



# TRUMBULL COUNTY COMBINED HEALTH DISTRICT (TCCHD) Epidemiology Response Annex

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Trumbull County Combined Health District and

Warren City Health District

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## ***INTRODUCTION***

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The Trumbull County Combined Health District (TCCHD) and Warren City Health District (WCHD) Epidemiology Response Annex provides operational guidance to responding to infectious diseases and outbreaks which could have considerable impact on the health system and health of the residents of Trumbull County. For purposes of simplicity, TCCHD will be used throughout the plan but the plan pertains to and is endorsed by both health districts. TCCHD provides Tier 1 and Tier 2 epidemiology coverage for the residents of Trumbull County as required by the Ohio Department of Health ***Appendix 1 – Competencies for Applied Epidemiologists***.

This Annex serves as a guidance document for conducting disease surveillance and investigations within Trumbull County. It is divided into three (3) principle sections designed to guide a response to infectious disease incidents. Section one (1) describes an overview of the situation and assumptions for Trumbull County. Section two (2) provides detailed information for communicable disease reporting and follow up, surveillance tools, notification, outbreak detection and investigation, data analysis and reports, and public health recommendations. This section also includes policies and protocols for implementing these activities. Section three (3) provides professional development that includes partnerships, meetings, trainings, and exercising; as well as maintenance and updating the plan.

This plan may be implemented independently or in conjunction with the TCCHD Emergency Response – Basic Plan and Annexes.

## RECORD OF CHANGES

The Health Commissioner authorizes all changes to the Trumbull County Combined Health District Epidemiology Response Annex. Change notifications are sent to those on the distribution list. The following should be completed when changes are made:

1. Add new pages and destroy obsolete pages.
2. Record changes on this page.
3. File copies of change notifications behind the last page of this Epidemiology Annex.

Date	Revision Number	Version Number	Description of Change	Pages Affected	Reviewed or Changed By (Name & Title)
12-13-2017	1	1.0	Formatted the Epidemiology Annex to align with the same plan style as the TCCHD ERP-Basic Plan	All	S. Swann
12-13-2017	2	1.0	Formatted the Disease Reporting and Sharing Health Information Procedure/Policy to align with TCCHD's PHAB procedure/policy format and had it Board approved.	Attachment 1	S. Swann
12-13-2017	3	1.0	Formatted the Communicable Disease Investigation Procedure/Policy to align with TCCHD's PHAB procedure/policy format and had it Board approved.	Attachment 2	S. Swann
12-13-2017	4	1.0	Formatted the Outbreak Investigation Procedure/Policy to align with TCCHD's PHAB procedure/policy format and had it Board approved.	Attachment 3	S. Swann
05-14-2018	5	1.1	Integration of PH and hospital during outbreaks and disease investigations; establishments of partnerships with hospital ICPs during development and update of this annex.	Pages 8, 9, 10, 11, 20, 21, & 22	S. Swann
05-14-2018	6	1.1	NUR-1030 - Procedure for Submitting Lab Specimens to ODH.	Page 18	S. Swann
05-14-2018	7	1.1	TCCHD Contact Information	Page 20	S. Swann
05-14-2018	8	1.1	ADM-1540 – Updated to replace the ABC's with the current version.	Attachment II	S. Swann
05-14-2018	9	1.1	Definitions and Acronyms	Page 22	S. Swann
05-15-2018	10	1.1	TCCHD Epidemiology ICS Structure	Page 17	S. Swann
05-15-2018		1.1	Added the additional Attachments and Appendices	Pages 2, 3, & 23	S. Swann
05-17-2018	11	1.1	Added language referencing partnerships, TCCHD ERP Basic Plan and CBRNE – special pathogen plan.	Attachment II Attachment III	S. Swann
10/19/2018	12	1.2	Added Attachment D – Electronic Log Book Page to include PHAB required log documentation. Also updated 5.1.2 of this attachment to include minimal required fields in ODRS.	Attachment II	S. Swann R. Shoenberger N. Markusic F. Migliozi K. Wilster
10/16/2018	13	1.2	Under purpose – added paragraph; Added IRB to Acronyms; Section 2.5 added “to local partners”; Added a new Section 3.3 and re-numbered later sections; Section 3.4 added reference to Attachment A; Section 3.6.4 added “reference procedure”; Added Sections 6.0 through 15.0 (Cluster Investigations); Divided procedure into Outbreak Investigation (Sections 1-6) and Cluster Investigation (Sections 7-15); Added Attachments D and E.	Attachment III	S. Swann R. Shoenberger N. Markusic F. Migliozi K. Wilster
12/28/2018	14	1.2	Updated Section 2.0 – Scope – removed the law and added it under Situation.	Page 9	S. Swann R. Shoenberger
12/28/2018	15	1.2	Update Section 3.0 – Situation – Changed #1 – to include the law.	Page 9	S. Swann R. Shoenberger

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## RECORD OF DISTRIBUTION

A single hard copy of the Trumbull County Combined Health District Epidemiology Response Annex is distributed to each person in the positions listed below.

Date Received	Program Area	Title	Name
	TCCHD	Health Commissioner	Frank Migliozi, MPH, REHS/RS
	WCHD	Deputy Health Commissioner	Robert Pinti
		Title	Name
		Title	Name

This plan is available to all staff and agency partners through the TCCHD internet site. One hard copy and one electronic copy can be found in the TCCHD Department Operations Center (DOC). Additionally, each Department Coordinator possesses an individual electronic copy. Staff may view the plan via the internet at any time or request to view one of the available hard copies.



# SIGNATURE PAGE

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This plan has been approved and adopted by the following individuals at TCCHD:

 Robert Biery, Jr., Board President	<u>1-23-19</u> Date
 Frank J. Migliozi, MPH, REHS, RS, Health Commissioner	<u>1-23-2019</u> Date
 Kris Wilster, MPH, REHS, RS, Director of Environmental Health	<u>1-23-2019</u> Date
 Sandra Swann, RN, BSN, Director of Nursing	<u>1-23-2019</u> Date

This plan has been approved and adopted by the following individuals at WCHD:

 Robert Pinti, Deputy Health Commissioner	<u>1-9-19</u> Date
 Subash Khaterpal, M.D. Health Commissioner	<u>1/9/19</u> Date

# SECTION I

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## 1.0 PURPOSE

The purpose of the TCCHD Epidemiology Response Annex is to serve as a guidance document for conducting disease surveillance and investigations within Trumbull County. Before an effective response can take place, certain plans, procedures and protocols need to be established. Mechanisms must be put in place to monitor the relevant population so changes that might trigger a response can be detected early in an event. This Annex was created to facilitate immediate epidemiology response to both deliberate release and naturally occurring disease in order to interrupt the transmission and spread of the disease; reduce the number of cases; implement pre or post - exposure treatment when needed and eliminate poor health outcomes.

This Annex and its policies/procedures will assist and guide communicable disease follow up, surveillance, and outbreak investigations. Routine communicable disease investigations and surveillance, both active and passive, will be used to assist in detecting unusual cases and outbreaks. The Annex policies and procedures will direct activities such as notification, identifying the source of outbreaks, epidemiology tool(s) that will be used, documentation in the Ohio Disease Reporting System (ODRS) and the National Outbreak Reporting System (NORS), determining the end of the outbreak, and generating written reports at the conclusion of an outbreak. This Annex will also be an important tool for training new epidemiologists and giving them the proper course of action to take in their jobs.

The TCCHD Epidemiology Annex and its policies/procedures will integrate other Trumbull County (TC) community stakeholders such as healthcare facilities, Infectious Disease Practitioners (ICP's), long term care facilities, hospitals, schools, etc. in order to mitigate the response to a communicable disease or outbreak. TCCHD will include these stakeholders in the development and/or revisions of the Annex; and will share this plan with them during a response to an outbreak or public health event.

In addition, this Annex is a supplement to the **TCCHD Emergency Response Plan (ERP) Basic Plan**. Public Health emergencies may involve novel diseases and/or disease outbreaks that might trigger an emergency response. The **TCCHD ERP Basic Plan** would serve as the foundation by which all emergency response operations at the health district(s) are executed and includes activation levels and incident command (ICS) structure that would be utilized during a response to a novel or Class A disease event. The **TCCHD CBRNE Annex (Chemical, Biological, Radiologic, Nuclear, and Explosive)** contains policies, procedures and information pertaining to special pathogens (e.g. Ebola, Anthrax, etc.) and novel diseases (e.g. Pandemic Influenza, etc.) and would be utilized in conjunction with the previously mentioned plans.



## 2.0 SCOPE

This Annex is applicable to epidemiology response operations within Trumbull County to be carried out by TCCHD Public Health. The scope of the TCCHD Epidemiology Response Annex pertains to TCCHD and all of its offices and program areas; and to the Warren City Health District (WCHD) and all of its offices and program areas. For purposes of simplicity, TCCHD will be used throughout the plan but the plan pertains to and is endorsed by both health districts.

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## 3.0 SITUATION

1. Ohio Administration Code (OAC) 3701-3-02 and 3701-3-13 sets the requirements for the reporting of infectious diseases in Ohio based on the severity of the disease or potential for epidemic spread.
2. All emergencies, disasters, and incidents begin locally and are managed locally within Trumbull County.
3. Trumbull County maintains jurisdictional authority and autonomy regarding emergency management activities in Trumbull County.
4. Implementation, utilization, and deactivation of the TCCHD Epidemiology Response Annex will occur at the local – jurisdictional level.
5. Public Health hazards, including but not limited to communicable, infectious, and contagious diseases; environmental hazards; chemical hazards; radiological hazards; and/or other public health hazards have the potential to occur at any given time, with little to no notice to a community.
6. The National Incident Management System (NIMS), and the Incident Command System (ICS) contained within, will be utilized to coordinate and manage an incident affecting Trumbull County.
7. The duties of the Epidemiology Team will include but are not limited to the following:
  - Surveillance of incidence of symptoms;
  - Assist in the identification of an infectious agent;
  - Investigation of possible contacts and cases;
  - Identification of possible sources;
  - Formation of a case definition;
  - Control the spread of disease to prevent additional cases by recommending control measure (Isolation, quarantine, treatment, prophylaxis); and
  - Summarize and report findings.

8. Disease reporting, investigation and surveillance are a collaborative effort that involves community stakeholder partnerships with healthcare facilities, ICP's, hospitals, long term care facilities, schools, etc. in Trumbull County.
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## 4.0 ASSUMPTIONS

1. The Epidemiology Response Annex is not a stand-alone plan, but is used in association with other TCCHD plans (e.g., *TCCHD ERP – Basic Plan*, *TCCHD CBRNE Annex*).
2. TCCHD's Epidemiology Response Annex encompasses both the TCCHD jurisdiction and the Warren City Health District (WCHD) jurisdiction.
3. Notification of an incident and/or the occurrence of a public health hazard will be communicated to all applicable stakeholders as outlined within this or other applicable plans (e.g., *TCCHD ERP – Basic Plan*).
4. A significant public health incident may rapidly exhaust local response resources and capabilities, thus requiring assistance from regional response partners and the State of Ohio. TCCHD is part of the North East Central Ohio (NECO) Region V and Standard Operating Procedures (SOPs) are in place for direction, control and coordination of a regional public health incident. TCCHD maintains and will utilize NECO Region V Basic Plan, Epidemiology, Ebola and Special Pathogen, Public Health Information, Hazardous Material, Medical Reserve Corp and Medical Counter Measure plans during a regional response
5. In our mobile society, multiple geographic areas outside of Trumbull County could be affected simultaneously by an incident, requiring a coordinated and collaborative response.
6. Strategies to limit the transmission of a disease or hazard (i.e., containment measures such as voluntary social distancing, quarantine, isolation, restrictions of use or movement, cancellation of public events; food/water embargo, recommended or ordered closures, etc.) are measures that can be taken to mitigate a disease's or other public health hazards spread and/or impact to a community. Such strategies may be applicable during a public health incident to mitigate the public health hazard. Strategies will vary in their effectiveness to mitigate the disease or hazard.
7. Health and medical partners (i.e., hospitals, urgent cares, etc.), in addition to other community stakeholders may become overwhelmed with ill, exposed, or worried members of the public affected or assumed affected by a public health incident. Such a situation will stress the health infrastructure of a local community, region, and

potentially the state. TCCHD has plans and procedures to address medical surge within Trumbull County.

8. Due to a potential increase in demand following a significant health related incident, medical resources (supplies, equipment, pharmaceuticals, etc.) may be in short supply and limit the response capabilities of TCCHD.
9. Public perception of an unusual or complex public health hazard occurring within a community may create high levels of anxiety, misperception, and panic.
10. Secondary (cascading) events will contribute to an even greater state of emergency.
11. Rumors and misinformation can be expected during a disaster or incident.
12. TCCHD Department Operation Center (DOC), Trumbull County (TC) Hospital Command Centers (HCCs), TC Emergency Operations Center (EOC), and support from regional and state authorities will assist in establishing a coordinated and structured response system.

## SECTION II

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### 5.0 CONCEPT OF OPERATIONS

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#### 5.1 COMMUNICABLE DISEASE REPORTING AND INVESTIGATIONS

Disease reporting and investigations in Ohio is governed by the Ohio Administrative Code 3701-3. The Ohio Department of Health (ODH) provides guidance and support to the Trumbull County Combined Health District (TCCHD) through the Bureau of Infectious Disease; the Ohio Infectious Disease Control Manual (IDCM); and the Office of Health Preparedness. All TCCHD Public Health Nurses and the TCCHD Epidemiologist are trained and responsible for investigating communicable diseases that are reported to the health jurisdictions in Trumbull County. This training includes confidentiality training since reported infectious disease includes health information. **Attachment I – ADM-1550 TCCHD Policy for Disease Reporting and Sharing Health Information** and includes reference and use of the TCCHD Confidentiality Policy, ADM-1150.

When a new employee at the TCCHD is hired, the Epidemiologist or Director of Nursing will provide them with Communicable Disease Investigation training, as per the **TCCHD Workforce Development Plan – Orientation Section**.

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##### 5.1.1 NORMAL BUSINESS HOURS

Disease reports are received via phone, fax, mail or the Ohio Disease Reporting System (ODRS) during normal business hours. The TCCHD Epidemiologist or Public Health Nurses will conduct the investigation(s) according to the **Attachment II – ADM-1540 TCCHD Procedure for Communicable Disease Investigation**. Follow up of reported disease will be prioritized according to:

- “Know your ABCs: A Quick Guide to Reportable Infectious Diseases in Ohio”;
  - The number and severity of cases; and
  - The potential for spread and causing an Outbreak.
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##### 5.1.2 AFTER NORMAL BUSINESS HOURS

Disease reports that are received after “normal business hours” will be reviewed and investigated the next business day unless it is reported through the TCCHD after hours

messaging system. The TCCHD after hours messaging system is equipped to provide 24/7 notification to the Health Commissioner, Nursing Director, Environmental Director and Medical Director in order to provide a quick response to:

- Suspect or Confirmed Class A disease reports;
- Novel disease reports; and
- Disease Cluster(s) or Outbreak(s).

TCCHD maintains a written protocol for its after-hours messaging that can be found in the **TCCHD Communication Response Annex**. Required notification of a Class A, Novel or Disease Outbreak to local, state and regional partners is outlined in **Attachment II – ADM-1540 TCCHD Procedure for Communicable Disease Investigation**, and **Attachment III – ADM-1560 TCCHD Procedure for Outbreak Investigations**.

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## 5.2 EPIDEMIOLOGIC SURVEILLANCE

Epidemiologic surveillance is an information-based activity involving the collection, analysis and interpretation of data from a variety of sources to determine baselines, trends, and anomalies. Surveillance data are used both to determine the need for public health action and to assess the effectiveness of programs. The TCCHD Epidemiologist is the lead for surveillance; and conducts both active and passive surveillance. TCCHD uses many surveillance tools for data collection, disease surveillance and outbreak detection. These tools include but are not limited to following:

1. Review of routine daily disease surveillance reports;
2. Ohio Disease Reporting System (ODRS);
3. Epi-Center and the National Retail Data Monitoring System (NRDMS);
4. Epi-X;
5. Influenza Surveillance;
6. Health Alert Notification (HAN); and
7. Ohio Public Health Communication System (OPHCS).

Some of these tools require training, permission and user access agreements. Others are information based tools that provide disease and health related information. Using more than one type of tool allows for a multi-component system that fosters consistency and results in data that is more accurate and reliable.

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### 5.2.1 OHIO DISEASE REPORTING SYSTEM (ODRS)

ODRS is a statewide electronic reporting and analysis system for Ohio reportable diseases. Access must be obtained through the TCCHD ODRS administrator. The recommendation is that reports are to be entered into this system within 24 hours of receipt of the disease report. Information about the reportable disease is entered into the ODRS fields for that disease and a notes section is available to add comments and additional information that may be helpful to others referencing the case. Another feature of the software is the ODRS Data Extract. This feature allows the user to build reports for analysis to establish baseline data and disease trends for Trumbull County.

The TCCHD Epidemiologist and Director of Nursing are the administrators for access to ODRS. When a new employee at the TCCHD requires access, the Epidemiologist or Director of Nursing will have them complete the ODRS User Agreement Form and then register them in the system. The Epidemiologist will provide the training to the new ODRS users. The Nursing Director will provide this training in the absence of the Epidemiologist. All signed user agreements are kept on file at the TCCHD. The TCCHD Director of Nursing shall ensure onboarding of new epidemiologist(s) to be registered in the Ohio Disease Reporting System (ODRS) within five (5) business days of hire (see **Attachment I – ADM-1550 TCCHD Policy for Disease Reporting and Sharing Health Information**).

The TCCHD Epidemiologist is responsible for monitoring ODRS daily, Monday through Friday during regular business hours. Surveillance of ODRS is enhanced during an outbreak or other public health event. The TCCHD Epidemiologist also uses ODRS to develop monthly and annual disease reports to determine baseline and trend data for Trumbull County.

All public health nurses are trained and capable of individual case management in ODRS and are assigned this task in the absence of the Epidemiologist. TCCHD secretary staff is trained to enter disease reports in ODRS. Cases are entered, reviewed and managed in ODRS according to their priority status as set by the Ohio Administrative Code Chapter 3701-3.

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### 5.2.2 EPI CENTER & NATIONAL RETAIL DATA MONITORING SYSTEM (NRDMS)

Epi-Center is a real-time syndromic surveillance system that monitors hospital Emergency Department (ED) visits and classifies patients “chief complaint(s)” into one of Epi-Center’s predetermined classifiers. It uses statistical analysis and historic baseline data to monitor 24/7 syndromic trends in Trumbull County. Epi-Center will send a digital alert via e-mail to TCCHD Epi-Center users when there is a significant elevation above the established baseline for any of the Epi-Center classifiers for Trumbull County.

Similarly, NRDMS is a real-time-web-based database system that tracks over-the-counter-sales of certain pharmaceutical products in Trumbull County and also has alerting capabilities when sales exceed expected baseline levels.

The TCCHD Epidemiologist and Public Health Nurses have access to Epi-Center and NRDMS. Both systems are monitored by the TCCHD Epidemiologist daily, Monday thru Friday during regular business hours. The Epidemiologist is the lead for reviewing and following up on Epi-Center and NRDMS alerts; as well as using either system to develop monthly and annual reports to monitor syndromic and disease trends in Trumbull County. Surveillance of Epi-Center and NRDMS would be enhanced during an outbreak or public health event.

All TCCHD Public Health Nurses are trained in both of these systems and are assigned to monitor Epi-Center and NRDMS during the absence of the epidemiologist. When a new employee at the health department(s) requires access, the Director of Nursing will have them complete the required forms and submit them to ODH for access to the systems (see **Appendix 2 - Epi-Center Access form and Appendix 3 - NRDMS User Agreement Form**). All signed user agreements are kept on file at the TCCHD; and new users will receive training in both systems.

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### 5.2.3 EPI X

Epi X is the Center for Disease Control and Prevention's (CDC) web based information exchange system for public health professionals. Through Epi X, public health professionals can access and share preliminary health surveillance information, quickly and securely. Users can also be actively notified of breaking health events as they occur. Participation in Epi X is limited to public health officials as designated by each health agency.

The TCCHD Epidemiologist has access to Epi X and checks it daily, Monday thru Friday during regular business hours.

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### 5.2.4 INFLUENZA SURVEILLANCE

The TCCHD Epidemiologist works with schools, hospitals and long term care facilities to obtain yearly influenza data for Trumbull County. With the exception of lab reporting, surveillance is limited to influenza-like-illness data. Each entity completes a monthly report that is faxed or e-mailed to TCCHD - **Appendix 4 - TCCHD Influenza Reporting Forms**. The TCCHD Epidemiologist analyzes this data to provide a monthly report to the TCCHD Board of Health. This information is compared to other surveillance tools such as ODRS, NRDMS, and Epi-Center to determine trends and anomalies for influenza.

The TCCHD Epidemiologist also provides information to physicians and healthcare agencies for participation to be an Influenza Sentinel Site **Appendix 5 – ODH Influenza-like Illness Surveillance**. The Epidemiologist provides the application packet and follows up with technical assistance if needed.

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### 5.2.5 HEALTH ALERT NOTIFICATION (HAN)

Health Alert Notifications (HAN) are sent from the Centers for Disease Control (CDC) and ODH via the Ohio Public Health Communication System (OPHCS) and/or e-mail. These notifications are usually health advisories issued by state and federal agencies. These advisories typically are generated for public health officials to prepare for an upcoming public health event.

The TCCHD Health Commissioner, Environmental Director, Nursing Director, Epidemiologist, Medical Director and Public Health Nurses are all set up to receive HAN messages. TCCHD may choose to share the advisory with the public, physicians, hospitals, or other health care agencies in Trumbull County. TCCHD has a local e-mail and fax HAN data base that is maintained by the TC Epidemiologist. TC HAN messages are sent according to **TCCHD ADM 1360 – Sending a HAN Message**. This policy is found in the **TCCHD Communication Response Annex**.

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### 5.2.6 OHIO PUBLIC HEALTH COMMUNICATION SYSTEM (OPHCS)

OPHCS is a secure, web based communication tool administered by the Ohio Department of Health (ODH). HAN advisories are sent via OPHCS to public health partners that have licenses and access to the system. ODH and local partners can share information, documents and communicate disease events as they occur. Alerts are prioritized as high, medium or low.

The TCCHD Health commissioner, Environmental Director, Nursing director, Epidemiologist and Public Health Nurses have OPHCS licenses and are trained on how to use the system and send HAN alerts. TCCHD has three OPHCS administrators that assist with user access. When a new employee at the health department(s) requires access, TCCHD administrators will work with ODH to obtain a new license, obtain OPHCS access for them, and provide training.

The TCCHD Epidemiologist will send an alert via OPHCS to local, regional and state partners within 12 hours of an actual investigation or positive test result of a Class A, novel, or disease outbreak.

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## 5.3 OUTBREAK DETECTION AND RESPONSE

An outbreak is the occurrence of more cases of disease or illness than is normally expected within a given place or group of people over a given period of time. Outbreaks can be disease, food, water or animal related events. Outbreaks can develop from a single case of disease or occur suddenly from a public health event.

Epidemiologic surveillance can lead to the discovery of outbreaks in a community. The routine review of disease surveillance reports, surveillance tools, data collection and analysis may lead to identifying a potential outbreak. Timely outbreak investigation may determine the source of the outbreak, lead to its removal and prevent future cases of illness or harm.

When an outbreak is suspected, investigation of the infectious disease outbreak will occur within three (3) hours of the initial notification (see **Attachment III – ADM-1560 TCCHD Procedure for Outbreak Investigations**).

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### 5.3.1 INVESTIGATION OF AN OUTBREAK

The TCCHD Epidemiologist is the lead for outbreak investigations that occur in Trumbull County. The TCCHD Epidemiologist will begin the outbreak investigation within three (3) hours of notification. The TCCHD Epidemiologist may choose to use one or more generic case interview forms depending on the type of outbreak or use a form developed by ODH or NECO Region V - **Appendix 6 – Hypothesis Generating Questionnaire; Appendix 7 – Enteric Case Investigation Form; and Appendix 8 – NECO Case Patient Interview Form**. If an outbreak is suspected, TCCHD will follow **Attachment III – ADM-1560 TCCHD Procedure for Outbreak Investigations**.

The Epidemiologist may assemble an Epidemiology Task Force to assist with case interviews and specimen collection; and this may expand into a larger Incident Command Structure (ICS) depending on the size of the event (see **Appendix 13 – TCCHD Epidemiology ICS Structure**). The TCCHD Epidemiologist will provide just in time training on the form(s) to staff for conducting the interviews.

The TCCHD Public Health Nurses are also trained on how to investigate outbreaks and will assist with the Epidemiologist as needed. The TCCHD Secretarial and Environmental staff is also trained to assist with interviewing and data entry if a large outbreak occurs in Trumbull County. This allows all TCCHD staff to be utilized during a surge to assist with epidemiological investigations at both the local and regional levels if needed.

When a new employee at the TCCHD is hired, the Epidemiologist or Director of Nursing will provide them with Outbreak Investigation training.

### 5.3.2 LABORATORY SPECIMEN SUBMISSION

Specimen submission for laboratory analysis is used to determine the causative agent of a special pathogen or an outbreak. The TCCHD Epidemiologist will be the lead for submission of specimens for laboratory analysis. The ODH Laboratory will be utilized for analysis of specimens collected from an outbreak and their forms, procedures and protocols will be followed **Appendix 9 – ODH Laboratory Information and Forms**. The chain of Custody form will be used during the transport of a specimen if a biological threat or criminal event is suspected **Appendix 10 – Chain of Custody Instructions and Form**.

The TCCHD Epidemiologist and Public Health Nurses are trained in specimen collection and transport (see **Attachment IV – NUR-1030 Procedure for Sending Specimens to ODH Laboratory**).

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### 5.3.3 DATA COLLECTION, ANALYSIS, AND REPORTS

Data collected during an outbreak in Trumbull County will be analyzed using Microsoft Excel or the CDC statistical software Epi Info. The analysis of the data will be used to determine significant information about the outbreak such as commonalities, trends, associations, or causative agent.

The TCCHD Epidemiologist will be the lead for collecting and analyzing outbreak data. The TCCHD secretaries and other staff will assist with data entry as needed. The results of the outbreak data analysis will be used to generate an Outbreak Report using the ODH template provided in **Attachment III – ADM-1560 TCCHD Procedure for Outbreak Investigations**.

The TCCHD Epidemiologist will provide a copy of the Outbreak Report to the TCCHD Health Commissioner, Director of Nursing, Environmental Director and Medical Director for review and discussion. The Epidemiologist will update the report with any review changes or recommendations. A copy of the report will be posted on ODRS and the National Outbreak Reporting System (NORS); and available to ODH if requested.

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### 5.3.4 PUBLIC HEALTH MEASURES AND RECOMMENDATIONS

At the conclusion of an outbreak, findings from the Outbreak Report will assist with recommendations and implementation of public health measures. The TC Epidemiologist, Health Commissioner, Director of Nursing, Environmental Director and/or Medical Director will determine the specific public health measures to be implemented based on the causative agent and nature of the event.

Recommendations may include but is not limited to:

1. Disseminating fact sheets and information about the disease or illness. Reference the **TCCHD Communication Response Annex** for policies and procedures for dissemination information;
  2. Providing pre or post exposure treatment. Reference the **TCCHD Mass Care/SNS Response Annex** for policies and procedures for setting up mass clinics to dispense pre or post exposure treatment; and/or
  3. Implementing social distancing or quarantine. Reference the **TCCHD Community Containment - Quarantine Annex** for policies and procedures for social distancing and quarantine.
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## SECTION III

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### 6.0 PARTNERSHIPS, MEETINGS, TRAININGS, AND EXERCISES

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#### 6.1 PARTNERSHIPS

TCCHD has established partnerships with hospitals, infectious control practitioners (ICPs), long term care facilities, physicians, and schools, etc. for the purpose of epidemiologic surveillance and investigation and sharing information (see **Appendix 11 – TCCHD Contact List**). These partners are engaged with TCCHD through sharing HAN information, taking part in surveillance activities and participating in disease, cluster or outbreak investigations. The TCCHD Epidemiologist and Director of Nursing are the primary people that involve these partners during an epidemiologic response. Additionally, these partners are provided an opportunity to review and provide input in the **TCCHD Epidemiology Response Annex** and provided a copy.

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#### 6.2 EPIDEMIOLOGY MEETINGS

The TCCHD Epidemiologist attends meetings as required by ODH Office of Public Health Preparedness and the Bureau of Infectious Disease. The TCCHD Epidemiologist attends local and regional meetings as well. These meetings provide a forum for epidemiologists and health professionals across Ohio to build relationships, share information and technical knowledge, and discuss lessons learned related to disease and outbreak investigations. Topics may include: regional updates, outbreak investigation techniques, disease surveillance systems and methods, and more.

The TCCHD Epidemiologist attends the following meetings:

1. **ODH Quarterly State Epidemiology meeting:** is designed to discuss current public health events, response strategies and recommendations pertaining to infectious disease surveillance, reporting and investigation at the state level. Attendance to this meeting includes epidemiologists from counties within Ohio. This meeting is scheduled four (4) times a year and attendance is required by ODH.
2. **North East Central Ohio (NECO) Region V Quarterly Epidemiology meeting:** is designed to discuss current public health events, response strategies and recommendations pertaining to infectious disease, but on a regional level. Attendance to this meeting

includes epidemiologists from counties within NECO Region V. This meeting is scheduled four (4) times a year.

3. **Trumbull County Local Epidemiology meeting:** is designed to discuss current public health events, response strategies, and recommendations pertaining to infectious disease, but on a local level within Trumbull County. Attendance to this meeting includes the city health district and other local stakeholders including hospitals, long term care, etc. Additionally, these partners are engaged in the review and update of the **TCCHD Epidemiology Response Annex**. This meeting is scheduled four (4) times a year.
  4. **Trumbull County Healthcare Coalition meeting:** is designed to engage local TC stakeholders to discuss current public health events, response strategies, and recommendations pertaining to infectious disease and other emergency preparedness issues. Attendance to this meeting includes TC Hospitals, TC Health Districts, TC Police and Fire, TC Nursing Homes, TC service organizations for people with functional needs, TC Coroner, TC EMA, TC Veterinarians, TC Volunteers, TC Mental Health and Recovery Board, and TC Schools. This meeting is scheduled two (2) times yearly and meets more often if there is an emergency or public health event in the community.
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### 6.3 EPIDEMIOLOGY TRAININGS

The TCCHD Epidemiologist and Public Health Nurses receive trainings for disease and outbreak investigations from various venues such as meetings, online webinars and class room settings. Required trainings for disease and outbreak investigations are part of the **TCCHD Workforce Development Plan** and the TCCHD Orientation Checklist.

Training of new employees is the responsibility of the Director of Nursing with assistance from the TCCHD Epidemiologist. When a new employee at the TCCHD is hired, the Director of Nursing will provide them with a copy of the TCCHD Orientation List, which includes specific trainings and time lines related to disease and outbreak investigations. The Orientation List is required to be completed prior to the six (6) month probation period; and some trainings are required to be completed sooner (e.g. ODRS access and training within five days of hire). The TCCHD Director of Nursing oversees that new employees complete trainings on schedule.

Additionally, the TCCHD Epidemiologist would assist TC partners with any trainings related to epidemiology surveillance and investigation activities.

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## 6.4 EPIDEMIOLOGY EXERCISES AND PLAN MAINTENANCE

All TCCHD program areas are directed to provide training and exercise of our plans in order to maintain the overall preparedness and response capabilities of TCCHD and agency partners. TCCHD will maintain this plan, reviewing it and reauthorizing it at least annually; and utilize stakeholder input and exercise or real event After Action Reports (AAR) to make changes and updates.

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## 7.0 DOCUMENT DEFINITIONS AND ACRONYMS

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Definitions and acronyms related to the TCCHD Epidemiology Response Annex are in ***Appendix 12 – Epidemiology Response Annex Definitions & Acronyms***.

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## 8.0 AUTHORITIES AND REFERENCES

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The following list of Authorities and References includes Executive Orders, Agency Directives, statutes, rules, plans and procedures that provide authorization and operational guidelines for infectious disease surveillance, reporting, and investigations.

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### 8.1 AUTHORITIES

1. Ohio Administrative Code Chapter 3701-3 Communicable Diseases  
<http://codes.ohio.gov/oac/3701-3>
  2. Health Information Portability and Accountability Act (HIPAA) -  
<https://www.hhs.gov/hipaa/index.html>
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### 8.2 REFERENCES

1. Infectious Disease Control Manual – Ohio Department of Health  
<http://www.odh.ohio.gov/healthresources/infectiousdiseasemanual.aspx>
2. Ohio Department of Health – Bureau of Infectious Diseases  
<https://www.odh.ohio.gov/odhprograms/bid/bid.aspx>

3. Center for Disease Control and Prevention <https://www.cdc.gov/>
4. Center for Disease Control and Prevention: Emerging Infectious Diseases <https://wwwnc.cdc.gov/eid/>

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## **9.0 ATTACHMENTS AND APPENDICES**

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**ATTACHMENT I – ADM-1550 POLICY DISEASE REPORTING & SHARING INFORMATION**

**ATTACHMENT II – ADM-1540 PROCEDURE FOR DISEASE INVESTIGATION**

**ATTACHMENT III – ADM-1560 PROCEDURE FOR OUTBREAK INVESTIGATIONS**

**ATTACHMENT IV – NUR-1030 PROCEDURE FOR SENDING SPECIMENTS TO ODH LAB**

***APPENDIX 1 – COMPETENCIES FOR APPLIED EPIDEMIOLOGISTS***

***APPENDIX 2 – ODRS USER AGREEMENT FORM***

***APPENDIX 3 – EPI CENTER & NRDMS USER AGREEMENT FORMS***

***APPENDIX 4 – TCCHD INFLUENZA REPORTING FORMS***

***APPENDIX 5 – ODH INFLUENZA-LIKE ILLNESS SURVEILLANCE***

***APPENDIX 6 – HYPOTHESIS GENERATING QUESTIONNAIRE***

***APPENDIX 7 – ENTERIC CASE INVESTIGATION FORM***

***APPENDIX 8 – NECO CASE PATIENT INTERVIEW FORM***

***APPENDIX 9 – ODH LAB INFORMATION AND FORMS***

***APPENDIX 10 – CHAIN OF CUSTODY INSTRUCTIONS AND FORM***

***APPENDIX 11 – TCCHD CONTACT LIST***

***APPENDIX 12 – DEFINITIONS & ACRONYMS***

***APPENDIX 13 – TCCHD EPIDEMIOLOGY ICS STRUCTURE***