



January 22-23, 2020

CSTE National Office

Atlanta, GA

Table of Contents

FULL MEETING AGENDA.....	3
MEETING PARTICIPANTS	5
STRATEGIC MAP	8
HLG INTRODUCTION.....	9
HLG CHAPTER OUTLINES	13
HLG CHAPTER 4: CLUSTER OUTBREAK DEFINITION.....	28
PRODUCT TRACKER	31

WINTER 2020 CORHA MEETING

January 22-23rd, 2020 | CSTE National Office, Atlanta, GA

Wednesday January 22nd

*Note: Breakfast will not be provided

Time	Agenda	Location
8:30am – 10:15am	Governance Committee Meeting	- Suite 700 , All Hands Room
10:15am-10:30am	Registration and Break (Provided)	- Spark Room, First Floor
10:30am-11:30am	Welcome: Council Updates <i>All Meeting Attendees</i> - Welcome and Introductions - Update on the Strategic Map Refresh - Workgroup Updates - Communications Task Force Update	- Spark Room, First Floor
11:30am-12:00pm	High Level Guidance (HLG) Overview	- Spark Room, First Floor
12:00pm-1:00pm	Working Lunch to Continue HLG Overview (provided)	- Suite 700 Galley
1:00pm-2:30pm	All CORHA Meeting: HLG Chapter-by-Chapter Review	- Spark Room, First Floor
2:30pm-2:45pm	Break (Provided)	- Suite 700 Galley
2:45pm-4:30pm	Workgroup Breakouts: HLG 1. WG A – Proposed Ch. 4 Detection, Final review and discussion 2. WG B – Proposed Ch. 5 Investigation, Draft review and discussion 3. Lab WG – Proposed Ch. 6 Lab, Draft review and discussion 4. Policy WG – Proposed Ch. 9 Communication, Outline and draft discussion 5. Others – Proposed Ch. 10 Performance Indicators, Draft discussion	Suite 700 1. Huddle 1 2. Huddle 2 3. Medium Conference Room 4. Huddle 5 5. Spark Room
4:30pm-5:30pm	Council Business Meeting <i>All council</i> - Review updates to Bylaws - Strategic Update Process	- Spark Room, First Floor
5:30pm	Adjourn	- Spark Room, First Floor
6:30pm	Optional Dinner at Central Rail Kitchen and Bar at the Atlanta Marriott Northeast/Emory Area 2000 Century Blvd NE, Atlanta, GA 30345	

WINTER 2020 CORHA MEETING

January 22-23rd, 2020 | CSTE National Office, Atlanta, GA

Thursday January 23rd

*Note: Breakfast will not be provided

Time	Agenda	Location
8:30am - 9:00am	Registration and Coffee	- Spark Room, First Floor
9:00am-10:30am	Workgroup Breakouts* 1. WG A/WG B – CDI/NTM 2. Lab WG 3. Policy WG 4. Others – HLG: Supplement A: Medical Product Investigations	Suite 700 1. Spark Room 2. Huddle 1 3. Huddle 2 4. Huddle 5
10:30am-10:45am	Break (Provided)	- Spark Room, First Floor
10:45am-12:00pm	High Level Guidance (HLG) Full Council Discussion of Selected Topics -Proposed topics - Discussion of Outbreak Definition Ch. 4 - Discussion of Performance Indicators Ch. 10	- Spark Room, First Floor
12:00pm-1:00pm	Working Lunch to continue HLG Full Council Discussion (provided)	- Suite 700 Galley
1:00pm – 2:30pm	Work Group Breakouts* 1. WG A/WG B – Influenza 2. Lab 3. Policy 4. Others – A-Z Pathogens	Suite 700 1. Spark Room 2. Huddle 1 3. Huddle 2 4. Huddle 5
2:30pm-3:00pm	Wrap Up & Adjourn <i>All council</i>	- Spark Room, First Floor



January 2020 Meeting Attendees

First Name	Last Name	CORHA Member Organization	Email
Meredith	Allen	ASTHO	mallen@astho.org
Christopher	Baliga	SHEA	christopher.baliga@virginiamason.org
Wendy	Bamberg	HLG Consultant	wmbamberg@gmail.com
Brooke	Beaulieu	CSTE	brooke@cste.org
Isaac	Benowitz	CDC	key6@cdc.gov
Jim	Blumenstock	ASTHO	jblumenstock@astho.org
Michelle	Cantu	NACCHO	mcantu@naccho.org
Gerd	Clabaugh	ASTHO Co- Chair	gerd.clabaugh@idph.iowa.gov
Nicole	Coffin	CDC	ndc3@cdc.gov
Matt	Crist	CDC	cwu0@cdc.gov
Valerie	Deloney	SHEA	vdeloney@shea-online.org
Dan	Diekema	Lab Workgroup Co-Lead	daniel-diekema@uiowa.edu
Jeff	Engel	CSTE	jengel@cste.org
Erin	Epson	CSTE Co-Chair	erin.epson@cdph.ca.gov
Andrea	Flinchum	CSTE	Andrea.Flinchum@ky.gov
Linda	Greene	APIC	Linda_Greene@URMC.Rochester.edu
Janet	Hamilton	CSTE	jhamilton@cste.org
Hillary	Hanson	NACCHO	hhanson@flathead.mt.gov
Bonnie	Herring	CDC	lte4@cdc.gov
Kate	Heyer	ASTHO	kheyer@astho.org
Jennifer	Hunter	CDC	xdd9@cdc.gov
Waleed	Javaid	SHEA	waleedjavaid@gmail.com
Lynn	Johnston	SHEA	lynn.johnston@nshealth.ca
Lilly	Kan	NACCHO	likan@naccho.org
Moon	Kim	Policy Workgroup	mokim@ph.lacounty.gov
Preeta	Kutty	CDC	chz6@cdc.gov
Mary Alice	Lavin	APIC	alavin@att.net
Julia	Marders	FDA	Julia.Marders@fda.hhs.gov
Richard	Martinello	SHEA	richard.martinello@yale.edu
Lisa	McGiffert	Patient Safety Action Network	lmcgpsan@gmail.com
Elizabeth	Mothershed	CDC	ekm9@cdc.gov
Heather	Moulton-Meissner	CDC	ftw2@cdc.gov
Kris	Moyer (Ehresmann)	ASTHO	kristen.ehresmann@state.mn.us
Martha	Ngoh	ASTHO	mngoh@astho.org
Ashley	Ottowell	ASTHO	aottewell@astho.org
Kiran	Perkins	CDC	guu9@cdc.gov



Joe	Perz	CDC	bzp4@cdc.gov
Catherine	Rebmann	CDC	csr9@cdc.gov
Monica	Schroeder	CSTE	mschroeder@cste.org
Puja	Shah	CSTE	pshah@cste.org
Dhara	Shah	CSTE	dshah@cste.org
Geeta	Sood	SHEA	gsood1@jhmi.edu
Nijika	Srivastwa	CDC	pcy9@cdc.gov
Dawn	Terashita	NACCHO	dterashita@ph.lacounty.gov
Maureen	Tierney	CSTE	Maureen.Tierney@nebraska.gov
Lisa	Tomlinson	APIC	ltomlinson@apic.org
Richard	Wild	CMS	richard.wild@cms.hhs.gov
Kelly	Wroblewski	APHL	kelly.wroblewski@aphl.org



Governance Committee

Erin Epton Co-chair Interim Workgroup A Lead CSTE	Gerd Clabaugh Co-chair ASTHO
Joe Perz CDC	Dawn Terashita Workgroup B & Policy Lead NACCHO

Council Members

Maureen Tierney Policy Workgroup Lead CSTE	TBD CSTE
Kristen Moyer (Ehresmann) ASTHO	Scott Harris ASTHO
Elizabeth Mothershed CDC	Hillary Hanson NACCHO
Jafar Razeq Laboratory Workgroup Lead APHL	Waleed Javaid Workgroup B Lead SHEA
Linda Greene Workgroup A Lead APIC	Julia Marders (non-voting) FDA
Richard Wild (non- voting) CMS	

CORHA Member Organization Support Staff

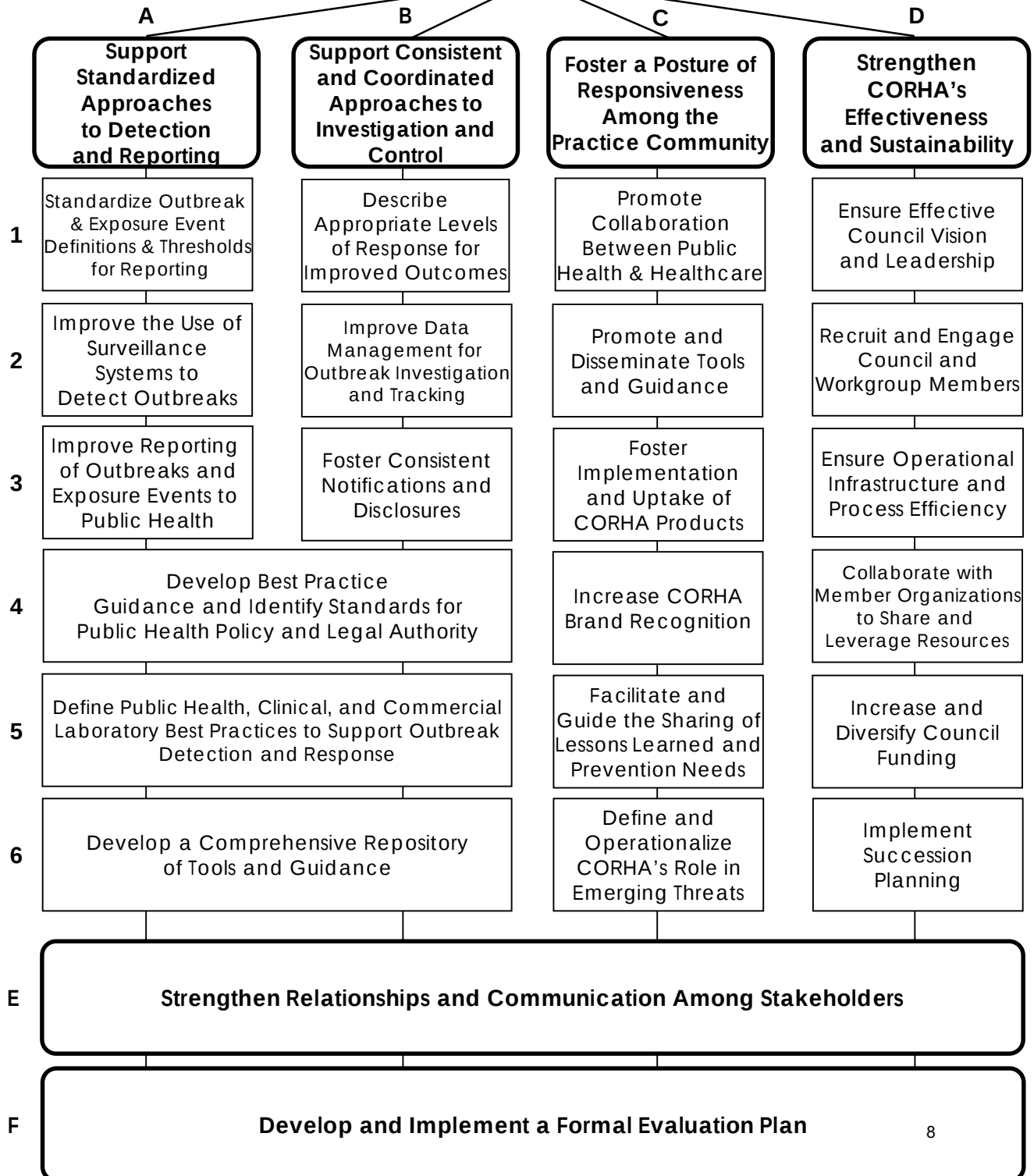
Kate Heyer ASTHO	Martha Ngoh ASTHO
Ashley Ottowell ASTHO	Monica Schroeder CSTE
Puja Shah CSTE	

CORHA

Strategic Map: 2020-2022

Enhance Capabilities of Public Health and Healthcare to Improve Outbreak Detection, Response, and Prevention

Draft
06/27/19



CORHA High-Level Guidance: Introduction Session

Winter 2020 CORHA Meeting

January 22-23, 2019

Chapter List

CORHA			CIFOR
Chapter	Full Title	Abbreviation	Chapter
1	Overview of the CORHA High-Level Guidance	Overview	1: Overview of CIFOR Guidelines
2	Fundamental Concepts of Healthcare-Associated Infections and Antimicrobial Resistant Pathogens Surveillance and Outbreak Response	Fundamental Concepts	2: Fundamental Concepts of Public Health Surveillance and Foodborne Disease
3	Planning and Preparation for Healthcare-Associated Infection and Antimicrobial Resistant Pathogen Outbreak Response	Planning & Preparation	3: Planning and Preparation
4	Healthcare-Associated Infection and Antimicrobial Resistant Pathogen Outbreak Detection and Reporting	Detection	4: Foodborne Disease Surveillance and Outbreak Detection
5	Investigation and Control of Healthcare-Associated Infection and Antimicrobial Resistant Pathogen Outbreaks	Investigation	5: Investigation of Clusters and Outbreaks 6: Control Measures
6	Laboratory Best Practices in Support of Healthcare-Associated Infection and Antimicrobial Resistant Pathogen Outbreak Response	Lab	
7	Special Consideration for Multi-Facility and Multi-Jurisdictional Outbreaks	Multi-Facility/ Jurisdiction	7: Special Considerations for Multijurisdictional Outbreaks
8	Legal Considerations for Reporting, Investigation, and Control of Healthcare-Associated Infection and Antimicrobial Resistant Pathogen Outbreaks	Legal	9: Legal Preparedness for the Surveillance and Control of Foodborne Disease Outbreaks
9	Communications, Media, Public Reporting, Notification, and Disclosure	Communications	
10	Performance Indicators for Healthcare-Associated Infection and Antimicrobial Resistant Pathogen Outbreak Response	Performance Indicators	8: Performance Indicators for Foodborne Disease Programs
A	Outbreak Investigations Related to Medical Products	Medical Products	
B	Infection Control Breach Investigations	IC Breaches	

Chapter Overview and Crosswalk

**Tables/Figures/Boxes/
CORHA Keys to Success (KtS)**

7	Multi-Facility/ Jurisdiction	• Outbreak coordination (roles, coordinating agency, communication, data, re-assessment, example scenarios) • Concluding an investigation	1. Table: Categories of multi-facility/jurisdiction outbreaks 2. Table: Notification steps 3. Table: Communication tips
8	Legal	• Legal basis for public health authority • Legal framework: case reporting/investigation • Legal framework: outbreak response • Preparedness, other investigation types	TBD
9	Communication	• Communication beyond outbreak investigators • Media • Patients and the public	TBD
10	Performance Indicators	• Purpose • Performance indicators • Targets (?)	1. Table: Outbreak response goals 2. Table: Short-term goals/objectives/indicators/metrics 3. Table: Intermediate-term.... 4. Table: Long-term....
A	Medical Products	• Unique aspects, contamination methods • Detection and investigation • Roles • Working with partners	TBD
B	IC Breaches	• Detection and evaluation • Roles/responsibilities • Coordination/communication • Drug diversion (Supp A vs B)	TBD

Chapter Progress

CORHA Chapter		Outline	Chapter Draft	Review
Overview	1	Pending	Not started	Not started
Fundamental Concepts	2	Complete	Complete	First review complete
Planning & Preparation	3	Complete	Complete	In progress
Detection	4	Complete	Complete	In progress
Investigation	5	Complete	Complete	First review complete
Lab	6	Complete	In progress	Not started
Multi-Facility/Jurisdiction	7	Complete	Complete	Not started
Legal	8	Complete	Not started	Not started
Communication	9	Complete	In progress	Not started
Performance Indicators	10	Complete	Complete	In progress
Medical Products	A	Complete	In progress	Not started
IC Breaches	B	Complete	Not started	Not started

Chapter Timeline

CORHA Chapter		Outline	Chap Draft	Review	Revise	Next-Level Review	Final Draft for CORHA
Overview	1	Mar 31	Apr 30	Jun 15	Jul 15	Aug 15	Aug 31
Fundamental Concepts	2	C	C	Dec 16	Jan 24	Feb 29	Mar 15
Planning & Preparation	3	C	C	Jan 24	Feb 29	Mar 31	Apr 15
Detection	4	C	C	Jan 24	Feb 29	Mar 31	Apr 15
Investigation	5	C	C	Jan 24	Feb 29	Mar 31	Apr 15
Lab	6	C	Mar 31	May 15	Jun 15	Jul 15	Jul 31
Multi-Facility/Jurisdiction	7	C	C	Jan 24	Feb 29	Mar 31	Apr 15
Legal	8	C	Mar 31	May 15	Jun 15	Jul 15	Jul 31
Communication	9	C	Mar 31	May 15	Jun 15	Jul 15	Jul 31
Performance Indicators	10	C	C	Jan 24	Feb 29	Mar 31	Apr 15
Medical Products	A	C	Mar 31	May 15	Jun 15	Jul 15	Jul 31
IC Breaches	B	C	Mar 31	May 15	Jun 15	Jul 15	Jul 31

6 wks 1 mo 1 mo 2 wks

CORHA High-Level Guidance: Chapter Outlines

Winter 2020 CORHA Meeting

January 22-23, 2019

Chapter 2: Fundamental Concepts of Healthcare-Associated Infections and Antimicrobial Resistant Pathogens Surveillance and Outbreaks

Preface

2.0 Introduction

2.1 Trends in Healthcare

- 2.1.1 Healthcare Settings
- 2.1.2 Healthcare Delivery
- 2.1.3 Regulation and Oversight
- 2.1.4 Product Warnings and Recalls

2.2 Trends in Surveillance

2.2.1 Overview

2.2.1.1 Public Health Surveillance

2.2.1.1.1 Reportable and Notifiable Diseases and Conditions

2.2.1.1.2 Surveillance of Healthcare-Associated Infections

2.2.1.1.3 Surveillance of Healthcare-Associated and Antimicrobial Resistant Pathogens

2.2.1.2 Surveillance within Healthcare Facilities

2.2.2 Public Health HAI/AR Surveillance Systems

2.2.2.1 Population-Based Surveillance

2.2.2.2 Healthcare Facility-Based Surveillance

2.2.2.3 Other Surveillance Systems

2.2.2.3.1 Emerging Infections Program: Healthcare-Associated Infection - Community Interface

2.2.2.3.2 Antimicrobial Resistance Laboratory Network (AR Lab Network)

2.2.2.3.3 Sentinel Surveillance

2.2.2.3.4 Syndromic Surveillance

2.2.2.3.5 Regulatory Monitoring Systems

2.2.2.3.6 Administrative Databases

2.2.3 Impact of Advances in Laboratory Methods Impact on HAI/AR Surveillance

2.2.4 Quality and Usefulness of Surveillance Data

2.2.4.1 Uses of Surveillance Data

2.2.4.2 Completeness and Quality of Data

2.3 Trends in HAI/AR Outbreak Detection and Response

2.3.1 Modes of Transmission

2.3.2 Outbreak Types Based on Etiology

2.3.2.1 Based on Pathogen

2.3.2.2 Based on Infection Type

2.3.2.3 Other Etiologies

2.3.3 Outbreak Types Based on Setting

2.3.3.1 Single Facility Outbreaks

- 2.3.3.2 Multi-Facility Outbreaks
 - 2.3.3.2.1 Local Multi-Facility Outbreaks
 - 2.3.3.2.2 Widespread Multi-Facility Outbreaks
 - 2.3.3.2.3 Outbreaks Related to Healthcare-Related International Travel
- 2.3.3.3 Healthcare Facilities as a Sentinel for Community Outbreaks
- 2.3.4 Investigations of Serious Infection Control Breaches

Chapter 3: Planning and Preparation for Healthcare-Associated Infection and Antimicrobial Resistant Pathogen Outbreak Response

Preface

3.0 Introduction

3.1 Agency Roles

3.1.1 Overview

3.1.2 Local, State, and Federal Agencies

3.1.2.1 Local Public Health Agencies

3.1.2.2 State Agencies - Public Health

3.1.2.3 State Agencies - Healthcare Facility Regulatory

3.1.2.4 State Agencies - Provider Licensing

3.1.2.5 Federal Agencies - Centers for Disease Control and Prevention

3.1.2.6 Federal Agencies - Food and Drug Administration

3.1.2.7 Federal Agencies - Centers for Medicare and Medicaid

3.1.2.8 Federal Agencies - Veterans Health Administration

3.1.3 Healthcare Facilities

3.1.4 Other Agencies and Partners

3.1.4.1 Accrediting Bodies

3.1.4.2 Member Organizations

3.1.4.3 Tribal Entities

3.1.4.4 Military (+/-)

3.1.4.5 National Park Service (+/-)

3.1.4.6 Other Federal Lands (+/-)

3.1.4.7 Law Enforcement

3.1.4.8 Academic Centers (+/-)

3.2 Outbreak Response Team

3.2.1 Overview

3.2.2 Roles of Core Team Members

3.2.2.1 Team Leader

3.2.2.2 Epidemiologists

3.2.2.3 Infection Preventionists

3.2.2.4 Laboratorians

3.2.2.5 Additional Team Members

3.2.3 Outbreak Response Team Model Practices

3.2.3.1 Outbreak Response Unit

3.2.3.2 Additional Support

3.2.3.3 Agency-Specific Response Protocols

3.2.3.4 Training for the Team

3.3 Resources

3.3.1 Equipment and Supplies

3.3.2 Outbreak Investigation Documents

3.3.3 Reference Materials

3.3.4 Tracking Time and Resources

3.4 Records Management

- 3.4.1 Overview
- 3.4.2 Records Management Model Practices
 - 3.4.2.1 Information Collection and Sharing
 - 3.4.2.2 Data Tracking
- 3.5 Communication
- 3.6 Other Aspects of Preparation
 - 3.6.1 Legal Preparedness and Authority
 - 3.6.2 Ethics
 - 3.6.3 Privacy
 - 3.6.4 Permissions and Approvals
- 3.7 Planning for Recovery and Follow-Up
 - 3.7.1 Overview
 - 3.7.2 Model Practices
- 3.8 Escalation
 - 3.8.1 Overview
 - 3.8.2 When to Ask for Help
 - 3.8.3 How to Obtain Help
- 3.9 Incident Command System

Chapter 4: Healthcare-Associated Infection and Antimicrobial Resistant Pathogen Outbreak Detection and Reporting

Preface

4.0 Introduction

4.1 Overview

4.1.1 Outbreak Detection Pathways

4.1.2 Cluster and Outbreak Definitions

4.2 Reporting of Clusters and Outbreaks

4.2.1 Purpose

4.2.2 Background

4.2.2.1 Reporting within a Healthcare Facility

4.2.2.2 Reporting to Public Health

4.2.3 Reporting Entities

4.2.3.1 Healthcare Facilities and Providers

4.2.3.2 Laboratories

4.2.3.3 Public, Patients, and Media

4.2.3.4 Other Government Agencies

4.2.3.5 Other Partners

4.2.4 Types of Reports

4.2.4.1 Reports of Clusters and Suspected Outbreaks

4.2.4.2 Reports of Unusual Pathogens/Infections

4.2.4.3 Reports of Infection Control Breaches

4.2.5 Epidemiology Process

4.2.6 Laboratory Process

4.2.7 Strengths and Limitations of Outbreak Reporting Systems

4.2.7.1 Strengths

4.2.7.2 Limitations

4.2.8 Key Determinants of Successful Outbreak Reporting Systems

4.2.8.1 Sensitivity of Case or Event Detection

4.2.8.2 Background Prevalence of Disease

4.2.8.3 Relationships

4.2.9 Model Practices for Outbreak Reporting Systems

4.2.9.1 Required Reporting

4.2.9.2 Ensuring timeliness

4.2.9.3 Clear Reporting Process

4.2.9.4 Useful Tools

4.2.9.5 Outbreak Tracking

4.3 Detecting Clusters and Outbreaks through Surveillance

4.3.1 Purpose

4.3.2 Background

4.3.2.1 Detection within a Healthcare Facility

4.3.2.2 Detection by Public Health

4.3.3 Types of Surveillance Data

4.3.3.1 Pathogen-Specific Surveillance

- 4.3.3.2 Healthcare-Associated Infection Surveillance
 - 4.3.4 Epidemiology Process
 - 4.3.5 Laboratory Process
 - 4.3.6 Strengths and Limitations of Surveillance for Outbreak Detection
 - 4.3.6.1 Strengths
 - 4.3.6.2 Limitations
 - 4.3.7 Key Determinants of Successful Outbreak Detection via Surveillance Systems
 - 4.3.7.1 Completeness of Reporting
 - 4.3.7.2 Sensitivity of Detection
 - 4.3.7.3 Prevalence of Disease
 - 4.3.7.4 Speed of Surveillance, Detection, and Investigation
 - 4.3.8 Model Practices for Detecting Outbreaks through Surveillance
 - 4.3.8.1 Case Reporting
 - 4.3.8.2 Submission and Characterization of Isolates
 - 4.3.8.3 Standardized Processes for Cluster Detection
 - 4.3.8.4 Communication
 - 4.3.8.5 Useful Tools
 - 4.3.8.6 Outbreak Tracking
- 4.4 Detection via Other Public Health Activities
- 4.5 Multi-Facility and Multi-Jurisdictional Considerations
- 4.6 Indicators and Measures

Chapter 5: Investigation and Control of Healthcare-Associated Infection and Antimicrobial Resistant Pathogen Outbreaks

Preface

5.1 Introduction

5.2 Keys to a Successful Investigation

- 5.2.1 Goals of an Outbreak Investigation
- 5.2.2 Coordination
- 5.2.3 Multi-Facility and Multi-Jurisdictional Considerations for Outbreak Investigations
- 5.2.4 Privacy of Individuals, Patients, and Their Families
- 5.2.5 Level of Response

5.3 Outbreak Investigation and Response Steps

- 5.3.1 Perform Initial Assessment
 - 5.3.1.1 Initial Data to be Gathered
 - 5.3.1.2 Proceeding with the Investigation
 - 5.3.1.3 Developing Hypotheses
- 5.3.2 Assemble and Brief the Investigation Team
 - 5.3.2.1 Team Composition
 - 5.3.2.2 External Partners
 - 5.3.2.3 Team Communication
- 5.3.3 Establish a Plan and Prepare for Fieldwork
- 5.3.4 Verify the Diagnosis
- 5.3.5 Confirm the Presence of an Outbreak
- 5.3.6 Establish Case Definition and Classification Criteria
- 5.3.7 Identify and Count Cases
- 5.3.8 Collect, Organize, and Analyze Data
 - 5.3.8.1 Data Collection
 - 5.3.8.2 Organize Data and Perform Descriptive Epidemiology
 - 5.3.8.3 Refining the Hypothesis
 - 5.3.8.4 Analytic Epidemiology (Reference to Appendix A)
- 5.3.9 Assess and Recommend Infection Control Measures
 - 5.3.9.1 Infection Control Assessment
 - 5.3.9.2 Environmental Assessment
 - 5.3.9.3 Recommend Prevention and Control Measures
- 5.3.10 Interpret Results
- 5.3.11 Monitor the Outbreak until Completion
 - 5.3.11.1 Monitor the Outbreak
 - 5.3.11.2 Re-evaluate Hypothesis and Case Definitions
 - 5.3.11.3 Ending the Investigation
 - 5.3.11.4 Summarize Investigation Findings, Conclusions and Recommendations
 - 5.3.11.5 Distribute Report

(Appendix A - Cohort and Case-Control Studies)

Chapter 6: Laboratory Best Practices in Support of Healthcare-Associated Infection and Antimicrobial Resistant Pathogen Outbreak Response

Preface

6.0 Introduction

6.1 Background

6.2 Types of Laboratories and Roles

6.2.1 Public Health and Agency Laboratories

6.2.2 Clinical Laboratories

6.3 Laboratory Functions in an Outbreak

6.3.1 Surveillance

6.3.2 Detection of Outbreaks

6.3.3 Reporting to Epidemiology

6.3.4 Confirmation of Diagnosis

6.3.5 Contribution to Case Definition

6.3.6 Saving Specimens and Isolates

6.3.7 Performing Additional Testing

6.3.8 Laboratory Data Management

6.3.9 Ensuring Chain of Custody

6.4 Epidemiology-Laboratory Communication

6.5 Types of Testing

6.5.1 Identifying Pathogens

6.5.2 Antimicrobial Susceptibility

6.5.3 Molecular Testing

6.5.4 Laboratory Role in Environmental Testing

6.5.5 Other Testing

6.6 Outbreaks Occurring within a Laboratory

6.7 Pseudo-Outbreaks

Chapter 7: Special Consideration for Multi-Facility and Multi-Jurisdictional Outbreaks

Preface

7.0 Introduction

7.1 Overview

7.2 Coordination of Multi-Facility and Multi-Jurisdictional Outbreaks

7.2.1 Initial Detection of a Multi-Facility or Multi-Jurisdictional Outbreak

7.2.2 Initial Notification Upon Detection

7.2.3 Identify Lead Agency

7.2.4 Identify Inter-Agency Outbreak Team and Establish Roles

7.2.5 Establish Regular Communication

7.2.5.1 Media Inquiries

7.2.5.2 Establish Roles for Publication/Presentation Early

7.2.6 Data Collection and Dissemination

7.2.7 Regular Assessment of the Scope of the Outbreak and Resources Needed

7.2.8 Example Scenarios

7.2.8.1 Multi-Facility Outbreak within One Jurisdiction

7.2.8.2 Outbreaks that Span Jurisdictions

7.2.8.3 Major Infection Control Breach

7.2.8.4 Contaminated Product

7.2.8.5 Others?

7.3 Concluding a Multi-Facility or Multi-Jurisdictional Investigation

Chapter 8: Legal Considerations for Reporting, Investigation, and Control of Healthcare-Associated Infection and Antimicrobial Resistant Pathogen Outbreaks

Preface

8.0 Background

- 8.0.1 The Constitutional Setting for Outbreak Response
- 8.0.2 Legal Basis for the Centers for Disease Control and Prevention in Outbreak Response
- 8.0.3 Legal Basis for State and Local Public Health Agencies in Outbreak Response

8.1 Legal Framework for Mandatory Disease Reporting and Case Investigation

- 8.1.1 Role and Legal Authority of Federal Agencies
- 8.1.2 Role and Legal Authority of State and Local Public Health Agencies
 - 8.1.2.1 Statutes and Regulations
 - 8.1.2.2 Regulatory Process for Reportable Conditions List
- 8.1.3 Reporting Processes
 - 8.1.3.1 Time Frame and Content
 - 8.1.3.2 Sources
 - 8.1.3.3 Reporting Methods
 - 8.1.3.4 Required Submission of Laboratory Specimens
- 8.1.4 Case Investigation
- 8.1.5 Non-Compliance and Enforcement
- 8.1.6 Cross-Jurisdiction Coordination

8.2 Legal Framework for Outbreak Prevention and Response

- 8.2.1 Role and Legal Authority of Federal Agencies
 - 8.2.1.1 Centers for Disease Control and Prevention
 - 8.2.1.2 Food and Drug Administration
 - 8.2.1.3 <Other federal agencies?>
- 8.2.2 Role and Legal Authority of State and Local Public Health Agencies

8.3 Legal Preparedness

8.4 Public Health Authority in Other Investigations

- 8.4.1 Regulatory Action
- 8.4.2 Criminal Investigations and Prosecutions

Chapter 9: Communications, Media, Public Reporting, Notification, and Disclosure

Preface

9.0 Introduction

9.1 Overview

9.2 Communications

9.2.1 Overview

9.2.2 Communications Professionals

9.2.2.1 Role of Communications Professionals

9.2.2.2 When to Consider Involving Communications Professionals

9.2.3 Consider Your Audience

9.2.3.1 Targeting Specific Audiences

9.2.3.2 Healthcare Providers and Facilities

9.2.3.3 Patients and General Public

9.2.4 Methods of Communication

9.2.4.1 Overview

9.2.4.2 Health Alerts

9.2.4.3 Using the Media to Communicate

9.2.4.4 <Other specific methods, add more as appropriate>

9.2.5 Risk Communication Principles

9.2.5.1 Risk Perception

9.2.5.2 Trust and Credibility

9.2.6 Communication Model Practices

9.2.6.1 Effective Messaging

9.2.6.2 <Subcategories>

9.3 Media

9.3.1 Overview

9.3.2 Considerations for Communication via Media

9.3.3 Considerations When the Media Approaches Public Health

9.3.4 Social Media

9.3.5 Preparation for Media

9.3.5.1 Primary Factors in Planning Media and Communication Strategy

9.3.5.2 Staff Training

9.3.5.3 Developing Messaging in Advance

9.3.5.4 Predicting Media Attention

9.3.5.5 Coordination with Involved Agencies and Facilities

9.3.5.6 Conducting a Successful Press Conference

9.3.6 Media Model Practices

9.3.6.1 Avoiding Communication Traps

9.3.6.2 <Subcategories>

9.4 Communication with Patients and the General Public

9.4.1 Public Reporting of Outbreaks

9.4.2 Disclosure of Outbreaks to Patients

9.4.2.1 Factors to Consider for Patient Disclosure

9.4.2.2 Model Practices for Patient Disclosure

- 9.4.2.2.1 Timing of Disclosure
 - 9.4.2.2.2 <Subcategories for each model practice>
- 9.4.3 Patient Notification Events
 - 9.4.3.1 Definitions
 - 9.4.3.2 Factors to Consider for Patient Notification
 - 9.4.3.3 Tools for Patient Notification
 - 9.4.3.4 Model Practices for Patient Notification
 - 9.4.3.4.1 Coordinated Messaging
 - 9.4.3.4.2 Timing of Notification
 - 9.4.3.4.3 Clarity of Message
 - 9.4.3.4.4 Source of Message
 - 9.4.3.4.5 Communicating with Key Stakeholders
 - 9.4.3.4.6 Preparation
 - 9.4.3.4.7 Establishing and Maintaining Trust
 - 9.4.3.4.8 Strategies to Minimize Negative Reactions
 - 9.4.3.4.9 Setting up a Call Center
 - 9.4.3.4.10 Determining when to Track Patient Testing Results
 - 9.4.3.4.11 Managing Differing Opinions Between Public Health and the Facility

Chapter 10: Performance Indicators for Healthcare-Associated Infection and Antimicrobial Resistant Pathogen Outbreak Response

Preface

10.0 Introduction

10.1 Purpose

10.1.1 Intended Use

10.1.2 Definitions

10.2 Performance Indicators

Table 10.1: Outbreak Response Goals of a Healthcare-Associated Infections and Antimicrobial Resistance Program

Table 10.2: Short-Term Goals, Objectives, Indicators, and Metrics

Table 10.3: Intermediate-Term Goals, Objectives, Indicators, and Metrics

Table 10.4: Long-Term Goals, Objectives, Indicators, and Metrics

10.3 Targets (+/-)

Supplement A: Outbreak Response Related to Medical Products

Preface

A.0 Background

A.1 Overview

A.1.1 Unique Aspects of Medical Product Investigations

A.1.2 Methods of Contamination of Medical Products

A.2 Detection of Medical Product Outbreaks

A.3 Roles and Responsibilities

A.3.1 Healthcare facilities

A.3.2 State and Local Public Health Agencies

A.3.3 CDC

A.3.4 FDA

A.4 Working with Partners

A.4.1 Working with Manufacturers/Distributors

A.4.2 Working with Pharmacies/State Boards of Pharmacy

A.4.3 Working with Clinical Partners

A.4.4 Working with Other Organizations

A.5 Investigation

A.5.1 Initial Investigation

A.5.2 Epidemiologic Investigation

A.5.2.1 Distribution of cases

A.5.2.2 Infection control assessment

A.5.3 Laboratory Investigation

A.5.3.1 Products

A.5.3.2 Healthcare environment

A.5.4 Pseudo-Outbreaks

A.5.5 Additional Considerations

A.6 Model Practices

A.6.1 Communication

A.6.2 <Subcategories for each model practice>

A.7 Concluding a Medical Product Investigation

Supplement B: Infection Control Breach Investigations

Preface

B.0 Background

B.1 Overview

B.2 Detection of Infection Control Breaches

B.3 Roles and Responsibilities

B.3.1 Healthcare facilities

B.3.2 State and Local Public Health Agencies

B.3.3 CDC

B.3.4 CMS

B.3.5 TJC?

B.4 Evaluation of an Infection Control Breach

B.4.1 Identification of Infection Control Breach

B.4.2 Gathering Data

B.4.3 Notification and Involvement of Key Stakeholders

B.4.3.1 Working with Regulatory Agencies

B.4.3.2 Working with Law Enforcement

B.4.3.3 <Working with XXX>

B.4.4 Qualitative Assessment of the Breach

B.4.5 Patient Notification and Testing

B.4.6 Legal Aspects

B.4.7 Concluding an Infection Control Breach Investigation

B.5 Coordination and Communication

B.6 Drug Diversions (here vs. Medical Products)

B.7 Model Practices

B.7.1 <Subcategories for each model practice>

4.1.2 Cluster and Outbreak Definitions

A first, most basic, step in the path to effectively detect outbreaks is to define what we mean by “outbreak.” In healthcare settings where infections are common and, in fact, might be the reason for a patient’s admission to a healthcare setting, it can be challenging to identify outbreaks. Healthcare-associated outbreaks are not always well-defined. One definition that has been commonly employed is an increase above what is considered endemic, or above the baseline of disease.² The challenge in using this definition is that a baseline will vary from facility to facility, among facility types, and among regions of the state or country. A baseline might indicate endemic sporadic disease or might hide ongoing transmission of pathogens within or among healthcare settings. Ultimately the goal is zero transmission of communicable diseases within a healthcare setting.

The term “cluster” is sometimes used interchangeably with the term “outbreak.” For the purposes of this guidance, a cluster is defined as two or more cases of the same disease (pathogen, pathogen subtype [e.g., emm type], genetic characteristic [e.g., carbapenemase], or infection type [e.g., surgical site infection]) linked epidemiologically by place and time or other shared characteristic (e.g., exposure to the same medical product). It is the initial signal that there might be transmission of disease that might need investigation.

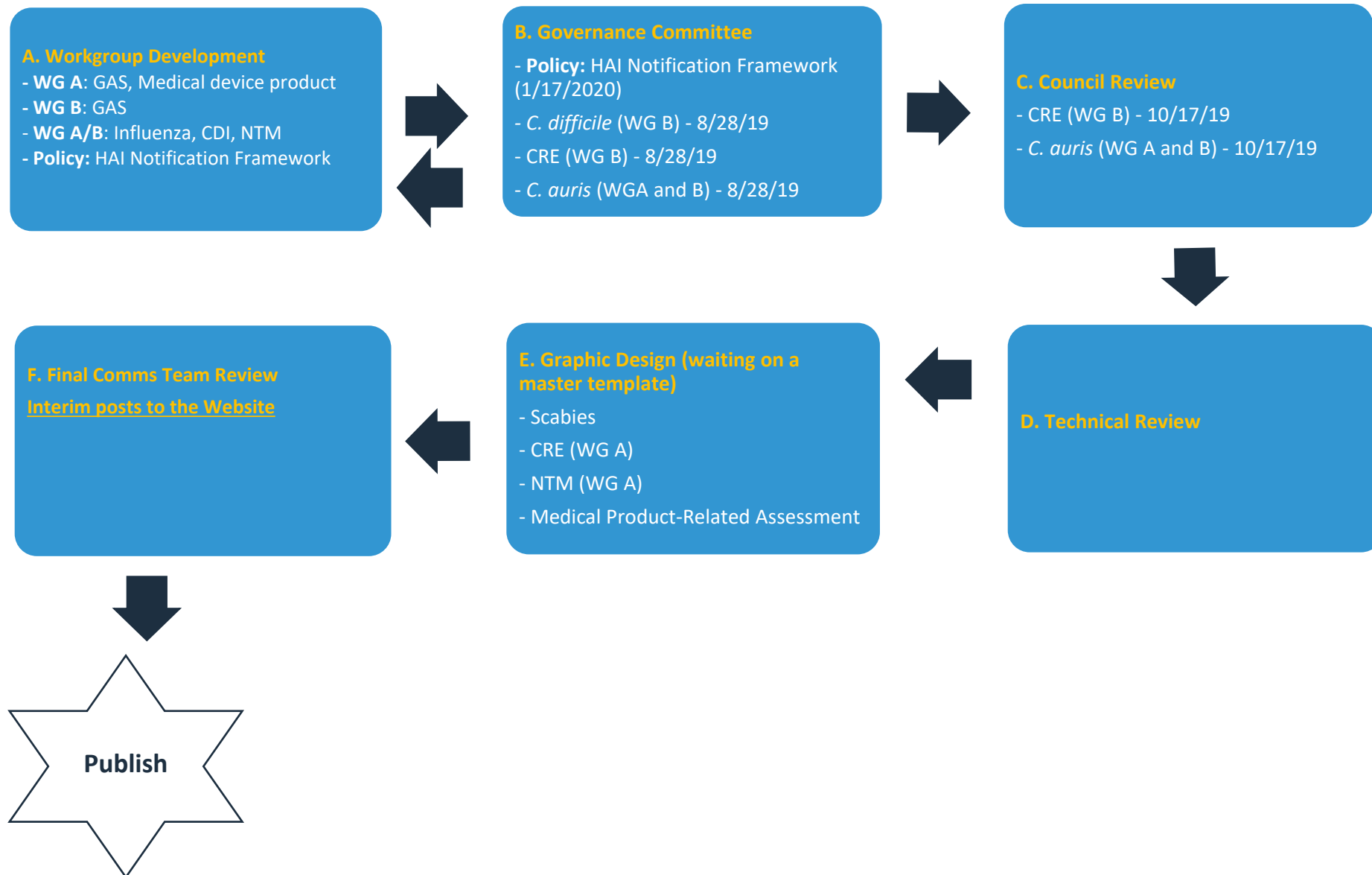
Determining a cluster to be an outbreak after an initial investigation is not always easy, and the transition between the use of terms “cluster” vs. “outbreak” can be indistinct. There is no single definition of “outbreak” that fits all HAI/AR situations. CORHA has developed and continues to develop outbreak definitions for selected pathogens; pathogen/condition-specific outbreak definitions found on the CORHA website (www.corha.org) include categories for the threshold for facilities to begin investigation, the threshold for facilities to report to public health, and the definition of an outbreak. Some local and state public health agencies might also have pathogen- or infection-specific definitions of outbreaks; public health agencies can consider developing their own based on local epidemiology. For conditions or situations that do not have specific thresholds and definitions, determining when a situation is an outbreak should follow these general principles:

- When there is a reasonable suspicion that disease transmission occurred among two or more cases based on epidemiologic and laboratory evidence, this should be considered an outbreak.
 - It is reasonable to assume that disease transmission occurred when there is an epidemiologic link between cases that is supported by laboratory evidence (e.g., identification of a rare pathogen, the same mechanism of resistance such as a carbapenemase, similar genetic sequences as identified by whole genome sequencing [WGS]).
 - The strength of the epidemiologic and laboratory evidence should be considered. For example, isolates that match by WGS or identification of the same rare mechanism of resistance is strong evidence of an outbreak even if epidemiologic evidence is weak or unclear. WGS can be extremely helpful to determine an outbreak; in an ideal state, WGS would be performed on all isolates, although currently this is not widely available for outbreak detection.
 - It is reasonable to assume that disease transmission occurred when there is strong epidemiologic evidence of linkage even when specific laboratory evidence of a link is unavailable.

- In situations where the pathogen/infection is uncommon, it is reasonable to assume disease transmission occurred when any epidemiologic evidence of linkage is present, even if the epidemiologic evidence is weak.
- When the pathogen/infection is common and baseline rates are high, strong epidemiologic evidence of linkage might be needed to make the assumption that transmission occurred.
- When there is a reasonable suspicion that two or more cases of disease were acquired from a common source based on epidemiologic and laboratory evidence, this also should be considered an outbreak.
- A reasonable suspicion of disease transmission might also include the input of experienced epidemiologists or infection preventionists.
- Understanding facility-level, regional, state, and national data can inform the strength of epidemiologic evidence needed to determine if transmission occurred.
- Outbreaks include the above criteria for infectious diseases as well as illnesses due to non-infectious conditions (e.g., toxins, chemicals).
- Suspected outbreaks should be reported to public health; this is discussed further in subsequent sections.
 - Single cases of novel or rare conditions also should be reported to public health and investigated by public health; treat these situations as outbreaks for purposes of investigation and control, even though they might not meet the definition of an outbreak.
 - Suspected medical product contamination should be reported to and investigated by public health; treat these situations as outbreaks for purposes of investigation and control, even if initially only a single case is detected.

Defining an outbreak related to a healthcare setting is not always straightforward. Public health agencies can consider using the outbreak definition to make the reporting of suspected outbreaks as simple and automated as possible to reduce burden. It is acknowledged that simplifying the reporting of suspected outbreaks might lead to increased numbers of reports. However, not every report will need public health investigation, and consideration should be given to how public health agencies will triage and prioritize investigations; see Chapter 5 for a detailed discussion. In many cases, reports of a suspected outbreak might stop at the report without investigation and response by the public health agency; this is still important for public health to track outbreaks and understand outbreak patterns in their jurisdiction.

CORHA Product-Specific Tracker



Product Details

Product	Workgroup	Status	Notes
<i>C. difficile</i> (ACH)/ (non ACH CDI)	Workgroup A	Workgroup Development	Finalizing among WG A
GAS	Workgroup A	Workgroup Development	Preparing to share with WG B
Medical Devices and Products	Workgroup A	Workgroup Development	
CRE	Workgroup A	Graphic Editor (8/2019)	Draft posted to website on 9/5
NTM	Workgroup A	Graphic Editor (8/2019)	Draft posted to website on 9/5 WG A and WG B to align NTM drafts
<i>C. difficile</i>	Workgroup B	Council-approved in November 2018. Revised Spring-Summer 2019. GC re-approved 8/28/2019. Sent to Technical Editor 9/2019.	WG A and WG B to align CDI products
CRE	Workgroup B	GC-approved with minor comments on 8/28/2019. Sent to Council for review and vote on 10/17/2019.	
<i>C. auris</i>	Workgroup B	GC-approved with minor comments on 8/28/2019. Sent to Council for review and vote on 10/17/2019.	
Influenza	WG A and B	Workgroup Development	
Medical Product-Related Assessment	Workgroup B	Graphic Editor (8/2019)	
HAI Notification Framework	Policy	Workgroup Development Sent to the Governance Committee on 1/17/2020	