

# Arizona's Infection Prevention Assessment Survey: 10 Core Concepts

Long-Term Care Facilities



ARIZONA DEPARTMENT  
OF HEALTH SERVICES

*Health and Wellness for all Arizonans*

# Dictionary

Competency-based training

An approach to vocational education and training that places emphasis on what a person can do in the workplace as a result of completing a program of training or based on workplace experience and learning (e.g. a physical practice, return demonstration or observation)

# Acronyms

ASP	Antimicrobial Stewardship Program
ELC	Epidemiology Laboratory Capacity
EMS	Emergency Medical Services
IPC	Infection Prevention and Control
IT	Information Technology
LTC	Long-Term Care

# Background

- Arizona long-term care facilities were surveyed in early 2016 to assess infection control practices, infrastructure and outbreak reporting
  - As part of ELC Ebola Supplement Activity A
- Results provided a snapshot of infection prevention capacity throughout the state
- Collected as a baseline data to focus pointed interventions
- 10 Core Concepts were identified as a focus for analysis

# 10 Core Concepts

1

**Training in infection control**

2

**Fiscal support for infection prevention and control (IPC) program**

3

**Notify public health about outbreaks**

4

**Mandatory influenza vaccination program**

5

**Competency-based training program for proper hand hygiene**

6

**Competency-based training program for environmental cleaning**

7

**7 core elements of Antibiotic Stewardship Programs (ASPs)**

8

**Policies to track personnel access to controlled substances**

9

**Access to Pharmacist**

10

**Monitor incidence of targeted healthcare-associated infections (HAIs)**

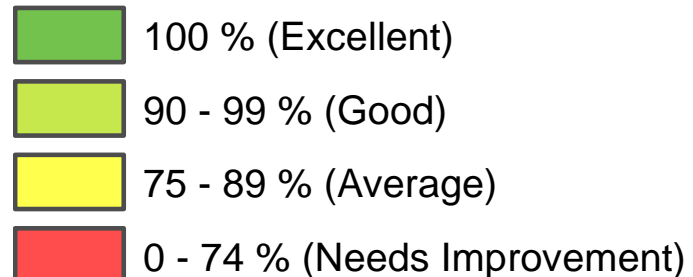
# EMS Regions



- Predefined geographical areas of EMS System
- Selected for simplicity and anonymity

Regions were categorized based on self reported responses as shown below:

## Positive Response



# Response Proportion by EMS Regions



146 long-term care received the survey

- 56 responded

**Arizona (n=146) : 38%**

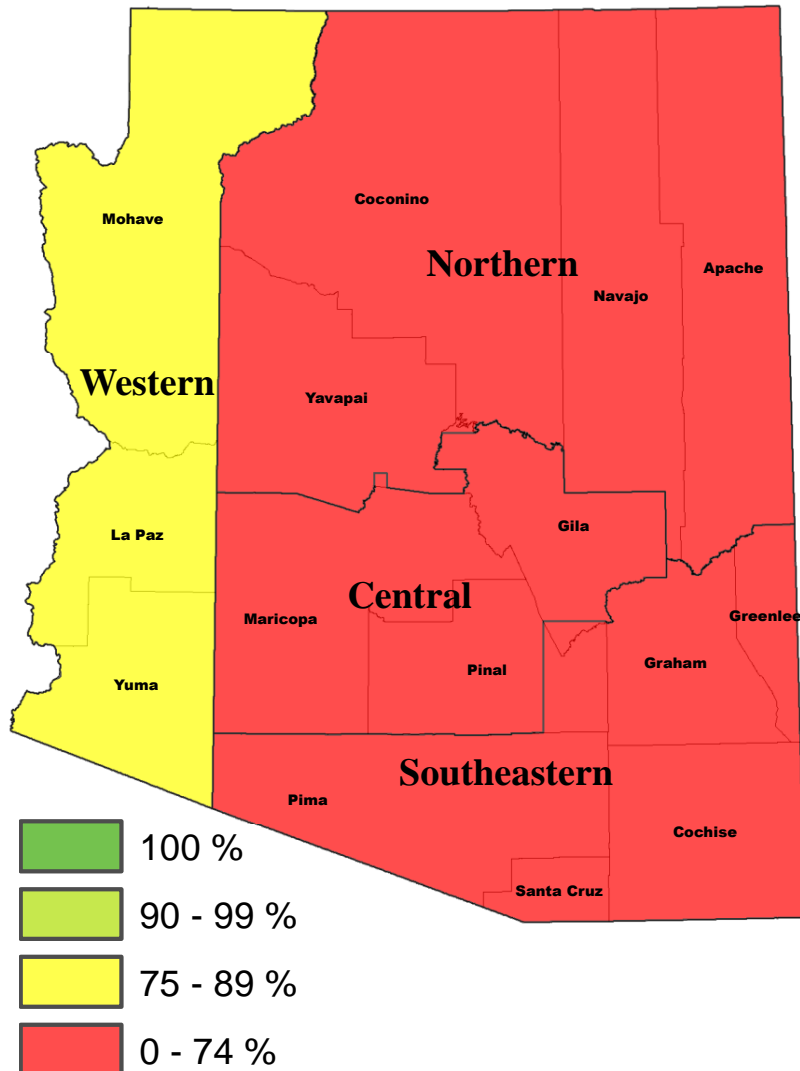
Region	Number Responded	Percent Responded
Central (n=91)	34	37%
Northern (n=14)	7	50%
Southeastern (n=29)	10	34%
Western (n=12)	5	42%

# Demographics of EMS Region

Demographics	Arizona	Central	Northern	Southeastern	Western
LTC Surveyed	146	91	14	29	12
LTC Responded (Percent)	56 (38%)	34 (37%)	7 (50%)	10 (34%)	5 (42%)
LTC for profit	42	22	5	10	5
LTC for non-profit	14	11	2	1	0
Median licensed beds (Mean)	101 (105)	103 (107)	83 (91)	116 (122)	90 (83)
Training in Infection Control (Percent)	37(66%)	24(66%)	5(71%)	4(40%)	4(80%)



# Training in Infection Control

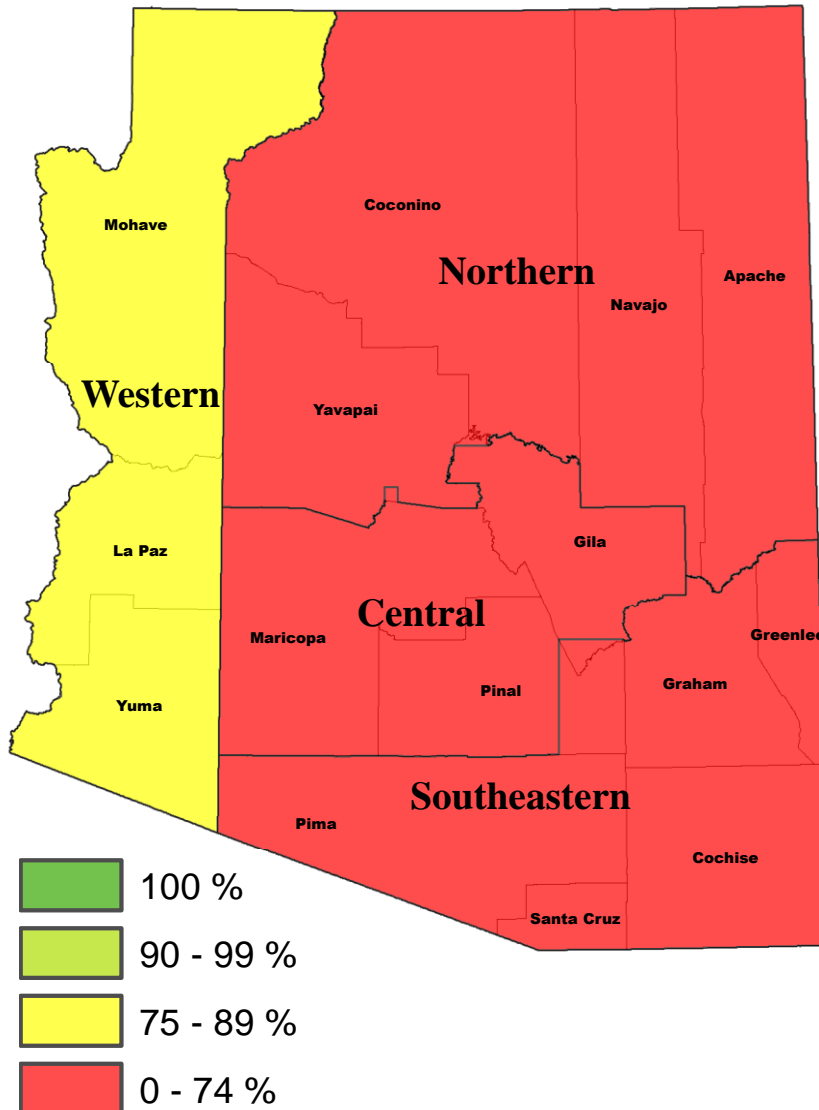


Has the person responsible for coordinating the infection prevention program received training in IPC?

**Arizona (n=56) : 66%**

Region	Positive Response
Central (n = 34)	71%
Northern (n = 7)	71%
Southeastern (n = 10)	40%
Western (n = 5)	80%

# Fiscal Support for IPC Program

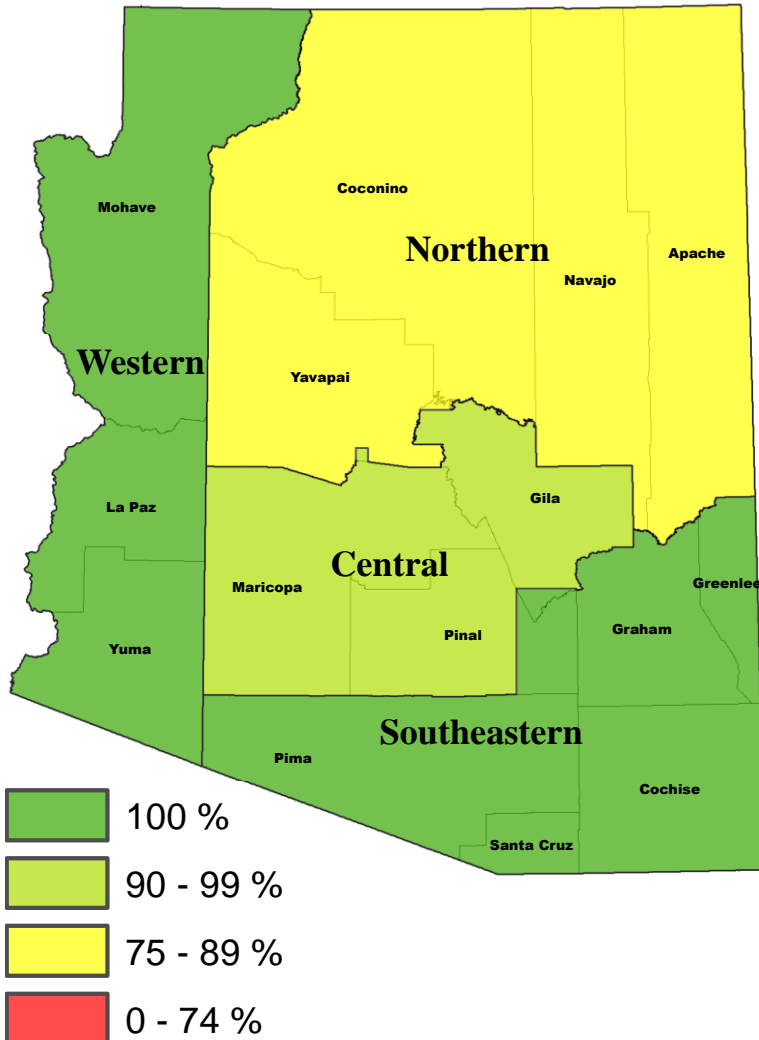


Does your facility provide any type of fiscal and human resource support for maintaining the IPC program?

**Arizona (n = 56) : 39%**

Region	Positive Response
Central (n = 34)	35%
Northern (n = 7)	57%
Southeastern (n = 10)	20%
Western (n = 5)	80%

# Outbreak Reporting to Public Health

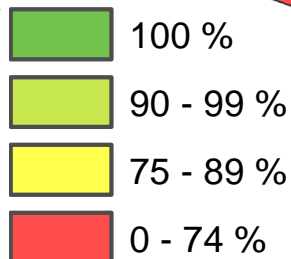


Does your facility routinely notify your local public health department about any type of outbreak at your facility?

Arizona (n=56) : 93%

Region	Positive Response
Central (n = 34)	91%
Northern (n = 7)	86%
Southeastern (n = 10)	100%
Western (n = 5)	100%

# Mandatory Influenza Vaccination Program

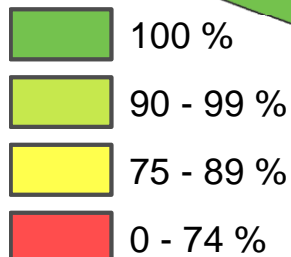


Does your facility have a mandatory influenza vaccination program for healthcare personnel?

**Arizona (n=56) : 32%**

Region	Positive Response
Central (n = 34)	32%
Northern (n = 7)	43%
Southeastern (n = 10)	30%
Western (n = 5)	20%

# Competency-based Training on Hand Hygiene

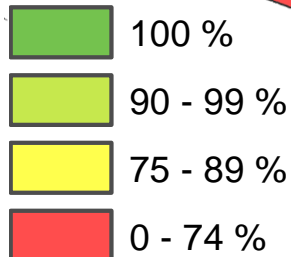
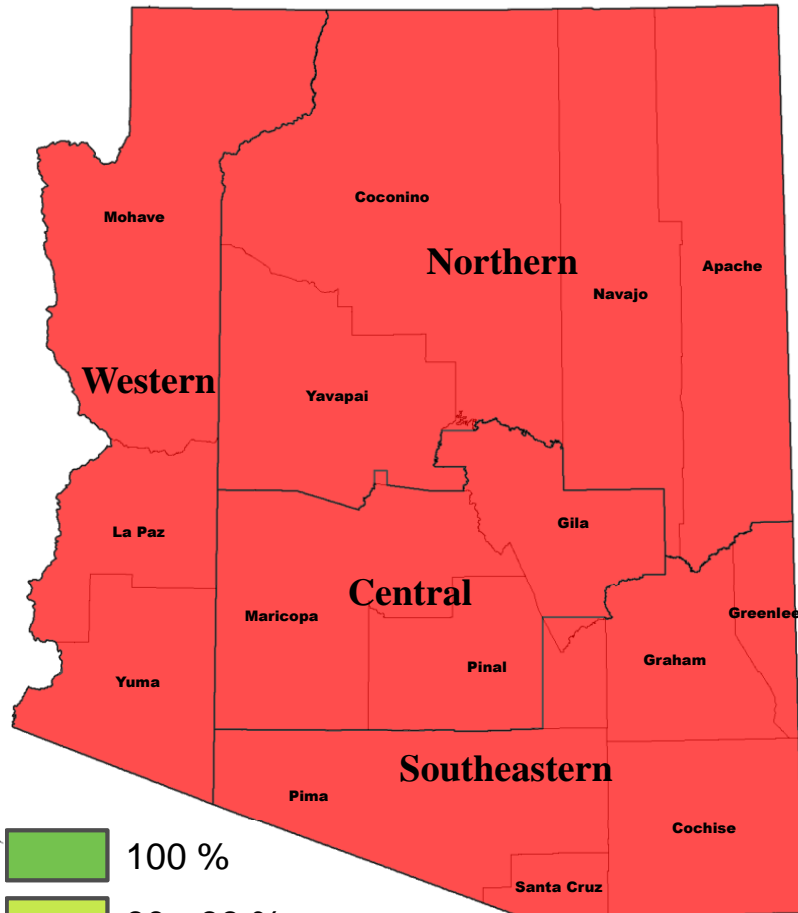


Does your facility use competency-based training program to train staff on proper hand hygiene?

**Arizona (n=56) : 88%**

Region	Positive Response
Central (n = 34)	88%
Northern (n = 7)	86%
Southeastern (n = 10)	100%
Western (n = 5)	100%

# Competency-based Training on Environmental Cleaning



Does your facility use competency-based training program to train staff on proper environmental cleaning?

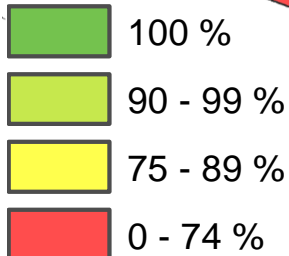
**Arizona (n=56) : 61%**

Region	Positive Response
Central (n = 34)	59%
Northern (n = 7)	57%
Southeastern (n = 10)	70%
Western (n = 5)	60%

# 7 Core Elements of Antibiotic Stewardship Programs (ASPs)

- 1 **Leadership Commitment:** Dedicate necessary human, financial and IT resources
- 2 **Accountability:** Appoint a single leader responsible for program outcomes
- 3 **Drug Expertise:** Appointing a single pharmacist leader responsible for working to improve antibiotic use
- 4 **Actions:** Implementing at least one recommended action, such as systemic evaluation of ongoing treatment need after a set period of initial treatment
- 5 **Tracking:** Monitor antibiotic prescribing and resistance patterns
- 6 **Reporting:** Regular report information on antibiotic use and resistance to doctors, nurses and relevant staff
- 7 **Education:** Educate clinicians about resistance and optimal prescribing

# Antibiotic Stewardship: Facilities Meeting all 7 Core Elements



Met all 7 core elements of ASP based on responses to questions regarding antibiotic stewardship.

**Arizona (n=56) : 18%**

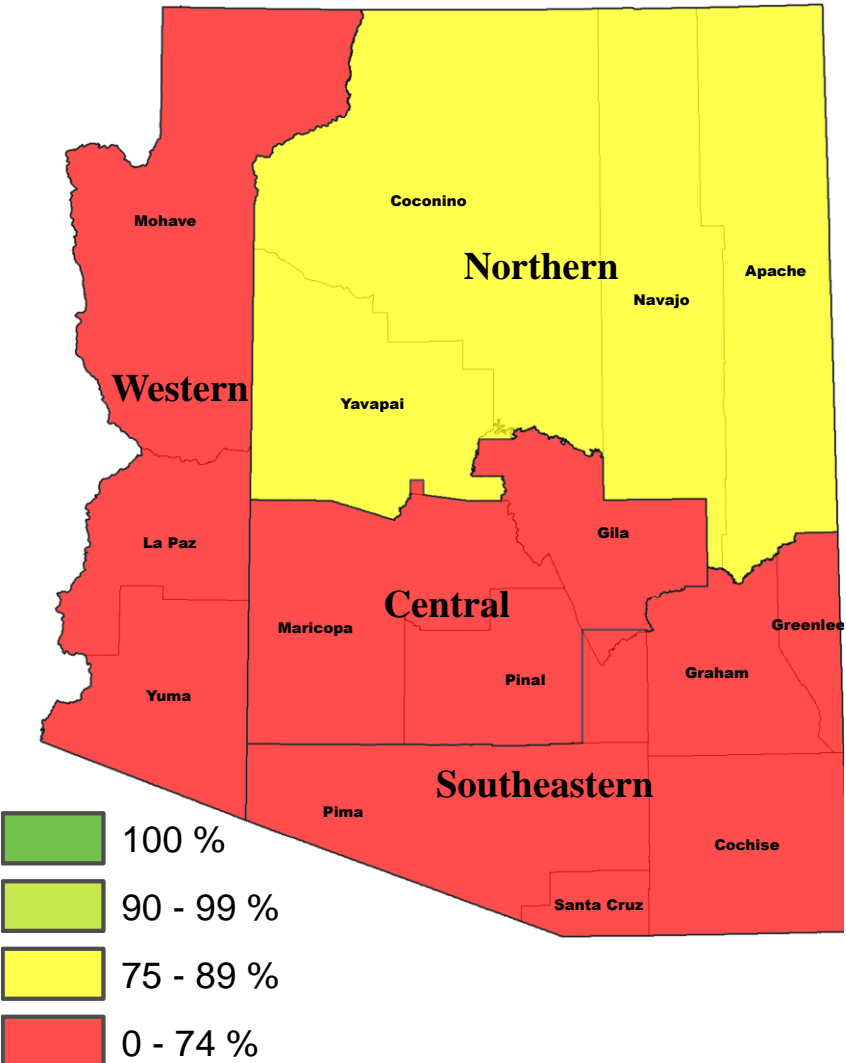
Region	Positive Response
Central (n = 34)	21%
Northern (n = 7)	29%
Southeastern (n = 10)	10%
Western (n = 5)	0%



# Antibiotic Stewardship: Facilities Meeting 3 Core Elements

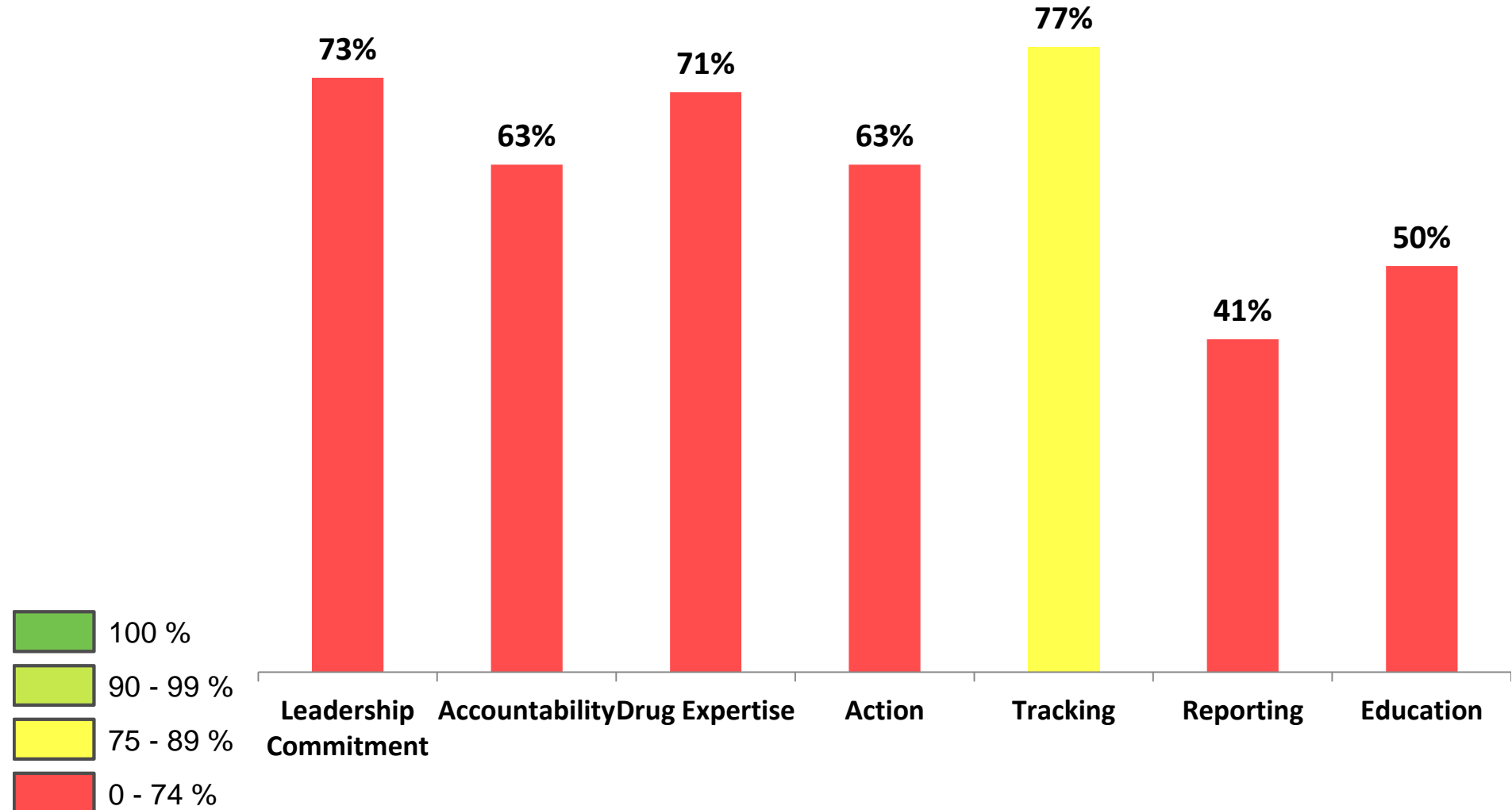
Met 3 core elements of ASP based on responses to questions regarding antibiotic stewardship.

**Arizona (n=56) : 71%**

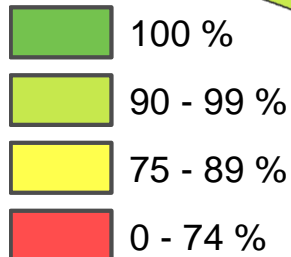


Region	Positive Response
Central (n = 34)	74%
Northern (n = 7)	86%
Southeastern (n = 10)	70%
Western (n = 5)	40%

# Summary of 7 Core Elements of ASP in Arizona



# Policies to Track Personnel Access to Controlled Substances



Does your facility have policies and procedures to track personnel access to controlled substances to prevent narcotics theft/drug diversion?

**Arizona (n=56) : 96%**

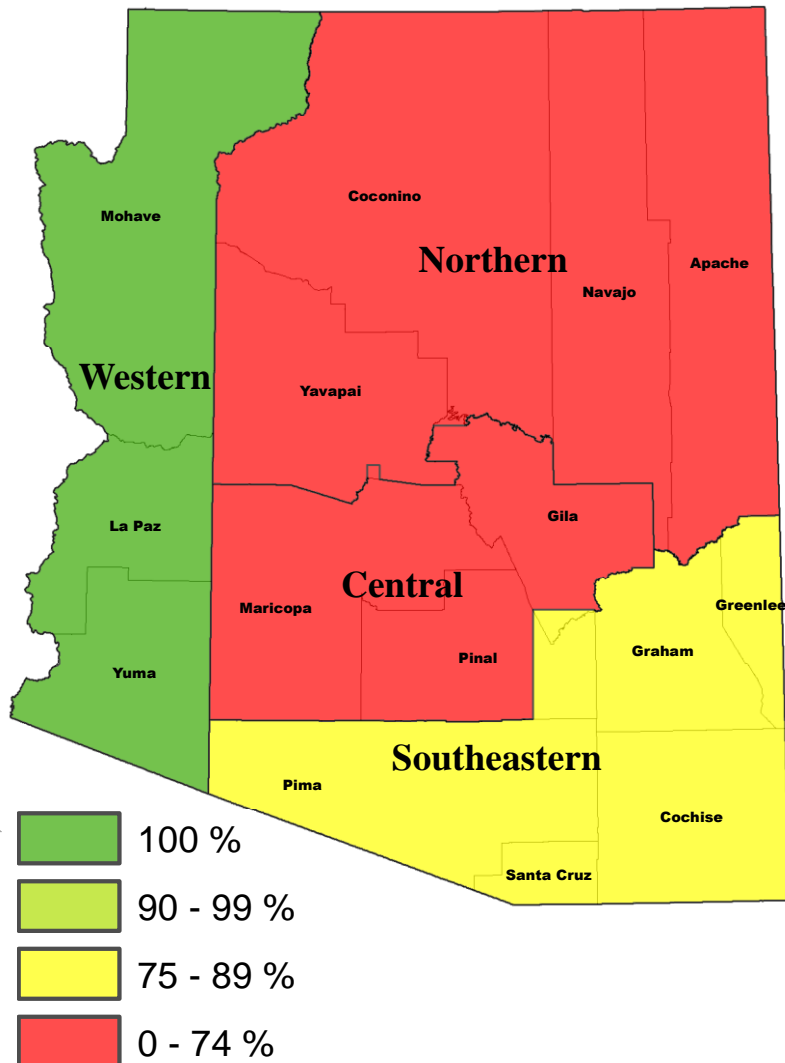
Region	Positive Response
Central (n = 34)	97%
Northern (n = 7)	100%
Southeastern (n = 10)	90%
Western (n = 5)	100%

# Drug Diversion Reporting

Reported To	Arizona	Central	Northern	Southeastern	Western
Supervisor	96%	88%	100%	100%	100%
State Health Department	46%	44%	86%	20%	60%
Corresponding Professional Entity	77%	73%	100%	80%	60%
Local Health Department	14%	6%	43%	10%	20%
Law Enforcement	59%	56%	86%	50%	60%
Adult Protective Services	18%	11%	14%	20%	20%

Note: Respondents marked all that apply

# Access to Pharmacist



Does your facility have access to a pharmacist?

Arizona (n=56) : 61%

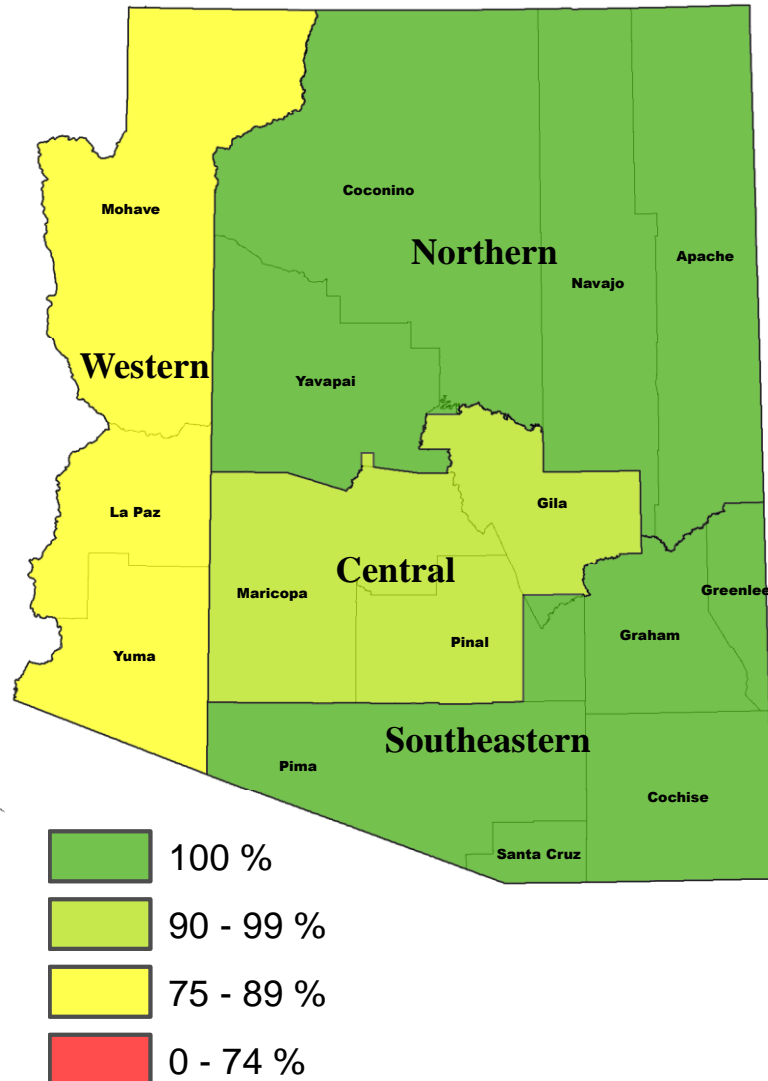
Region	Positive Response Percent
Central (n = 34)	62
Northern (n = 7)	57
Southeastern (n = 10)	80
Western (n = 5)	100

# Monitor Incidence of Targeted HAIs

In addition to reporting to public health, does your facility have a surveillance program to monitor incidence of epidemiologically-important organisms (e.g. MRSA, CDI) and targeted healthcare-associated infections?

**Arizona (n=56) : 93%**

Region	Positive Response
Central (n = 34)	91%
Northern (n = 7)	100%
Southeastern (n = 10)	100%
Western (n = 5)	80%



# Summary of Core Concepts by Region

Core Element	Arizona	Central	Northern	Southeastern	Western
IPC training	66%	71%	71%	40%	80%
Fiscal support for IPC	39%	35%	57%	20%	80%
Outbreak reporting	93%	91%	86%	100%	100%
Competency-based training for hand hygiene	88%	88%	86%	100%	100%
Mandatory flu vaccination	32%	32%	43%	30%	20%
Pharmacist	61%	62%	57%	80%	100%
Track personnel access to controlled substances	96%	97%	100%	90%	100%
3 core elements of ASP	71%	74%	86%	70%	40%
Competency-based training for environmental cleaning	61%	59%	57%	70%	60%
Monitor HAIs	93%	91%	100%	100%	80%

# Conclusions

- After analyzing the 10 Core Concepts, the following areas were categorized as:

## **Successes**

- Outbreak reporting to public health
- Policies to track personnel access to controlled substances
- Monitor incidence of targeted HAIs

## **Targeted for interventions:**

- Training in infection control
- Core elements of ASP
- Competency-based training for environmental cleaning



# THANK YOU

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