

OSDH Perspectives on  
Information Technology Security

**NWA  
TECHNOLOGY  
CONFERENCE**

November 4-6, 2009



# CYBER FED

<http://www.securitywizardry.com>



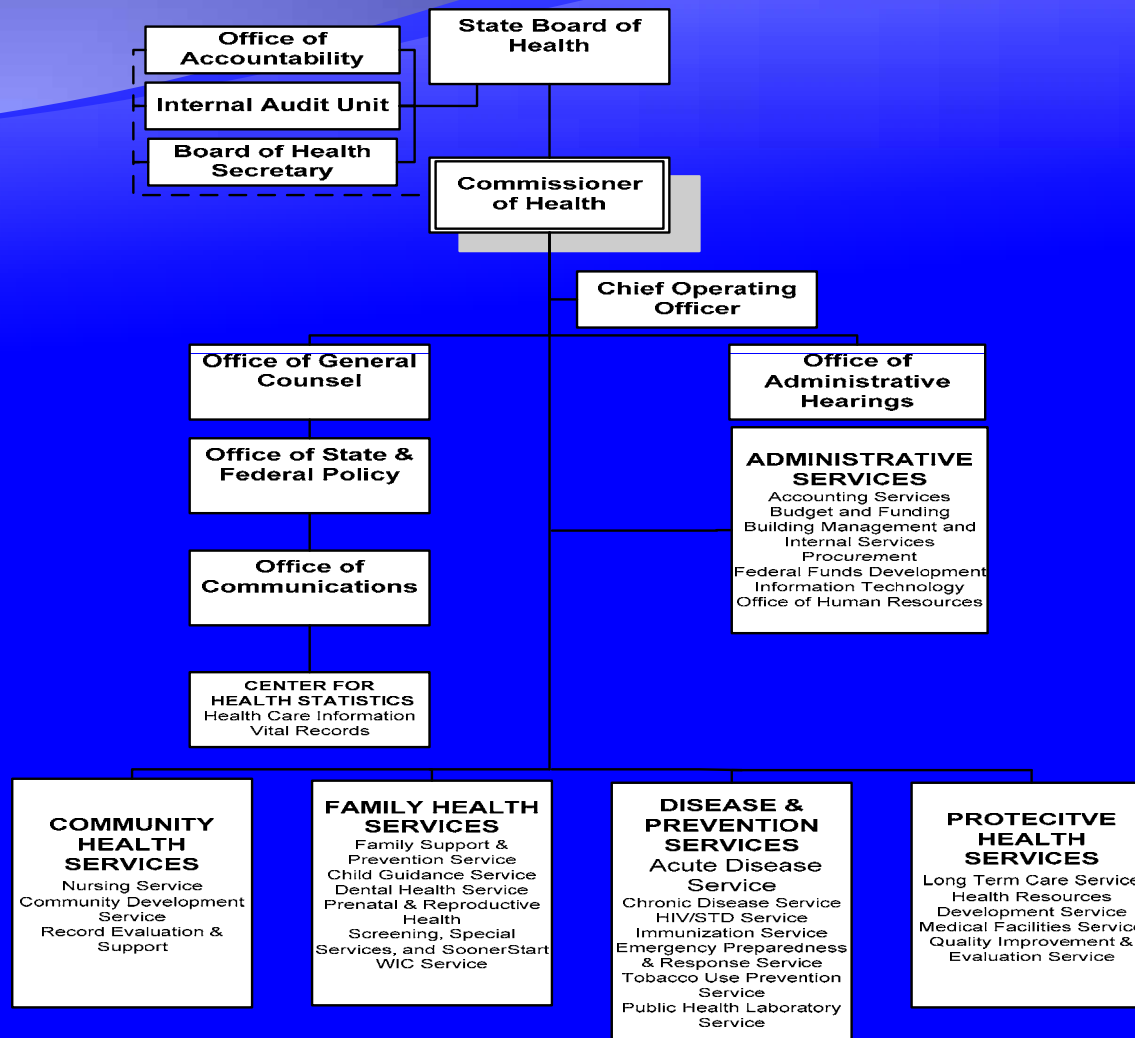
# Objectives

## Oklahoma State Department of Health

- ◆ OSDH Background
- ◆ Security Philosophy
- ◆ Security Layers Utilized by OSDH



# Oklahoma State Department of Health



# Oklahoma State Department of Health Background

- ◆ 241 Total # of Locations Served
- ◆ 136 County Sites in 77 Counties
  - ◆ 2 Independent City-County Health Departments
- ◆ 126 WIC Sites
  - ◆ 160,065 Clients Served (Caseload Report, July 2009)
- ◆ 2200 FTEs Agency-Wide



# Security Philosophy

- ◆ The Balance Between Security and Business Needs
- ◆ The Debate on Security vs. Privacy
  - ◆ We implement security to insure privacy.
  - ◆ Privacy is about the appropriate use of the information.
  - ◆ The two must be integrated.



# OSDH Layers of Security

- ◆ Physical
- ◆ Data
- ◆ Applications and Operating Systems Security
- ◆ Network Security
- ◆ Security Management and Monitoring
- ◆ Security Awareness



# OSDH Physical Security Layer

- ◆ Secured Data Center
- ◆ Lockable Cabinets
- ◆ Sign In/Sign Out
- ◆ Supervised Access
- ◆ Cameras
- ◆ Locked Consoles/Password Enabled



# OSDH Data Layer of Security

- ◆ Least Privileged Philosophy
- ◆ Strong Authentication
  - ◆ Utilize complex passwords
- ◆ Two Factor Authentication
  - ◆ Something You Have/Something You Know/Something You Are
  - ◆ Two of the Three
- ◆ Encryption
- ◆ Data Use Agreements



# STRONG AUTHENTICATION

<http://www.totaleclipsed.hypermart.net/>



# Application and Operating System Security

- ◆ Anti-Virus
- ◆ Anti-Spyware
- ◆ Firewalls
  - ◆ Software/Host
- ◆ Anti-Spam



# SPAMMED

<http://en.kerouac3001.com/>



# Network Security

- ◆ Firewalls
- ◆ Intrusion Detection and Prevention (IDS/IPS)
- ◆ Wireless Application (NetMotion)
- ◆ Network Segregation
- ◆ Web and Content Filtering



# Security Management and Monitoring

- ◆ Vulnerability Assessment
- ◆ Patch Management
- ◆ Standard Configurations Where Possible
- ◆ Need for Monitoring
  - ◆ Unpatched Software or Unsafe Configurations



# Security Awareness

“You are only as strong as your weakest link.”



# Security Awareness

*(Continued)*

- ◆ Policies
  - ◆ Telework
  - ◆ Mobile Devices
  - ◆ Acceptable Use
  - ◆ Passwords
  - ◆ Media Destruction



# Security Awareness

*(Continued)*

- ◆ Security Training
  - ◆ Basic Security (Work and Home)
  - ◆ New Employee Orientation
- ◆ Posters
- ◆ Security Tips



# OSDH Security Awareness Poster Example

“Create Strong Passwords”

**CREATE STRONG PASSWORDS**  
**THAT ARE**  
**EASY TO REMEMBER**

Uppercase and Lowercase  
Contains Special Characters and Numbers  
At least 8 characters long

**\$p1ffy\_Un1f0rm\$**  
(Spiffy Uniforms)

**1T~Pr0\$!!**  
(IT Pro\$!)

**P0vv3r+C0rd**  
(Power Cord)

**Y3110vv-<@ble**  
(Yellow Cable)

**VV0r}{-800t&**  
(Work Boots)

**Your new password must:**

- Not be the same as your previous 5 passwords.
- Not be similar to your current password.
- Not be similar to your login name.
- Not be similar to your name.
- Contain a numeric character.
- Contain a special character.
- Contain at least 1 of the following character types:
  - upper alpha
  - lower alpha
- Contain at least 8 characters.

**Oklahoma State Department of Health** Information Technology Services  
Help Desk x12588  
1-866-866-8019  
HelpDesk@health.ok.gov

# OSDH Security Awareness Poster Example

“Thwart Wireless Attacks”

**Thwart Wireless Attacks**

**Be aware of your surroundings.**

Assume someone is eavesdropping on you.

Keep your security software current and active.

Beware of Evil Twins—dummy networks created by criminals.

In 27 airports targeted nationwide **77%** of the Wi-Fi networks were not official hotspots.

Only **3%** of the people in the 27 airports were using secure networks.

Set all Bluetooth devices to “hidden,” not to “discoverable.”

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\*Kaiser, I. (2009, July 12). Wireless Cybercriminals Target Ourselves. [Electronic version]. Fox News.

# OSDH Awareness Poster Example

## “Email Management”

### Email Management 101

#### Decide

- Is this spam or work-related?
- Am I the only one that can answer?
- Can I answer in less than 2 minutes?
- Can I delegate to someone?
- Can I save attachments in my provided network space?
- Should I delete?
- Does this email need to be retained in my personal folder to meet my records retention requirements?

#### Delegate

- Can I delegate for someone else to work and delete the original?
- Can I save the attachment into provided network work space for someone else to work on?
  - Should this information actually be a task or appointment?

#### Do

- If spam, did I click the red envelope to send to Bertram?
- Take care of each item as it arrives in your mailbox.
- Allot at least 30 minutes to an hour each day.
- Empty your deleted items
- Check 'auto delete upon exit.'

#### Delete

- If you delegated or changed to a task-DON'T keep a copy-this defeats the purpose.
- Does the message relate to a meaningful objective you're currently working on? If not, you can probably delete it.
- Does the message contain information you can find elsewhere? If so, delete it.



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Knowledge  
is  
Power!

# Summary

- ◆ OSDH Background
- ◆ Security Philosophy
- ◆ Security Layers Utilized by OSDH



# Thank you!

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*[http://www.ok.gov/health/Child\\_and\\_Family\\_Health/WIC/](http://www.ok.gov/health/Child_and_Family_Health/WIC/)*

