CORHA

Council for Outbreak Response:

Healthcare-Associated Infections

Antibiotic-Resistant Pathogens

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CORHA Governance Committee Member
Spring SHEA Meeting
April 18, 2018
Updated May 2018 by CORHA Staff

Problem

Despite significant progress, patients still experience preventable harms in the context of outbreaks and other adverse events that stem from emerging infectious diseases with potential for healthcare transmission, unsafe healthcare practices, contaminated drugs, and medical devices

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# Outbreak Investigation and Response Activities

- Core function, central to patient safety and health protections

- Outbreaks and other adverse event investigations in healthcare
  - Identify unsafe products and practices
  - Inform and motivate broader HAI/AR prevention efforts

- Public health, regulatory and healthcare partners: roles and responsibilities

- Variable capacities for detecting and responding to possible HAI/AR outbreaks in healthcare settings
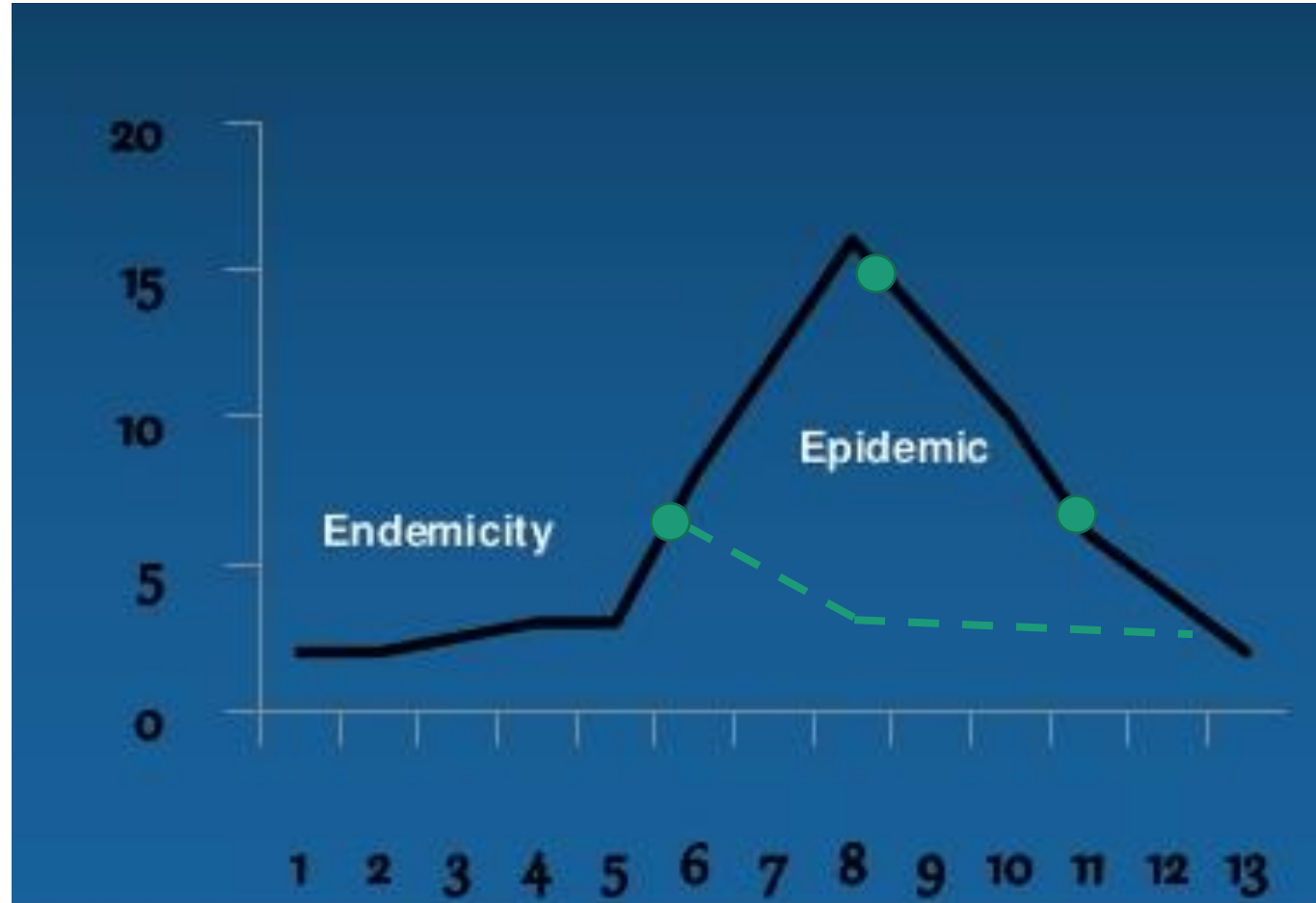 - Health Department, Facility, and Laboratory levels

Need

More systematic and consistent approach to healthcare outbreak response, from signal detection to investigation and control

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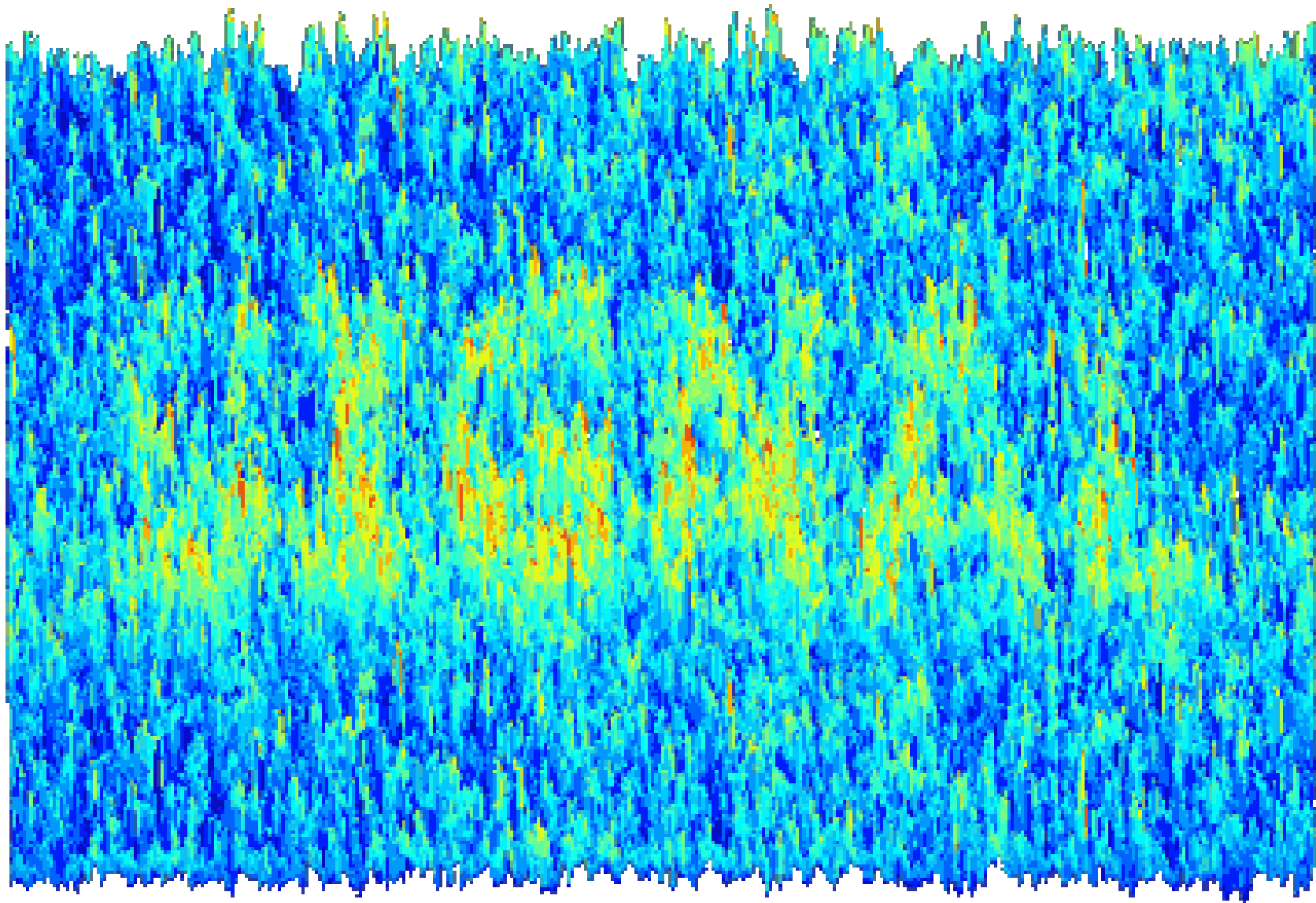
Basic Tenet: sooner we become aware of a potential problem, the more opportunity to attenuate harms

A Useful Mantra

- Sooner
- Faster
- Better
- Smaller

A Useful Mantra

- **Sooner** – can we do a better job of detecting and communicating signals that might represent an uncontrolled or unacceptable risk to patients – one that could take the form of an outbreak

- **Faster** – can we respond to those signals more quickly

- **Better** – can we do a better job assessing the situation and implementing any necessary controls or actions

- **Smaller** – can we reduce impacts and harms using this type of proactive approach

What do we mean by "Response" in the context of HAIs and AR Threats?

Response refers to efforts to assist with assessment and investigation of specific, acute HAI/AR risks.

These risks can take various forms:
  (1) outbreaks
  (2) clusters of infections
  (3) sentinel cases (e.g., HAI or emerging AR threat), or
  (4) a serious breach in infection control practice

HAI/AR Response Activities – Investigation Goals and Activities

Investigation goals

- Rule out larger problem
- Rule out uncontrolled risk

Investigation activities

- Case finding
- Assessments of infections control and care delivery practices
- Evaluate transmission potential/mechanisms
- Implement control measures

Guiding Principles

Commitments to:

Swift actions
- Identify cause
- Contain threat
- Prevent harm

Diligent follow through
- Communicate actions/findings
  - key stakeholders
  - timely
- Apply findings and lessons
- System improvements
  - prevent recurrence
  - increase vigilance

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CORHA Formation

CDC's Division of Healthcare Quality Promotion funded the Association of State and Territorial Health Officials (ASTHO) and the Council of State and Territorial Epidemiologists (CSTE) to co-lead the Council for Outbreak Response: HAI/AR (CORHA)

Council for Outbreak Response:
Healthcare-Associated Infections & Antibiotic-Resistant Pathogens

Mission

To **improve practices and policies** at the local, state and national levels for **detection, investigation, control and prevention of HAI/AR outbreaks across the healthcare continuum**, including emerging infections and other risks with potential for healthcare transmission.

Vision

Public health and healthcare collaborating effectively to **protect patients and prevent harms from HAI/AR outbreaks**.

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CORHA Structure

ASTHO
Gerd Clabaugh, Iowa

CSTE
Marion Kainer, Tennessee

CDC
Joe Perz, CDC/DHQP

NACCHO
Dawn Terashita, Los Angeles County

Governance Committee

SHEA

APIC

APHL

CMS

FDA

Member Organizations
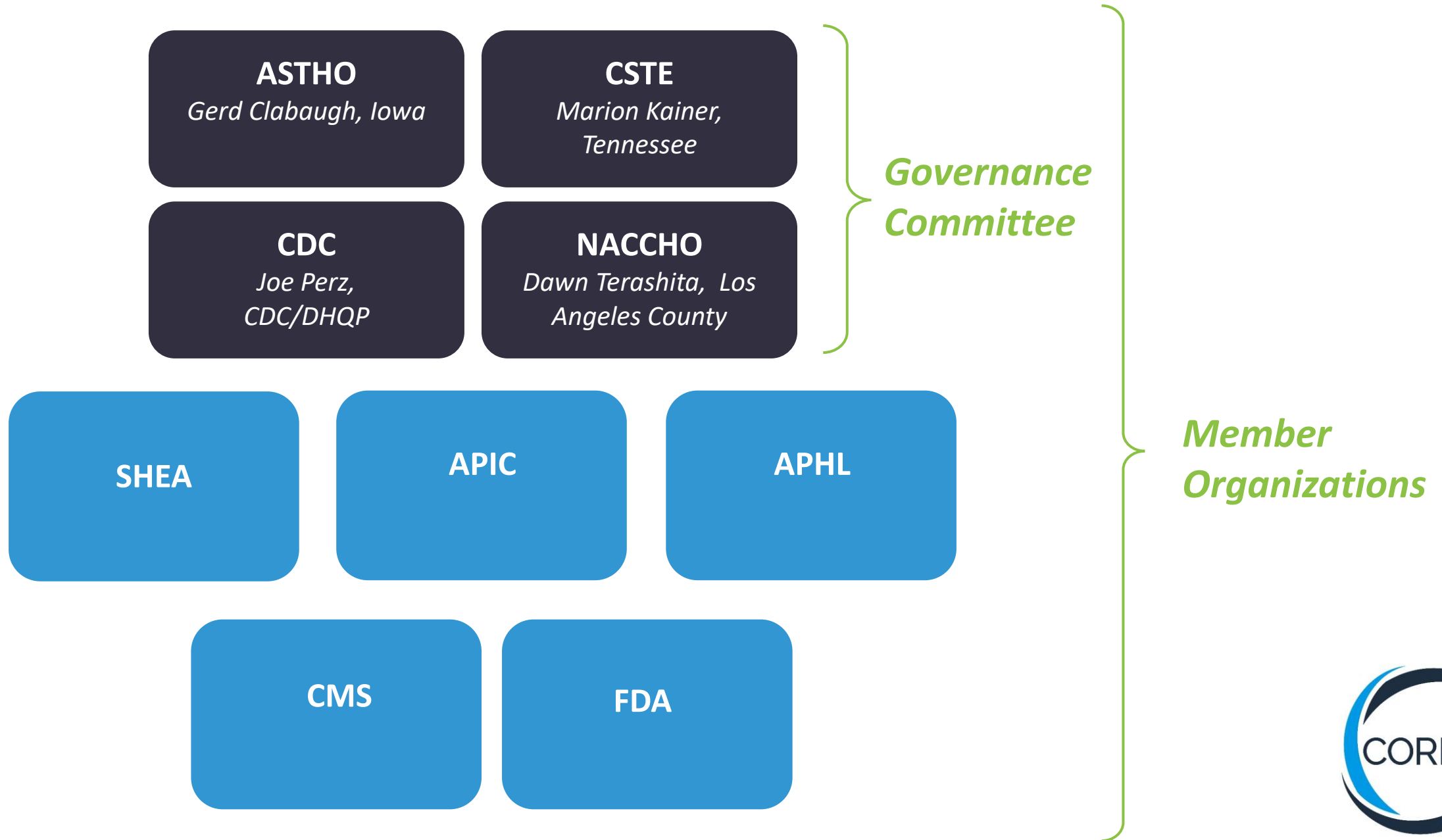
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CORHA Product Offerings

- **Suite of condition or event-specific reference tools**

  - Threshold for reporting and investigation

  - Suggestions on how to improve reporting

  - Suggestions on how to improve the use of existing surveillance data for detection

  - Tools for investigation

  - Suggestions for standardized control measures

- **Completed prototype for Scabies**

- **Other examples in pipeline include *C. auris*, CRE, CDI, NTM**

CORHA Product Offerings

- **Searchable clearinghouse**

  - HAI/AR outbreak response abstracts from select annual meetings

  - Investigation tools and resources

  - Users will be able to submit materials for consideration
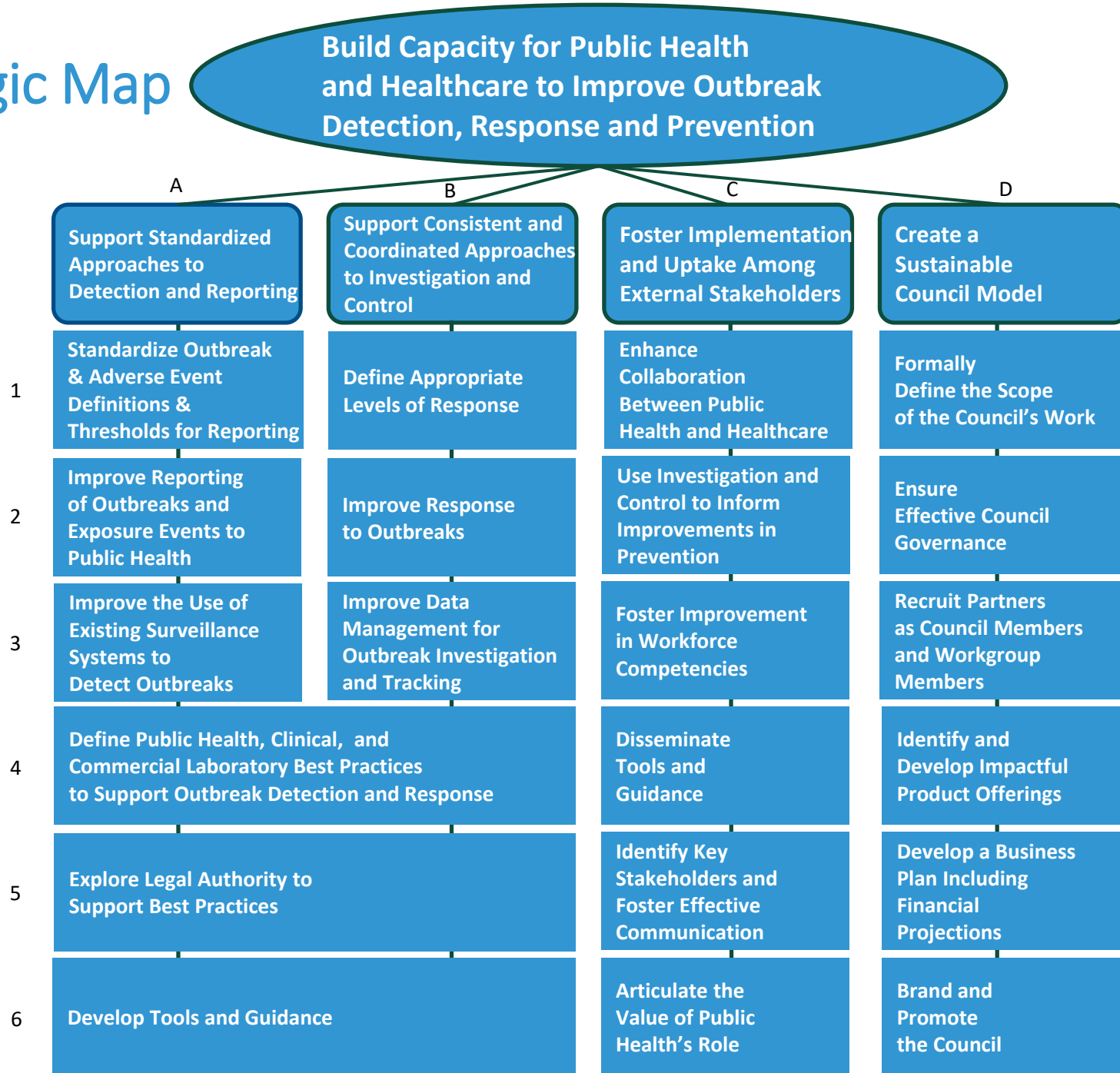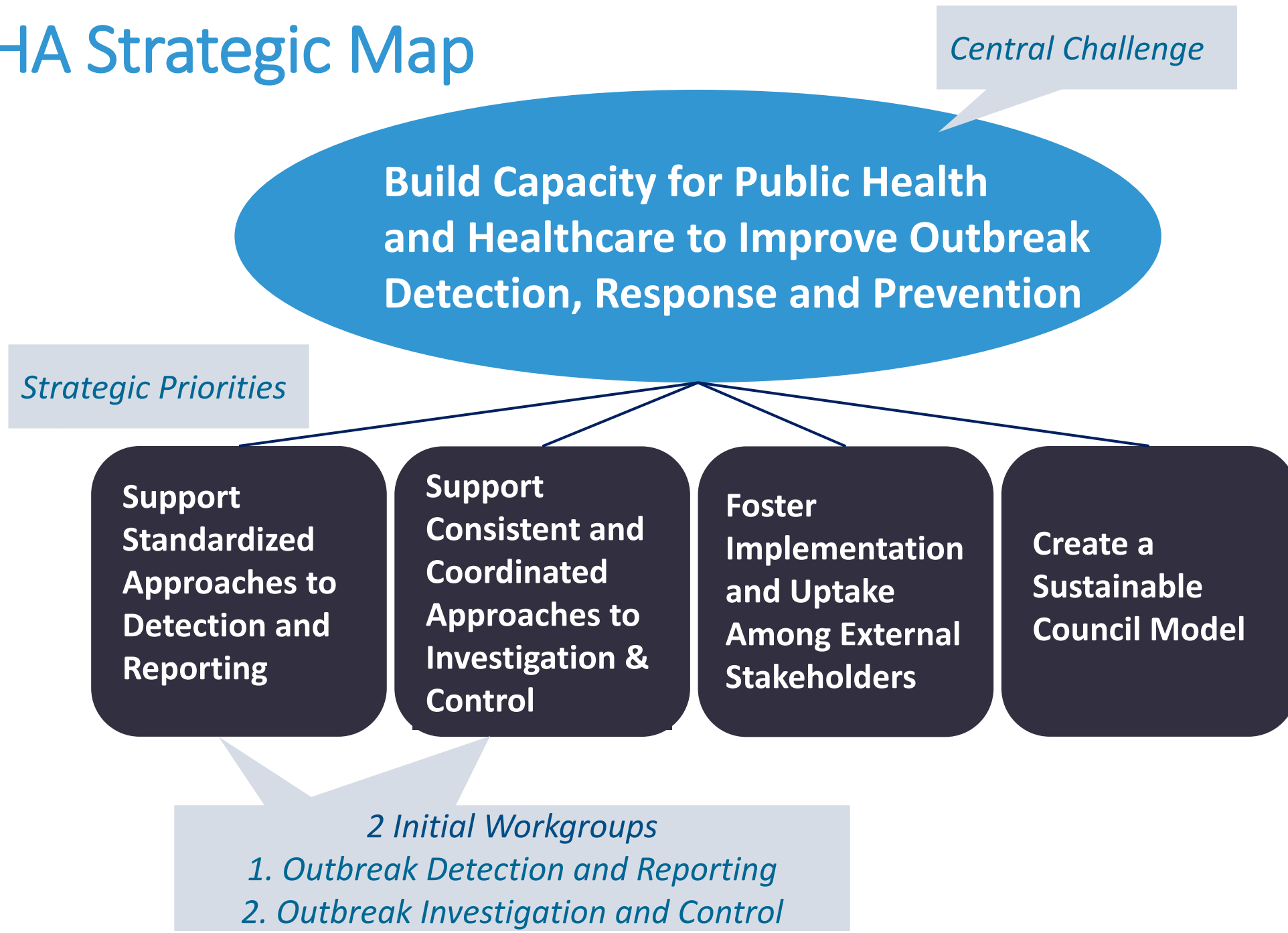
CORHA Product Offerings

- **High-level guidance related to strategic objectives**

  - E.g., Best practices for improve detection of potential outbreaks using existing data sources

  - E.g., Laboratory best practices to support outbreak detection and investigations

  - E.g., Suggestions for improving data management for outbreak investigation and response activity tracking
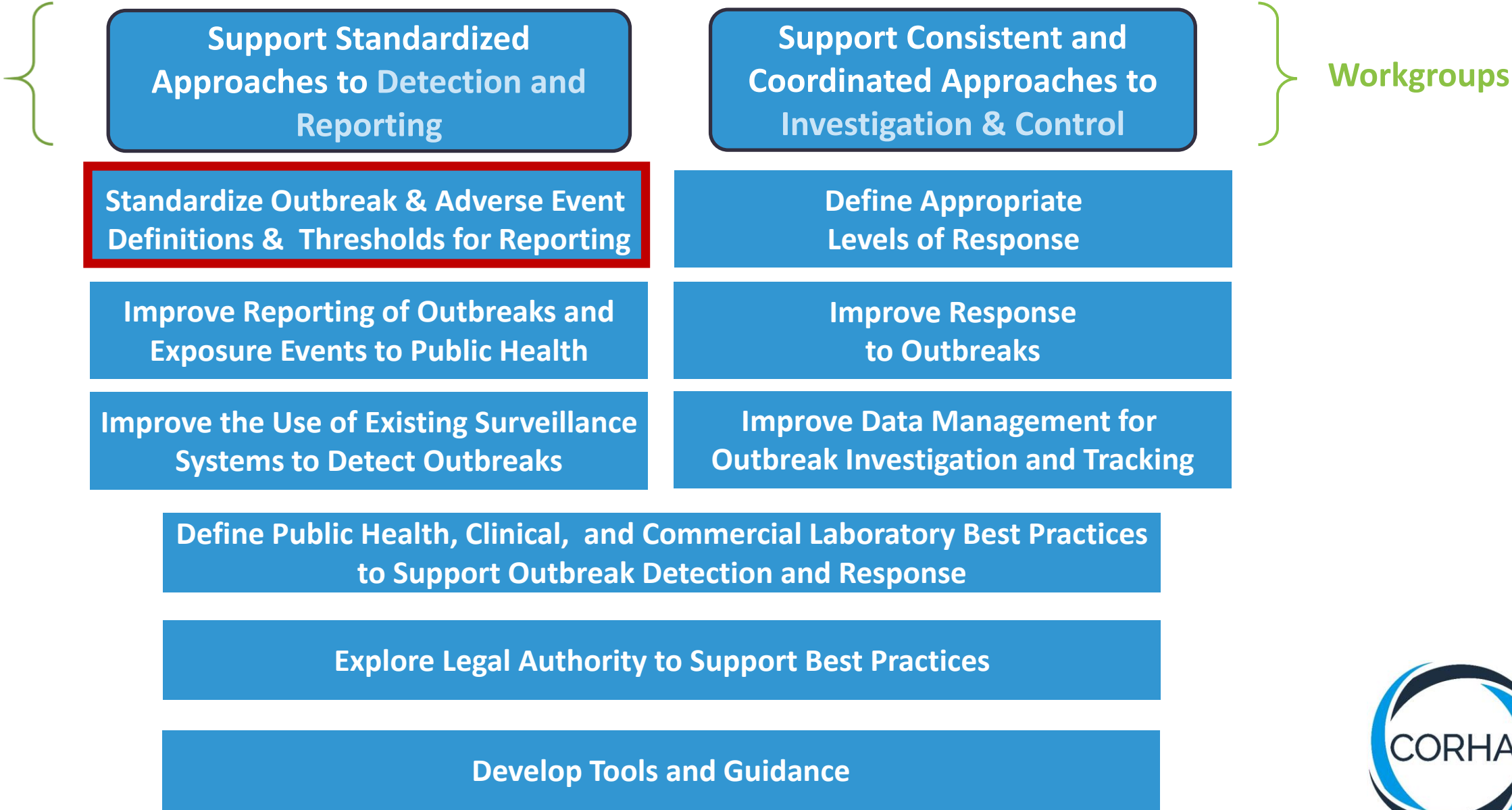
CORHA Strategic Map

Build Capacity for Public Health and Healthcare to Improve Outbreak Detection, Response and Prevention

	A — Support Standardized Approaches to Detection and Reporting	B — Support Consistent and Coordinated Approaches to Investigation and Control	C — Foster Implementation and Uptake Among External Stakeholders	D — Create a Sustainable Council Model
1	Standardize Outbreak & Adverse Event Definitions & Thresholds for Reporting	Define Appropriate Levels of Response	Enhance Collaboration Between Public Health and Healthcare	Formally Define the Scope of the Council's Work
2	Improve Reporting of Outbreaks and Exposure Events to Public Health	Improve Response to Outbreaks	Use Investigation and Control to Inform Improvements in Prevention	Ensure Effective Council Governance
3	Improve the Use of Existing Surveillance Systems to Detect Outbreaks	Improve Data Management for Outbreak Investigation and Tracking	Foster Improvement in Workforce Competencies	Recruit Partners as Council Members and Workgroup Members
4	Define Public Health, Clinical, and Commercial Laboratory Best Practices to Support Outbreak Detection and Response		Disseminate Tools and Guidance	Identify and Develop Impactful Product Offerings
5	Explore Legal Authority to Support Best Practices		Identify Key Stakeholders and Foster Effective Communication	Develop a Business Plan Including Financial Projections
6	Develop Tools and Guidance		Articulate the Value of Public Health's Role	Brand and Promote the Council

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CORHA Strategic Map

Build Capacity for Public Health and Healthcare to Improve Outbreak Detection, Response and Prevention

Strategic Priorities

Support Standardized Approaches to Detection and Reporting

Support Consistent and Coordinated Approaches to Investigation & Control

Foster Implementation and Uptake Among External Stakeholders

Create a Sustainable Council Model

2 Initial Workgroups
1. Outbreak Detection and Reporting
2. Outbreak Investigation and Control

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CORHA Strategic Map – Priorities A and B

Example – Serious Infection Control Breach Reporting Requirement

DEPARTMENT OF HEALTH & HUMAN SERVICES
Centers for Medicare & Medicaid Services
7500 Security Boulevard, Mail Stop C2-21-16
Baltimore, Maryland 21244-1850

CMS
CENTERS FOR MEDICARE & MEDICAID SERVICES

Center for Clinical Standards and Quality/Survey & Certification Group

Ref: S&C: 14-36-ALL
REVISED 10.28.16

DATE: May 30, 2014

TO: State Survey Agency Directors

FROM: Director
Survey and Certification Group

SUBJECT: Infection Control Breaches Which Warrant Referral to Public Health Authorities
Additional Information has been added to Breaches to Be Referred. This policy memorandum supersedes policy memorandum S&C: 14-36-ALL*

Memorandum Summary

- *Infection Control Breaches Warranting Referral to Public Health Authorities:* If State Survey Agencies (SAs) or Accrediting Organizations (AOs) identify any of the breaches of generally accepted infection control standards listed in this memorandum, they *must* refer them *as directed* to appropriate State authorities for public health assessment and management.

- Trigger for Reporting is clearly spelled out

- Includes reuse of injection equipment and breakdowns in reprocessing or sterilization

- Provides opportunity for health department to assess, assist and intervene

- Elevates these practices

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Breaches to Be Referred

When one or more infection control breaches, that could potentially expose patients to the blood or bodily fluids of another, are identified during any survey of a Medicare or Medicaid-certified provider/supplier, the SA or AO *must* make the appropriate State public health authority aware of the deficient practice. Examples of such infection control breaches *that must be reported* are unsafe injection practices and use of sharps, including:

- Using the same needle for more than one individual;

- Using the same syringe, pen or injection device (e.g. pre-filled, manufactured, insulin or any other *medication or biological*) for more than one individual;

- Re-using a needle or syringe which has already been used to administer medication *or a biological* to an individual, to subsequently enter a medication container (e.g., vial, bag), and then using contents from that medication container for another individual;

- Using the same lancing/fingerstick device for more than one individual, even if the lancet is changed.

The SA or AO should also refer other infection control breaches in addition to those described above if recommended by their State public health authorities or if they believe the breaches require public health assessment and management. Examples of such infection control breaches include, but are not limited to, the following:
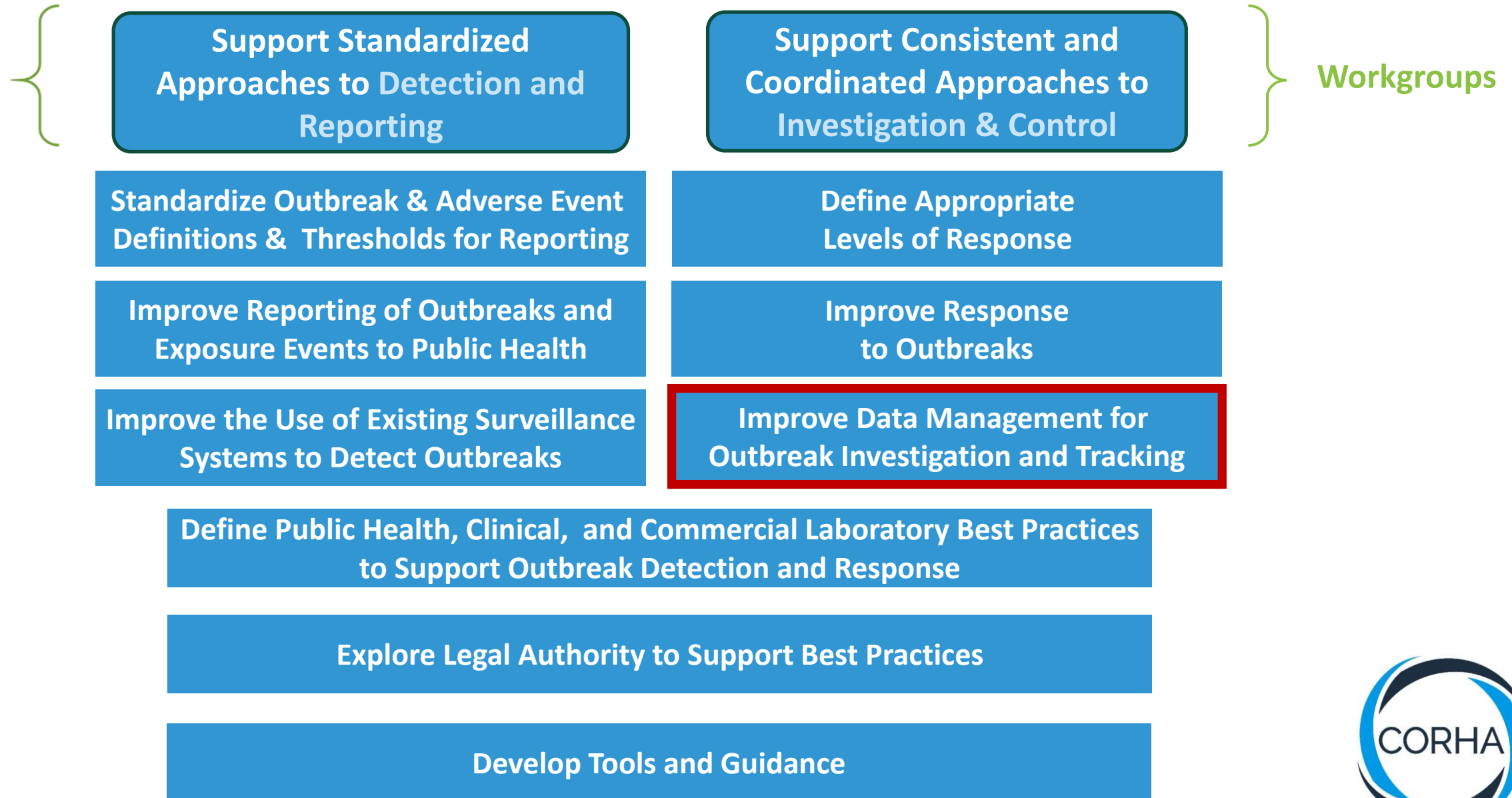
- *Improper cleaning and disinfection of endoscopy equipment; and,*

- *Improper cleaning and sterilization of surgical instruments.*

The CDC works closely with States on HAI prevention activities, and many States have designated HAI Prevention Coordinators.

CORHA Strategic Map – Priorities A and B

Support Standardized Approaches to Detection and Reporting

Support Consistent and Coordinated Approaches to Investigation & Control

Workgroups

Standardize Outbreak & Adverse Event Definitions & Thresholds for Reporting

Define Appropriate Levels of Response

Improve Reporting of Outbreaks and Exposure Events to Public Health

Improve Response to Outbreaks

Improve the Use of Existing Surveillance Systems to Detect Outbreaks

Improve Data Management for Outbreak Investigation and Tracking

Define Public Health, Clinical, and Commercial Laboratory Best Practices to Support Outbreak Detection and Response

Explore Legal Authority to Support Best Practices

Develop Tools and Guidance

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CORHA Response Activity Tracking System

- Developed to help health departments and large healthcare systems with tracking summary data from responses activities

- Builds on recent evaluation of health department HAI/AR program evaluation which showed high levels of Response Activity but variable approaches to recording, tracking and analyzing this information

- Materials include a sample database (provided in the form of a downloadable Microsoft Access file) and data dictionary

Response/Outbreak ID [ ]   (Please enter response ID first)

Status [▼]

Type of event/investigation [▼]

Intake Information

(Select date then add space
and enter time, e.g. 4:30pm)

Date/time public health contacted [ ]

Date/time public health investigation initiated [ ]

Date facility investigation initiatied [ ]

Source of report [▼]

Method of report [▼]

Name [ ]

Phone [ ]

Email [ ]

Description of situation when initially reported

[ ]

Epidemiological Investigation

Epidemiological investigation notes

[ ]

Public Health Contact Information

Lead investigator [ ]

Other health dept. staff involved and contact information

[ ]

Other agencies/departments involved

Agency/Dept.	[▼]
Name	[ ]
Phone	[ ]
Email	[ ]
Notes	[ ]

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Healthcare Facility Information

Facility setting	[▼]
Facility name	[▲▼]
Facility address	[ ]
Facility point(s) of contact	[ ]
Facility county	[▼]
Facility region	[▼]
Location within facility	[▼]
Facility bed count	[ ]

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Investigation method(s) ▾		Investigation resource(s) used ▾		Website link ▾
✱	▾	✱	▾	

Click to add resources and website links

Suspected source(s) of transmission ▾		Specify source ▾	Likely Source ▾
✱	▾		☐

Laboratory Testing

Laboratory notes

Pathogen(s) identified ▾	Resistance 1 ▾	Resistance 2 ▾	Resistance 3 ▾	
✱				

Sample Type ▾	Testing lab ▾	# Tested ▾	# Positive ▾	Surveillance? ▾	Molecular testing ▾	# Molecular testing ▾
✱ ▾				☐	☐	

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Control Measures

Number vaccinated [　　　]   Number receiving prophylaxis [　　　]

Control measure(s) implemented ▾
✳

Control measure(s) notes

[　　　　　　　　　　　　　　　　]

Resolution and Follow Up

Date closed [　　　　　]

Resolution notes

[　　　　　　　　　　　　　　　　]

Follow up notes

[　　　　　　　　　　　　　　　　]

Notifications

Notification type [　　　　　▾]

Notification date [　　　　　]

Number notified [　　　]

Testing performed ☐

Number tested [　　　]

Number of additional cases identified [　　　]
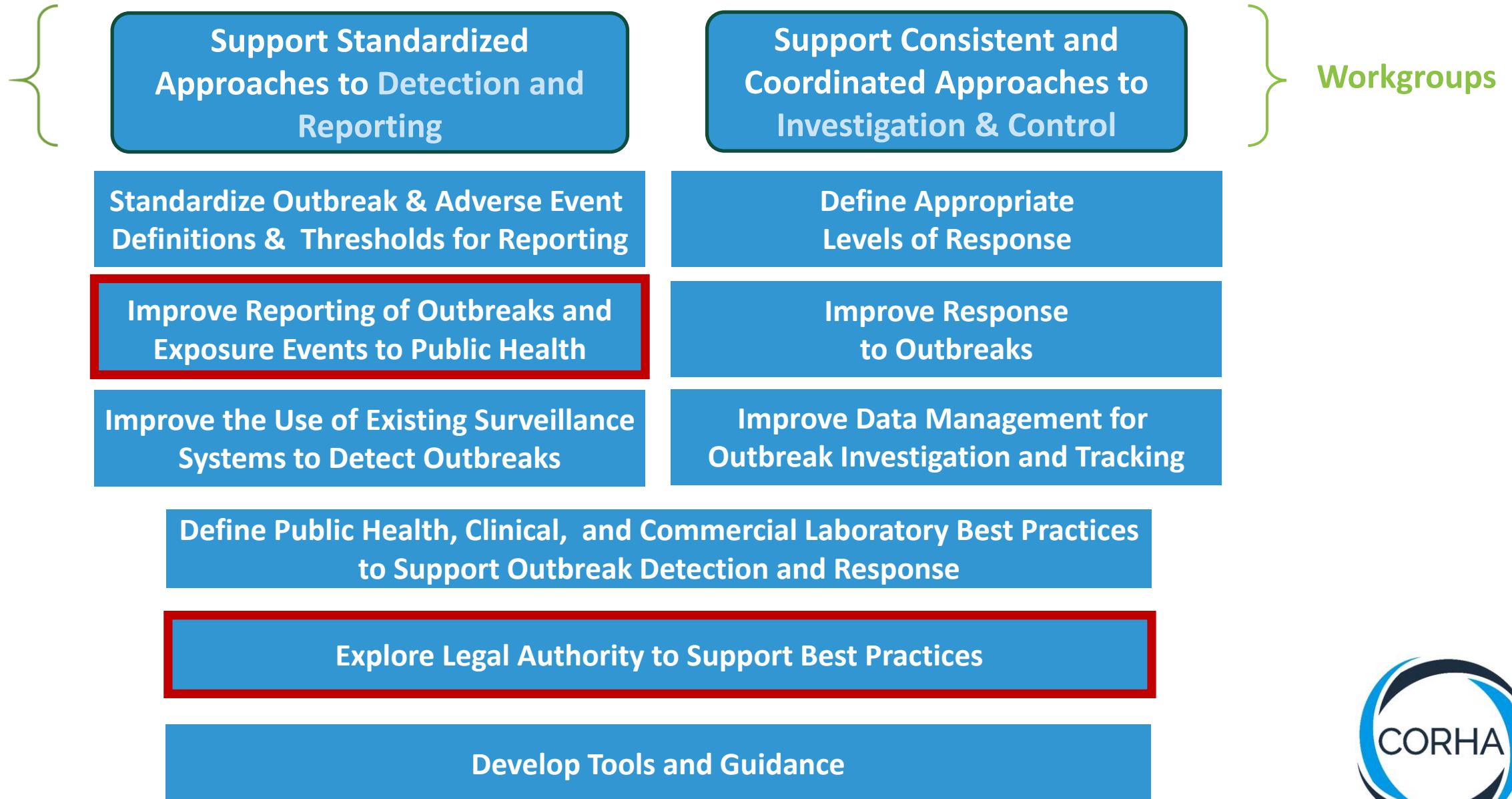
Notification details

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Develop Tools and Guidance

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ASTHO-led Evaluation of State HAI/AR Outbreak Reporting Policies and Practices

1 **HAI/AR Outbreak Reporting**

For the purposes of this interview, we would like to focus discussion specifically on **reporting policies** *associated with* **HAI/AR outbreaks**

Detection → Reporting → Investigation → Control

State-level Policies: Laws, regulations, judicial decrees

Authority

Health Agency-level Policies: Agency guidelines, budget priorities

2 **Policy Levels**

Within the context of HAI/AR reporting, we are interested in learning about **two levels of policies:** *state-level and health agency-level policies (defined in the diagram to the left)*

3 **Topics for Discussion**

- Policy content
- Policy implementation
- Policy impact and evaluation

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CORHA: Recognizing Laboratory as Essential to HAI/AR Outbreak/Response Activities

- Variety of laboratory activities contribute to HAI/AR outbreak/response activities

  - Diagnostics → signal detection (launch investigation)

  - Diagnostics → case finding (support investigation)

  - Relatedness testing → signal detection (launch investigation)

  - Relatedness & Environmental testing (support investigation)

Laboratory Workgroup Charge (Draft)

- Promote and support improvement of laboratory response to healthcare-associated infection outbreaks

- Define public health, clinical, and commercial laboratory best practices to support outbreak detection and response

- Improve collaborations with healthcare facilities and state/local public health departments

Some Other Topics/Issues CORHA is Working On

- Medical Product Investigations

- Drug Diversion

- Patient Notification and Public Disclosure

- Workforce capacity/training

- Advice on Planning and Preparation

CORHA – Summary

- The Council is **evolving** and aims to provide a **practical forum** for the healthcare community, consumers, public health authorities, and professional associations to address the challenges of HAI/AR outbreak response

- Largely dependent on in-kind contributions (thanks)

- Engage with us:

  - Website – corha.org

  - CORHA Member Organizations can provide path to workgroup participation

Thank You

The findings and conclusions in this report are those of the authors and do not necessarily represent the official position of the Centers for Disease Control and Prevention.