



# Indiana State Department of Health

## Indiana Action Plan to Prevent Healthcare-Associated Infections and Antibiotic Resistance

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2018-2021

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## Vision

Improve patient safety by reducing the burden of antibiotic resistance and healthcare-associated infections within the state of Indiana.

## Mission

Conduct surveillance and provide timely outbreak response for antibiotic resistant and healthcare-associated infections.

Provide support and resources for antibiotic stewardship programs across Indiana.

Educate healthcare workers, public health professionals, and the public about antibiotic resistance, antibiotic stewardship, and healthcare-associated infections.

Facilitate relationship building between and collaboration among state partners to create a stronger and more prepared Hoosier healthcare and public health community.

## Strategic Priorities

The state of Indiana plays a critical role in the national movement to eliminate healthcare-associated infections (HAIs) and combat antibiotic resistance (AR). To accomplish this mission, the Indiana State Department of Health (ISDH) will partner with healthcare facilities in acute care, long-term care, and ambulatory care settings to address three strategic priorities to better prevent AR and HAIs, and to encourage antibiotic stewardship (AS). The following action plan is structured as follows:

- Infrastructure and Procedures: Develop subject matter expertise and implement standardized response procedures focused on evidence-based policies and practices.
- Reporting, Surveillance, and Response: Strengthen surveillance systems, reporting infrastructure, and response for HAI/AR/AS.
- Communication and Education: Enhance communication and education regarding AR, AS, and HAIs among healthcare workers, public health professionals, and the community.

## Priority Area A: Infrastructure and Procedures

Develop subject matter expertise and implement standardized response procedures focused on evidence-based policies and practices

### **Objective 1.1 Establish an HAI and AR surveillance prevention and control program**

#### 1.1.1 HAI/AR/AS program

- Develop and maintain dedicated, trained staff to oversee HAI/AR/AS activities
- Coordinate state HAI prevention activities
- Collaborate with state partners and organizations
- Provide consultation and guidance regarding HAI/AR/AS to healthcare workers, public health professionals, and the community
- Conduct HAI/AR surveillance and investigation
- Provide consultation and guidance to the HAI/AR program regarding laboratory testing results, emerging trends, and testing limitations
- Develop and implement an effective laboratory AR testing program at the ISDH Laboratories (ISDHL)

1.1.2 Pursue continuing education opportunities, certifications, and national conference submissions to improve subject matter expertise

### **Objective 1.2 Foster and empower statewide committees to combat HAIs and AR in our communities**

1.2.1 Establish a multidisciplinary AS Steering Committee to provide direction, guidance, and prioritization for key issues surrounding HAI/AR in Indiana

1.2.2 Develop workgroups within the WISE Advisory Committee that target identified needs, shared experiences, and best practices

### **Objective 1.3 Provide timely testing for HAI/AR pathogens of public health importance in Indiana**

1.3.1 Harmonize ISDH practices with the Antibiotic Resistance Laboratory Network (ARLN) to ensure same-practice in all 50 states

1.3.2 Implement new testing and technologies as they become available to prepare for emerging threats

1.3.3 Work with stakeholders in other disciplines (e.g. chemistry, animal health) to identify and remove shortfalls in One Health HAI/AR testing within Indiana

### **Objective 1.4 Develop response procedures for infection control breaches, cases, clusters, and outbreaks**

1.4.1 Identify and define stakeholder relationships, roles, and responsibilities in preparation for and during outbreak response

1.4.2 Build coordination among stakeholders that share responsibility for surveillance, prevention, and containment

1.4.3 Establish alert values that trigger a public health intervention

1.4.4 Create protocols to standardize HAI/AR assessment and response

## Priority Area B: Reporting, Surveillance, and Response

### Strengthen surveillance systems, reporting infrastructure, and response for HAI/AR/AS

#### **Objective 2.1 Align statewide data and technology standards with national standards for HAI/AR/AS tracking**

2.1.1 Use NHSN for routine HAI/AR/AS tracking

2.1.2 Develop metrics to measure progress toward national standards and goals

- Reduce central line-associated bloodstream infections (CLABSI) in intensive care units and ward-located patients
- Reduce catheter-associated urinary tract infections (CAUTI) in intensive care units and ward-located patients
- Reduce the incidence of invasive healthcare-associated methicillin-resistant *Staphylococcus aureus* (MRSA) infections
- Reduce hospital-onset MRSA bloodstream infections
- Reduce hospital-onset *Clostridium difficile* infections (CDI)
- Reduce the rate of *Clostridium difficile* hospitalizations
- Reduce surgical site infections (SSI)

#### **Objective 2.2 Use NHSN data to identify targeted prevention programs**

2.2.1 Annually determine the top two priority prevention targets using NHSN surveillance data

2.2.2 Create targeted interventions to address priority needs

#### **Objective 2.3 Increase public health action by expanding AR surveillance**

2.3.1 Expand reporting of AR organisms to NHSN to meet national standards

2.3.2 Update AR surveillance reporting requirements to include emerging pathogens and align with current CDC nationally notifiable conditions

#### **Objective 2.4 Assist and facilitate advancement of healthcare facilities toward statewide AS goals**

2.4.1 Work with inpatient facilities to meet 2020 goals

2.4.2 Support improvement of stewardship programs in long-term care facilities

2.4.3 Assist outpatient facilities in establishing stewardship programs

#### **Objective 2.5 Strengthen and expand the HAI/AR outbreak surveillance system infrastructure across acute care, non-acute care, and community settings**

2.5.1 Enhance current surveillance systems to detect outbreaks and clusters

2.5.2 Implement data use agreements and updated reporting rules for enhanced data capture

2.5.3 Assist healthcare facilities to optimize their use of surveillance systems

#### **Objective 2.6 Provide timely reporting to clinical laboratories and public health partners for HAI/AR pathogens of public health importance**

2.6.1 Harmonize ISDH reporting practices with the ARLN and other national standards to ensure same-practice in all 50 states

2.6.2 Implement reporting mechanisms for new tests and technologies to prepare for emerging threats

#### **Objective 2.7 Use established protocols for timely response to HAI/AR outbreaks and clusters**

2.7.1 Apply cluster detection to implement use of assessment tools and response procedures

2.7.2 Provide technical and onsite assistance

#### **Objective 2.8 Develop data reports to assess statewide and facility-specific trends**

2.8.1 Improve the quarterly reporting process of facilities for data utilization in infection prevention and control practices

2.8.2 Use the Targeted Assessment for Prevention (TAP) Strategy for quality improvement efforts in facilities with higher burdens of HAIs

2.8.3 Create reports from NHSN data for cluster identification

#### **Objective 2.9 Evaluate trends in antibiotic prescribing through collaboration with partners**

2.9.1 Establish antibiotic use and resistance baselines

2.9.2 Use antibiotic use and/or resistance data to develop targeted, timely interventions

## Priority Area C: Communication and Education

Enhance communication and education regarding AR, AS, and HAIs among healthcare workers, public health professionals, and the community

### **Objective 3.1 Provide education to healthcare workers and providers**

3.1.1 Provide technical assistance and tools to improve best practices for the integration of the Core Elements, appropriate antibiotic use, the reduction of HAIs, and the response to MDROs

3.1.2 Promote appropriate antibiotic use through application of audit and feedback strategies

3.1.3 Establish standardized guidance for use in contact isolation policy for patients colonized or infected with drug-resistant pathogens

3.1.4 Implement statewide protocols for identification of clusters or outbreaks

3.1.5 Develop and use educational tools to encourage colonization screening

3.1.6 Provide updated education on the Communicable Disease Reporting Rule and the Hospital Rule requirements

### **Objective 3.2 Provide education to the general public**

3.2.1 Provide education regarding AR and appropriate antibiotic use, including the promotion of U.S. Antibiotic Awareness Week

3.2.2 Evaluate changes in the public's knowledge, attitudes, and practices related to appropriate antibiotic use for effective target efforts

3.2.3 Continue to use social media platforms while exploring additional avenues for educational campaigns

3.2.4 Develop a mechanism for providing consumer access to useful healthcare quality measures

### **Objective 3.3 Provide HAI/AR laboratory training and technical support for priority needs by providing training and/or education for ISDH stakeholders**

3.3.1 Improve laboratory capacity to confirm emerging resistance in HAI/AR pathogens by providing hands-on training to laboratorians in a wet-workshop format

3.3.2 Improve clinical laboratory knowledge of emerging resistance threats through webinars and/or clinical microbiology newsletters tailored to the identified needs of Indiana's clinical laboratories

3.3.3 Mobilize the regular exchange of information and sharing of best practices through the implementation of regional collaborations

### **Objective 3.4 Promote the improvement of inter-facility communication regarding HAI and AR patient status, outbreaks, and infection control breaches**

3.4.1 Develop standard reporting criteria for HAIs that are not reported through NHSN

3.4.2 Establish and promote inter-facility communication protocols for use during patient transfer

### **Objective 3.5 Identify opportunities for collaborative projects with stakeholders**

3.5.1 Explore the possibility of sharing data with the Indiana Hospital Association and QSource

3.5.2 Use existing data to plan regional facility collaborative efforts

3.5.3 Use collaborative efforts to promote inter-facility communication and mentorship