

# HEALTHCARE ASSOCIATED INFECTIONS — STATE, COUNTY, AND FACILITY PERSPECTIVES



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# Outline



- ❑ Infection Prevention and Control Advisory Committee
- ❑ ADHS HAI Program
- ❑ Outbreak Reporting
- ❑ HAI Reporting

**INFECTION PREVENTION  
AND CONTROL  
ADVISORY COMMITTEE**



**BACKGROUND AND  
RECOMMENDATIONS**

# Infection Prevention and Control Advisory Committee



- ❑ **Senate Bill 1356**
- ❑ **Established a multidisciplinary committee**
- ❑ **Tasked with recommending:**
  - ❑ **Best practices for preventing and controlling healthcare and community acquired infections**
  - ❑ **Components of community infection prevention education campaign**
  - ❑ **Determining if additional infection reporting is necessary to improve patient safety and health outcomes**
- ❑ **By December 31, 2009**

# Committee Activities



- ❑ Reviewed guidelines on healthcare associated infection (HAI) prevention from professional associations and government agencies
- ❑ Reviewed federal and state legislation regarding HAI reporting in over 20 states and current legislative activity in Arizona
- ❑ Talked with national and state HAI experts in other states
- ❑ Reviewed available tools for community HAI education programs

# Summary of Committee Recommendations



- ❑ ADHS to establish a voluntary, ongoing, state-wide multi-disciplinary advisory committee on infection prevention and control
- ❑ Healthcare facilities support robust infection prevention and control performance improvement programs based on evidence-based practices
- ❑ Public and provider education campaigns about vaccine preventable diseases, vaccines, & antibiotic use in both community and healthcare settings
- ❑ No additional HAI or community infection reporting

# ADHS HAI PROGRAM



## **CURRENT ACTIVITIES**

# HAI Program Establishment



- ❑ In September 2009, Arizona received ARRA funds to support development of an HAI program
- ❑ Requirement for state HAI plan creation
  - ❑ Development and enhancement of HAI program infrastructure
  - ❑ Surveillance, detection, reporting, and response
  - ❑ Prevention
  - ❑ Evaluation, oversight, and communication

# HAI Advisory Committee



## Representatives from:

- ❑ state and local health departments
- ❑ acute care hospitals – IPs, ID doctors and pharmacists, environmental services
- ❑ long term care and assisted living
- ❑ hospice and home health
- ❑ dialysis centers
- ❑ ambulatory surgery centers
- ❑ Arizona Rural Health Office
- ❑ Association for Professionals in Infection Control and Epidemiology (APIC)
- ❑ Health Services Advisory Group (HSAG)
- ❑ Arizona Hospital and Healthcare Association (AzHHA)
- ❑ Arizona Health Care Association (AHCA)
- ❑ Aging Services of Arizona
- ❑ Arizona Ambulatory Surgery Center Association
- ❑ Arizona Infectious Disease Society (ARIDS)
- ❑ Blue Cross Blue Shield

# HAI Advisory Committee - Subcommittees



## ❑ Prevention Strategies

- ❑ Evaluate current prevention strategies utilized by Arizona healthcare facilities
- ❑ Create a toolkit that synthesizes HAI prevention evidence for facilities across the healthcare continuum

## ❑ Provider Education

- ❑ Develop an educational series to educate healthcare providers about appropriate antibiotic use
- ❑ Compile a panel of experts to provide information, best practices for stewardship, and technical assistance to healthcare facilities

# HAI Advisory Committee - Subcommittees



## ❑ Public Education

- ❑ Create a public education campaign to roll out during International Infection Prevention week (October 17<sup>th</sup>-23<sup>rd</sup>)

## ❑ Surveillance

- ❑ Improve knowledge base of HAI surveillance activities across the healthcare continuum
- ❑ Encourage and support voluntary use of CDC's National Healthcare Safety Network (NHSN)

# ADHS HAI Website



[www.azdhs.gov/phs/oids/hai](http://www.azdhs.gov/phs/oids/hai)

- ❑ General information for the public
- ❑ Prevention recommendations for healthcare providers
- ❑ Resources for HAI surveillance and outbreak investigation
- ❑ Links to hospital performance data
- ❑ State HAI plan and progress reports

The screenshot shows the ADHS HAI website homepage. At the top, there is a navigation bar with the Arizona Department of Health Services logo, the slogan "Leadership for a Healthy Arizona", and the text "Arizona Department of Health Services". To the right is the "AZ.GOV" logo and a search bar. Below the navigation bar is a main content area with a sidebar on the left and a main content area on the right. The sidebar contains links to "Office Home Page", "HAI Home Page", "Arizona HAI Plan", "Infection Prevention and Control Advisory Committee", "General Information", "HAI Prevention Strategies", "HAI Surveillance and Investigation", and "Hospital Performance". The main content area features the "Office of Infectious Disease Services" header, followed by a paragraph about ADHS's commitment to supporting and enhancing ongoing HAI prevention efforts. Below this are four highlighted sections: "General Information" (Background information and FAQs on healthcare-associated infections and antibiotic resistance), "HAI Prevention Strategies" (Infection control guidelines and evidence based strategies for HAI prevention), "HAI Surveillance and Investigation" (Resources for HAI surveillance and investigation), and "Hospital Performance" (Learn about quality of care provided in Arizona hospitals). At the bottom, there is a paragraph about the Healthcare-Associated Infection and Antibiotic Resistance program, which is responsible for monitoring, controlling and preventing healthcare-associated infections (HAI) including bloodstream infections, surgical site infections, and HAI-causing organisms (e.g., methicillin-resistant *Staphylococcus aureus*). In addition, the program monitors bacterial infections that are resistant to antibiotics and provides education about appropriate use of antibiotics to health care providers and the public. The program:

# NATIONAL HEALTHCARE SAFETY NETWORK (NHSN)



## FIRST STATE SPECIFIC HAI SUMMARY REPORT

# NHSN State Summary Report



- ❑ CDC's first report of state-specific NHSN data – January-June 2009
- ❑ CLABSIs only – future reports will present other HAIs
- ❑ Only includes states with mandatory CLABSI reporting to NHSN (N=18) – Arizona not included
- ❑ Presents the SIR (standardized infection ratio) as a summary statistic
  - ❑ Compares observed number of HAI events with the baseline national experience of facilities within the same risk category (based on patient location)
  - ❑ Referent period – January 2006-December 2008
- ❑ Report shows an 18% CLABSI decrease

# OUTBREAK REPORTING



## **BENEFITS AND BARRIERS**

# Determination of an Outbreak



- ❑ First Step in Outbreak Investigation is determining existence of an outbreak
- ❑ Can be as simple as 1 case of a communicable disease, unusual organism or situation over and above what is normally seen
- ❑ Second step in process is contacting internal experts/resources to help define a case, develop initial action steps and to decide on notification of county and state to seek assistance and guidance with the issue

# Reporting Requirements



- ❑ Reportable HAIs by healthcare providers & facilities
- ❑ Diseases listed by organism – not necessarily HA
  - ❑ Vancomycin resistant (or intermediate) *S. aureus*
  - ❑ Vancomycin resistant *S. epidermidis*
  - ❑ Vaccine preventable diseases
  - ❑ Zoonotic diseases
  - ❑ Bacterial GI diseases
  - ❑ Outbreaks of nausea, vomiting, or diarrhea
  - ❑ Emerging or exotic disease
  - ❑ <http://www.azdhs.gov/phs/oids/downloads/rptlist.pdf> for complete list of reportable diseases

# Barriers to Reporting



- ❑ Lack of knowledge about need to report, or who to report to
- ❑ Lack of identification of an outbreak
- ❑ Concern that reporting may “bring in the state”
- ❑ Consideration for reporting may get lost in the process of internal steps for outbreak control and may be an “after thought” far into the process
- ❑ Thinking that someone else is responsible to report (i.e. lab)

# Benefits of Reporting



- ❑ Additional expert guidance and resources to help determine appropriate action steps and stop outbreak
- ❑ Investigation assistance
- ❑ Helps to link occurrence to other similar situations that may exist, allowing for identification of extensiveness of an outbreak (Public Health benefit)
- ❑ Public Relations asset/minimize scrutiny of those who may ask why you didn't report

# Process for Reporting Outbreaks in Arizona



- ❑ If outbreak has been determined, or in some cases, is suspected, reach organizational decision to report
- ❑ Contact your county health department
- ❑ County works with ADHS- PI and the organization to guide action planning and investigation
- ❑ County and ADHS-EPI work with ADHS Licensure if necessary to assure facility compliance
- ❑ Collaborative process to provide best outcome for patients and public health

# What is the County's role?



- ❑ Work with IPs to ensure all relevant information collected on which to base decisions
- ❑ Serve as “fresh ears” to assist with case identification, surveillance and/or finding source
- ❑ Recommend additional resources/personnel request
  - ❑ PFGE testing from Arizona State Laboratory
  - ❑ Additional personnel to assist with investigation
  - ❑ State may call CDC Epi-Aid
- ❑ Serve as liaison with ADHS epidemiology

# What is a CDC Epi-Aid?



- ❑ If additional resources are necessary, CDC Epidemiology assistance can be requested by the facility through ADHS
- ❑ A team of epidemiologists and sometimes laboratorians are deployed to your facility
  - ❑ Work with facility staff to perform a thorough investigation, usually including case-control or cohort studies
  - ❑ **KEEP A LOW PROFILE**
  - ❑ Often collect environmental samples - sent to CDC for testing
  - ❑ Stay days to months working 7 days/week – avg. 2 weeks
  - ❑ Provide a detailed report of investigation, findings, and recommendations

# Examples of Outbreak Reporting



- ❑ Legionella Experience- Possible or Known HAI  
Legionella case identified
- ❑ Device associated Outbreak/Pseudo-Outbreak
- ❑ Public Health determines existence of a  
geographical outbreak (Measles, Pertussis)

# Examples of CDC Epi-Aids in Arizona



- ❑ MDR-Acinetobacter outbreak associated with contaminated portable X-ray machine
- ❑ Pseudo-outbreak of Legionella associated with contaminated bronchoscope
- ❑ Outbreak of Aspergillus possibly associated with new facility construction

# Hospital Associated Infections (HAI) Reporting



**NHSN**

**NATIONAL HEALTHCARE  
SAFETY NETWORK**

# What is NHSN?



- ❑ CDC database for adverse events and HAI reporting
- ❑ Formerly known as NNIS
- ❑ Module based system capable of accepting HAI case information related to procedures, devices, MDROs, Antimicrobial Use, Personnel/Immunization data
- ❑ National benchmarks
- ❑ Database used by 19 + states for mandatory reporting
- ❑ Standardized HAI definitions

# Benefits of NHSN Reporting



- ❑ Increase numbers of submissions/submitters creates better benchmarking data
- ❑ Opportunity to refine definitions and modules
- ❑ Step toward increase transparency of data
- ❑ **CMS/NHSN Proposed IPPS Rule: Value Based Purchasing/Pay for Performance**

# Barriers to NHSN



- ❑ Resources needed to begin and maintain
- ❑ IT component
- ❑ Interfaces needed to avoid manual submission of data
- ❑ Question by some of whether submitting to NHSN improves care

# NHSN Next Steps



- ❑ CMS IPPS- P4P will bring NHSN to us!
- ❑ Not a matter of IF, but rather WHEN
- ❑ If an organization has not already investigated NHSN and resources at facility available to help IPs participate, you need to do so now
- ❑ If you have further questions and want a local contact, let us know. Az NHSN facilities are willing to help