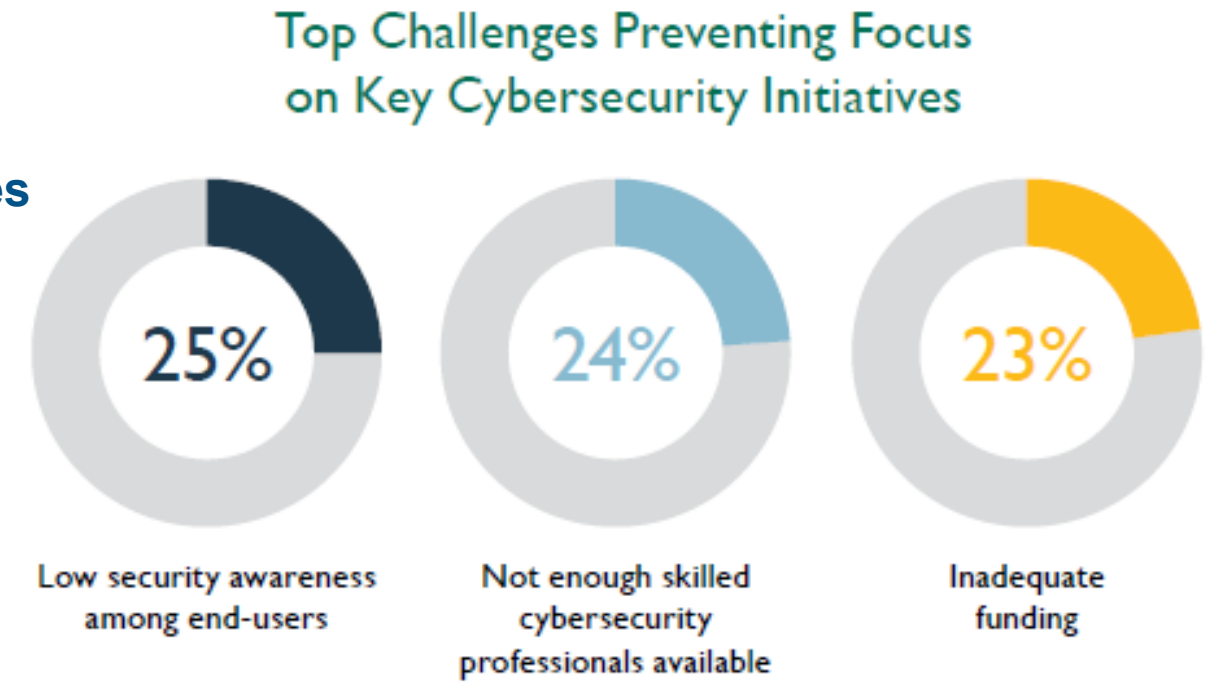
**Problems within corporations themselves prevent a true focus on key cybersecurity initiatives**




**IT & cybersecurity staff are the 1st to see budget cuts when issues arise**

**Corporate IT staff spends more than 54% of their time on cybersecurity issues**

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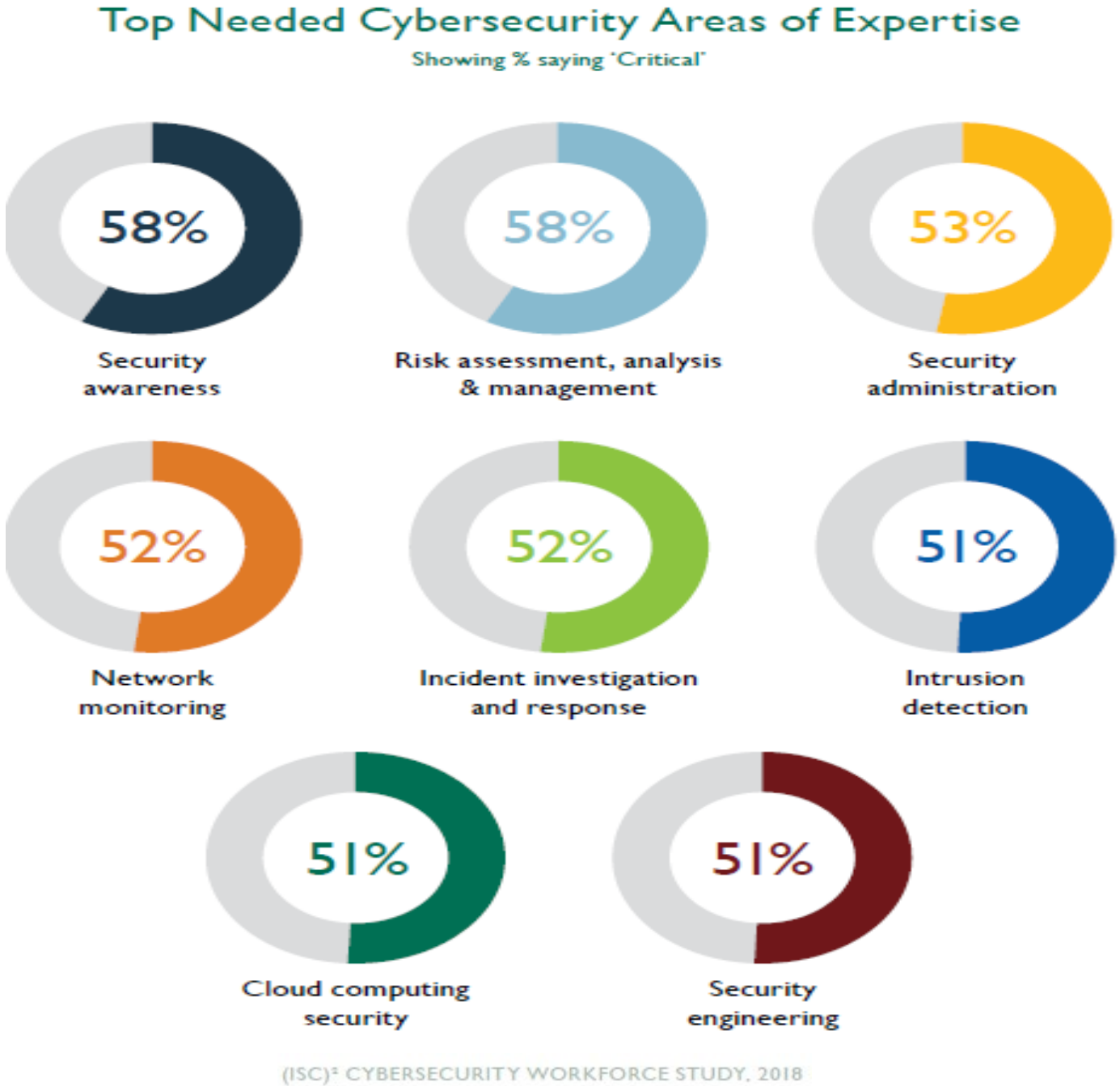
# Top Areas of Expertise Needed

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# How to meet the need

- Curriculum developed that meets the needs – cloud, forensics, etc.
  - Too much managerial level – the need is for technical
- Labs – all cyber curriculum at the undergrad level need to incorporate labs both in residence and online in order to ensure technical proficiency
- Certificate Programs at the undergrad and Masters levels

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# Best Practices

- Leadership Must **OWN** the Issue
- Be Prepared – EXERCISE
- Good Cyber Hygiene – Blocking and Tackling
- Defend and Continue to Operate
- Risk Management – What Can I Accept?
  - Balance Security, Mission and Privacy
- Leverage Relationships

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# DO YOU FEEL LUCKY?

*Source: http://mentalfloss.com/article/75811/11-lucky-facts-about-dirty-harry*


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