

# **Epidemiological Investigation and Laboratory Testing Plan**

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# **EPIDEMIOLOGICAL INVESTIGATION AND LABORATORY TESTING PLAN**

## **I. PURPOSE**

The purpose of this plan is to provide for effective epidemiological investigations and public health laboratory testing. This includes providing for rapid identification of potential exposure and disease detection (both deliberate release and natural occurring) and establishment of protocol outlining the conditions, criteria, and situations that may necessitate a coordination of local and/or regional epidemiological and/or laboratory resources for Portage County Public Health.

This plan was developed by the Portage County Health Department in conjunction with the Portage County Medical Response Committee's Epidemiology and Lab Testing Subcommittee comprised of representation from local public health, Robinson Memorial Hospital Infection Control and Laboratory services and contracted epidemiological services.

## **II. SITUATIONS AND ASSUMPTIONS**

### **A. Situations**

1. There are three local health departments in Portage County: Portage County Combined General Health District (PCHD), Kent City Health Department, and Ravenna City Health Department.
2. There is one hospital in Portage County: Robinson Memorial Hospital that includes affiliated physician practices, a Med Center, Emergency Medical Services (EMS), and laboratory services.
3. Robinson Memorial Hospital (RMH) and/or its affiliates, physician practices and Med Centers, may be the point of identification for a county infectious disease emergency. As the sole hospital in Portage County, RMH would most likely be impacted by any significant county emergency.
4. Ohio Administrative Code 3701-3-02 and 3701-3-13 sets requirements for the reporting of Infectious Diseases in Ohio based on the severity of disease or potential for epidemic spread.
5. Robinson Memorial Hospital Lab and private county laboratories will follow the Ohio Administrative Code requirements for communicable disease reporting and the Bio-safety regulations required for their certification by the College of American Pathologists (CAMP).

6. Potential Epidemiological situations have been defined as follows:

**EPI Level 1 Situation:** Only Portage County local health jurisdictions are affected and the response can be handled independently within the county. Most infectious disease detection and reporting to Portage County public health falls in this category. Infectious disease is generally reported by the local hospital infection control practitioner after processing in their lab but can be received by other sources. One of the three local health departments, depending on jurisdiction, or a coordinated local response is able to handle this situation.

**EPI Level 2 Situation:** Portage County local health jurisdictions are affected and require assistance from region. Generally this type of situation would be indicated because of the need to provide additional response resources including staff.

**EPI Level 3 Situation:** More than one local health department is affected within the region and would require assistance from the region and state. A wide-spread outbreak of infectious disease could place Portage County into this situation.

**EPI Level 4 Situation:** More than one region in the state or multiple states are affected. A situation of this magnitude would potentially involve local, regional, state and federal assistance. A pandemic condition would produce this situation.

B. Assumptions

1. There is no established regional authority. Primary responsibilities of the Portage County public health epidemiologists lie with the needs of their own jurisdiction. In any event, the epidemiologists will follow the guidelines of their local health jurisdiction and/or the Ohio Department of Health (ODH).
2. Portage County local health departments will maintain a current list of the personnel and other resources needed for interviewing, scribes, data entry, data analysis, specimen collection, handling and shipping.
3. Portage County local health departments will provide regular communication with other local health departments and other health partners as needed. This will be conducted through established pathways such as the Ohio Public Health Communication System (OPHCS) and the NECO epidemiology list serve.
4. The organizations that have responsibilities for human infectious disease related laboratory activities during a human infectious disease emergency in Ohio are ODH (lead agency), Ohio

Department of Agriculture (ODA) and Ohio Environmental Protection Agency (OEPA). Laboratory coordination includes guidance on specimen collection and transport to the Ohio Department of Health Laboratories (ODHL) for specimen confirmation and coordination for shipment of specimens to Centers for Disease Control and Prevention (CDC) laboratories as needed.

5. Coordination of regional assistance may be needed for some aspects of epidemiological investigation/control.
6. Compliance with National Incident Management System (NIMS) will be maintained throughout the response efforts.

### III. CONCEPT OF OPERATIONS

#### A. Preparedness/Surveillance

1. The Portage County public health system has surveillance and information systems in place to facilitate early detection and mitigation of disease including but not limited to the Real-time Outbreak and Disease Surveillance (EpiCenter) System, Ohio Public Health Communication System (OPHCS), Epi-X, National Outbreak Reporting System (NORS), and Ohio Disease Reporting System (ODRS).
2. Information related to infectious disease reporting as defined by Ohio law including a listing of *Reportable Infectious Diseases in Ohio* (Tab A) has been disseminated to disease reporters in Portage County including hospital, physician offices and laboratories.
3. Laboratory facilities in the county are in constant surveillance. Portage County's main laboratory for local processing of specimens is through the RMH Laboratory.
4. Portage County local health departments contract for additional epidemiological services; additional resources of staff and services as needed for disease/outbreak investigation upon notification.

#### B. Response

1. Public health Epidemiological investigation protocols are in place to direct activities based on classification of disease. This includes Disease Investigation and Outbreak Standard Operating Guides (SOGs).
2. Communication protocols are in place to disseminate information locally, regionally, and to state and federal agencies per the Portage County Public Health Communication Plan.

3. Upon notification an Epidemiology Team is established; made up of Portage County public health nurses, Robinson Memorial Hospital Infection Control Practitioner and contracted Epidemiologist(s).
4. Additional Public health staff are available as part of the established Portage County Public Health Response Team or as support personnel.
5. Volunteers may be activated as needed for epidemiologic response. The Medical Reserve Corp (MRC) database and activation protocols will be used.
6. Notification to the Ohio Department of Health Bureau of Infectious Disease Control (ODH-BIDC) as soon as possible of an outbreak. In addition the Portage County local health departments will meet ODH requirements for data entry and deadlines to enter and close outbreaks in the National Reporting System (NORS).
7. Implementation of coordinated response will be determined by the scope of the incident. Four levels have been created in order to address this using the *Determination of Regional Assistance Algorithm* (Tab B):

**EPI LEVEL 1 RESPONSE:** Only Portage County local health jurisdictions are affected and the response can be handled independently.

1. No regional response required.
2. The Epidemiology team is activated by Health Commissioner or designee.
3. General notification of the incident is made locally, to adjoining jurisdictions, and other appropriate agencies as needed to coordinate response.
4. Emergency public information is disseminated.

**EPI LEVEL 2 RESPONSE:** Portage County local health jurisdictions are affected and require assistance from region.

1. Initiate all Level 1 response actions.
2. Portage County public health will notify the region.
3. Portage County Health Commissioner of the affected health jurisdiction activates the Portage County Public Health Response Team, Portage County Epidemiology Team and initiates ICS/NIMS. An Epidemiology Section Chief will be designated.
4. Notify all applicable Level 1 response partners.
5. Use established guidelines (found in Regional Assistance Algorithm (Tab B) to determine what type of assistance is needed from the unaffected health jurisdictions.

**EPI LEVEL 3 RESPONSE:** More than one local health department is affected within the region.

1. Initiate all Level 1 and 2 response actions.
2. ODH and CDC may be involved in initiating a response and updates for this level.

**EPI LEVEL 4 RESPONSE:** More than one region in the state or multiple states are affected.

1. Initiate all Level 1, 2 and 3 response actions.
2. Response may be directed by ODH and/or CDC.

#### **IV. ORGANIZATION AND ASSIGNMENT OF RESPONSIBILITIES**

A. Public Health will take the following actions once notified of potential exposure and disease detection

- Determine level of response necessary to include, but not limited to activation of Epidemiology Team, public health response team, and support personnel including MRC volunteers.
- Utilize Disease Investigation/Outbreak Process SOG to direct activities (TAB C).
- Communicate with local laboratory to ensure efficient specimen processing, assist with any needed ODH Lab collaboration.
- Determine what additional resources are needed and coordinate with local EMA.
- Notification of appropriate local law enforcement and partnering agencies such as Red Cross, Mental Health and Recovery Board, Portage Area Regional Transportation Agency (PARTA), etc.
- Establish Public Information Officer and Spokesperson to handle media.
- Initiate activation of additional county/public health plans, to include Pandemic Response Plan, Mass Prophylaxis Plan, Mass Care Plan, and Community Containment Plan, and Mental Health Plan as needed.

B. Hospital (Infection Control and Laboratory Services)

- Reporting of communicable disease cases identified through RMH lab and its affiliates as required by OAC 3701-3-02.
- Coordination between hospital laboratory services and RMH Infection Control Practitioners for reporting of suspect communicable disease cases to public health.
- Communication maintained between Hospital and other response agencies including Public Health throughout emergency response.

- C. Portage County Homeland Security and Emergency Management
  - Provide logistic support and resource management for all responding agencies. This includes but is not limited to:
    - Emergency Operations Center
    - Interoperable communications
    - Acquisition and deployment of resources
    - State and federal assistance acquisition and coordination
  
- D. Portage County Law Enforcement
  - Provide the following assistance as needed, to include but not limited to:
    - Joint law enforcement and public health epidemiological investigations.
    - Transportation of specimens to the ODH Lab in Columbus or other designated site (Tab D) and maintain chain of custody (Tab E).
  
- E. Portage County Emergency Medical and Ambulance Services
  - Will stand-by and assist as needed for on scene medical care.
  - Work in conjunction and coordination with Robinson Memorial EMS Coordinator.

## **V. DIRECTION AND CONTROL**

- A. Direction and control related to epidemiological activities is the responsibility of the public health agencies within Portage County.
  - 1. IC Operations will activate the public health epidemiology team and designate an Epidemiology Section Chief as determined by the incident.
  - 2. Public Health Departmental Operations Center (DOC) will handle coordination utilizing ICS structure.
  - 3. When incident requires the EOC to be activated, off scene direction and control will be coordinated through the EOC and Incident Command Post.
  
- B. Direction and Control related to local laboratory activities is the responsibility of the specific laboratory involved working within the directives of their policy and procedure and state requirements. ODH Lab may direct activities depending on the level of response needed.

## **VI. ADMINISTRATION AND LOGISTICS**

- A. Resource Management
  - 1. When the situations exceed the capability of local government, requests for resources will be coordinated and directed through Portage County OHS/EMA. Requests for county/regional/state/federal assistance will be initiated by the

Incident Commander through the county EOC for proper authorization.

2. Requests for assistance from local, private and public sector groups will be made as appropriate by contacting agencies listed in the County Resource Manual maintained by the PC OHS/EMA.

## B. Relationship to Other Plans

1. **Emergency Operations Plan:** The County's all-hazard Emergency Operations Plan (EOP) creates an umbrella for protecting the health, safety and property of the public from all hazards.
2. **Medical Surge Plan:** Developed by an interagency, multidisciplinary team after having identified issues related to any event that exceeds the daily capabilities of pre-hospital and hospital systems, and to enhance the capability of the Portage County local health departments during a pandemic event.
3. **Mass Care Emergency Support Function:** Coordinated through PC OHS/EMA, this provides for the protection of the population through identification of shelters and coordination of social service agencies.
4. **Community Containment Plan:** Provides direction for the implementation of actions to limit or slow the spread of illness while sustaining essential services within the community.
5. **Mass Prophylaxis Plan:** To provide the process and methodologies that will be utilized should mass prophylaxis or vaccination be warranted within Portage County.
6. **Mental Health Plan:** Provides the mechanisms that will be used during an incident to deliver mental health and substance abuse services to individuals affected by an incident.
7. **Northeast Central Ohio (NECO) Region Epidemiology Response Standard Operating Guide (SOG):** The NECO Region has established a protocol for coordination of regional epidemiological resources (Tab F) and a regional Case Investigation Form (Tab G).
8. **State of Ohio Emergency Operations Plan, Human Infectious Disease Annex:** Identifies supplemental assistance to local governments in identifying the health and medical needs of victims of a human infectious disease emergency whether naturally occurring or terrorism related.

## **VII. PLAN DEVELOPMENT AND MAINTAINANCE**

- A. The Portage County OHS/EMA will be responsible for development and maintenance of the Epidemiological Investigation and Laboratory Testing Plan in accordance with the U.S. Department of Homeland Security's National Response Plans Target Capabilities and Planning Scenarios guidance documents.
- B. All agencies assigned responsibilities in this plan are responsible for developing or updating internal procedures that assure a continuing acceptable degree of operational readiness to conduct their responsibilities.
- C. The Portage County Emergency Management Agency Advisory Council, through the Portage County OHS/EMA will oversee a plan review to assure the plan remains functional. The plan shall also be reviewed following any exercise or actual incident to incorporate any after action or corrective action items necessary to improve the intended response actions of the plan.
- D. The primary responsibility of the epidemiological component of this plan is Public Health and public health officials will work in conjunction with Portage County OHS/EMA to schedule, design and conduct an evaluation of the plan related to exercises.

## **VIII. AUTHORITIES AND REFERENCES**

- A. Local Laws/Ordinances
- B. State Laws: Ohio Administrative Code 3701-3-02 & 3701-3-13 Reportable Infectious Diseases in Ohio
- C. Federal Laws
- D. References
  - 1. State of Ohio "Emergency Operations Plan-Human Infectious Disease Incident Plan" October 2005
  - 2. Northeast Central Ohio (NECO) Regional Standard Operating Guidelines 2005
  - 3. NECO Region 5 Epidemiology Drill After-Action Corrective Action Report January 30, 2007
  - 4. US Department of Homeland Security Target Capability List.

## **IX. TABS**

- A. Reportable Infectious Diseases in Ohio: Ohio Administrative Code 3701-3-02
- B. Determination of Regional Assistance Algorithm

- C. Disease Investigation/Outbreak SOG
- D. Directions to the State of Ohio Laboratories Complex
- E. Chain of Custody Form
- F. NECO EPI Incident Management Document
- G. NECO Standardized Case Patient Interview Form

**X. AUTHENTICATIONS**

The Portage County Office of Homeland Security and Emergency Management has reviewed this plan and finds it addresses the Target Capabilities as outlined by the U.S. Department of Homeland Security’s National Response Plans.

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Chairperson, PC EMA Advisory Council	Date
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Director, PC OHS/EMA	Date
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f/data/nursing/ESF 8

# TAB A

## Know Your ABCs: A Quick Guide to Reportable Infectious Diseases in Ohio

From the Ohio Administrative Code Chapter 3701-3; Effective January 1, 2014

### Class A:

Diseases of major public health concern because of the severity of disease or potential for epidemic spread – report immediately via telephone upon recognition that a case, a suspected case, or a positive laboratory result exists.

Anthrax	Measles	Severe acute respiratory syndrome (SARS)
Botulism, foodborne	Meningococcal disease	Smallpox
Cholera	Plague	Tularernia
Diphtheria	Rabies, Human	Viral hemorrhagic fever (VHF)
Influenza A – novel virus	Rubella (not congenital)	Yellow fever

Any unexpected pattern of cases, suspected cases, deaths or increased incidence of any other disease of major public health concern, because of the severity of disease or potential for epidemic spread, which may indicate a newly recognized infectious agent, outbreak, epidemic, related public health hazard or act of bioterrorism.

### Class B:

Disease of public health concern needing timely response because of potential for epidemic spread – report by the end of the next business day after the existence of a case, a suspected case, or a positive laboratory result is known.

Amebiasis	Coccidioidomycosis	Legionnaires' disease	To vancomycin (VRSA, to VISA)
Arboviral neuroinvasive and non-neuroinvasive disease	Creutzfeldt-Jakob disease (CJD)	Leprosy (Hansen disease)	Streptococcal disease, group A, invasive (IGAS)
Eastern equine encephalitis virus disease	Cryptosporidiosis	Leptospirosis	Streptococcal disease, group B, in newborn
LaCrosse virus disease	Cyclosporiasis	Listeriosis	Streptococcal toxic shock syndrome (STSS)
(other California serogroup virus disease)	Dengue	Lyme disease	<i>Streptococcus pneumoniae</i> , invasive disease (ISP)
Powassan virus disease	<i>E. coli</i> O157:H7 and Shiga toxin-producing (STEC) <i>E. coli</i>	Malaria	Syphilis
St. Louis encephalitis virus disease	Ehrlichiosis/anaplasmosis	Meningitis:	Tetanus
West Nile virus infection	Giardiasis	Aseptic (viral)	Toxic shock syndrome (TSS)
Western equine encephalitis virus disease	Gonorrhea ( <i>Neisseria gonorrhoeae</i> )	Bacterial	Trichinellosis
Other arthropod-borne diseases	<i>Haemophilus influenzae</i> (invasive disease)	Mumps	Tuberculosis, including multi-drug resistant tuberculosis (MDR-TB)
Babesiosis	Hantavirus	Mycobacterial disease, other than tuberculosis (MOTT)	Typhoid fever
Botulism, infant	Hemolytic uremic syndrome (HUS)	Pertussis	Typhus fever
Botulism, wound	Hepatitis A	Poliomyelitis (including vaccine-associated cases)	Varicella
Brucellosis	Hepatitis B, non-perinatal	Psittacosis	Vibriosis
Campylobacteriosis	Hepatitis B, perinatal	Q fever	Yersiniosis
Chancroid	Hepatitis C	Rubella (congenital)	
<i>Chlamydia trachomatis</i> infections	Hepatitis D (delta hepatitis)	Salmonellosis	
	Hepatitis E	Shigellosis	
	Influenza-associated hospitalization	Spotted Fever Rickettsiosis, including Rocky Mountain spotted fever	
	Influenza-associated pediatric mortality	<i>Staphylococcus aureus</i> , with resistance or intermediate resistance	

### Class C:

Report an outbreak, unusual incident or epidemic of other diseases (e.g. histoplasmosis, pediculosis, scabies, staphylococcal infections) by the end of the next business day.

<b>Outbreaks:</b>		
Community	Healthcare-associated	Waterborne
Foodborne	Institutional	Zoonotic

### NOTE:

Cases of AIDS (acquired immune deficiency syndrome), AIDS-related conditions, HIV (human immunodeficiency virus) infection, perinatal exposure to HIV, and CD4 T-lymphocyte counts <200 or 14% must be reported on forms and in a manner prescribed by the Director.

## Know Your ABCs (Alphabetical Order)

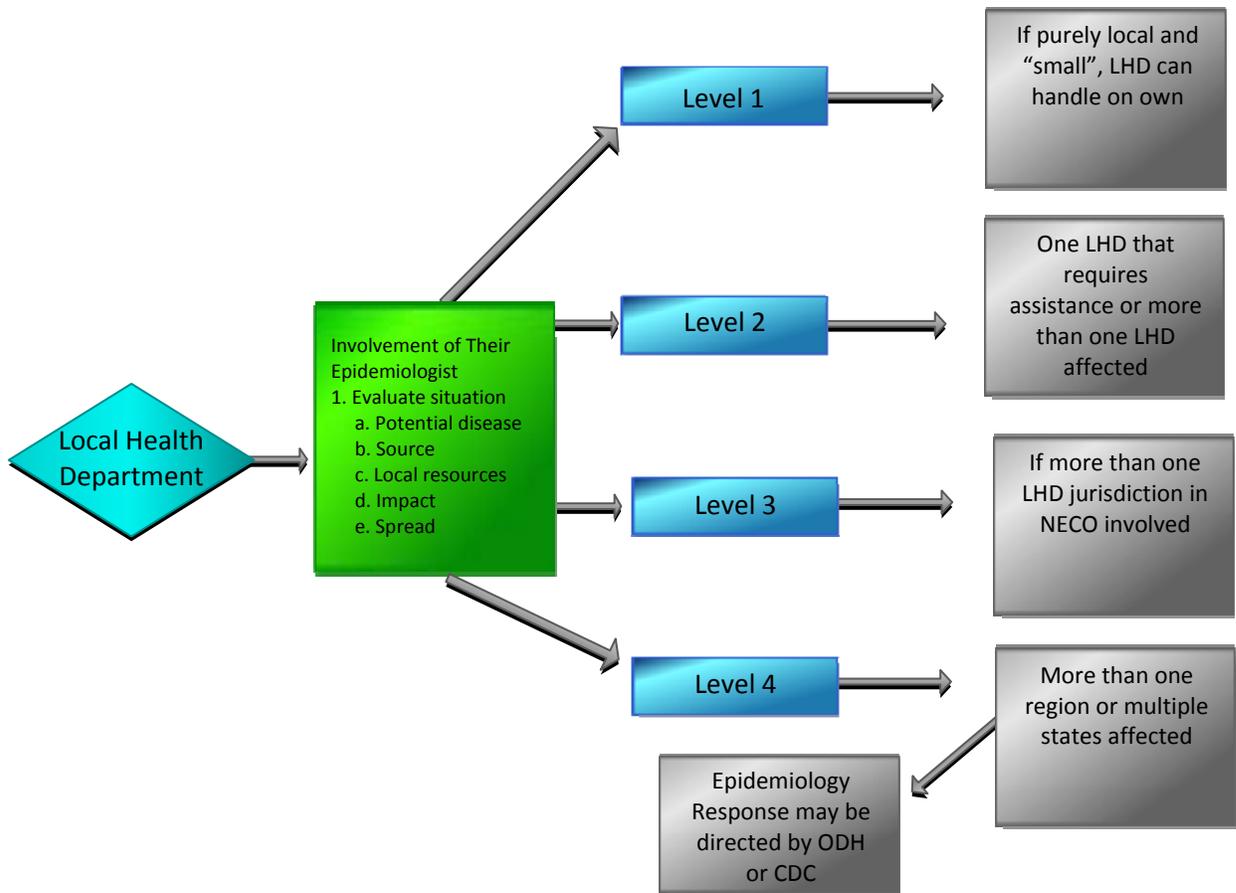
Effective January 1, 2014

Name	Class	Name	Class
Amebiasis	B	Meningitis, aseptic (viral)	B
Anthrax	A	Meningitis, bacterial	B
Arboviral neuroinvasive and non-neuroinvasive disease	B	Meningococcal disease	A
Babesiosis	B	Mumps	B
Botulism, foodborne	A	Mycobacterial disease, other than tuberculosis (MOTT)	B
Botulism, infant	B	Other arthropod-borne diseases	B
Botulism, wound	B	Outbreaks: community, foodborne, healthcare-associated, institutional, waterborne, zoonotic	C
Brucellosis	B	Pertussis	B
Campylobacteriosis	B	Plague	A
Chancroid	B	Poliomyelitis (including vaccine-associated cases)	B
<i>Chlamydia trachomatis</i> infections	B	Powassan virus disease	B
Cholera	A	Psittacosis	B
Coccidioidomycosis	B	Q fever	B
Creutzfeldt-Jakob disease (CJD)	B	Rabies, human	A
Cryptosporidiosis	B	Rubella (congenital)	B
Cyclosporiasis	B	Rubella (not congenital)	A
Dengue	B	Salmonellosis	B
Diphtheria	A	Severe acute respiratory syndrome (SARS)	A
<i>E. coli</i> O157:H7 and Shiga toxin-producing (STEC) <i>E. coli</i>	B	Shigellosis	B
Eastern equine encephalitis virus disease	B	Smallpox	A
Ehrlichiosis/Anaplasmosis	B	Spotted Fever Rickettsiosis, including Rocky Mountain spotted fever	B
Giardiasis	B	St. Louis encephalitis virus disease	B
Gonorrhea ( <i>Neisseria gonorrhoeae</i> )	B	<i>Staphylococcus aureus</i> , with resistance or intermediate resistance to vancomycin (VRSA, VISA)	B
<i>Haemophilus influenzae</i> (invasive disease)	B	Streptococcal disease, group A, invasive (IGAS)	B
Hantavirus	B	Streptococcal disease, group B, in newborn	B
Hemolytic uremic syndrome (HUS)	B	Streptococcal toxic shock syndrome (STSS)	B
Hepatitis A	B	<i>Streptococcus pneumoniae</i> , invasive disease (ISP)	B
Hepatitis B, non-perinatal	B	Syphilis	B
Hepatitis B, perinatal	B	Tetanus	B
Hepatitis C	B	Toxic shock syndrome	B
Hepatitis D (delta hepatitis)	B	Trichinellosis	B
Hepatitis E	B	Tuberculosis, including multi-drug resistant tuberculosis (MDR-TB)	B
Influenza A – novel virus	A	Tularemia	A
Influenza-associated hospitalization	B	Typhoid fever	B
Influenza-associated pediatric mortality	B	Typhus fever	B
LaCrosse virus disease (other California serogroup virus disease)	B	Varicella	B
Legionnaires' disease	B	Vibriosis	B
Leprosy (Hansen disease)	B	Viral hemorrhagic fever (VHF)	A
Leptospirosis	B	West Nile virus infection	B
Listeriosis	B	Western equine encephalitis virus disease	B
Lyme disease	B	Yellow fever	A
Malaria	B	Yersiniosis	B
Measles	A		

# TAB B

## TAB B. Regional Assistance

## Algorithm



# TAB C

## DISEASE INVESTIGATION PROCESS SOG

### Overview

The purpose of this SOG is to provide general guidelines, including a decision tree, for the process of investigating a suspected communicable disease outbreak. Outbreak investigations should be a collaborative effort whenever possible, since several tasks requiring different skills must be done simultaneously.

While every outbreak is unique, the investigative process generally follows a series of steps that are outlined below under "Information Needed for Investigation". Although no outbreak will follow the steps in exact order, these guidelines provide a summary of the things that need to be considered in any investigation.

It is important to stress that several of these steps may occur simultaneously, that their order of occurrence will likely vary, and that several of the steps may occur more than once. However, all of these steps are necessary to the successful resolution of an outbreak.

### Preparation for the Outbreak Before it Occurs

- Establish a multidisciplinary investigative team (i.e., nursing, communicable disease, environmental, support staff, laboratory, public information, and computer information specialists) and assign responsibilities.
- Train staff (complete Introduction to Epidemiology, Principles of Epidemiology and other disease specific courses on investigative procedures).
- Assemble materials (laboratory kits, forms, reference materials, personal protective equipment such as gloves and masks).
- Maintain a current phone directory, including e-mail and Internet addresses, home addresses and phone numbers of team participants, and key contact personnel outside the Local Public Health Agency.
- Maintain adequate local surveillance systems for the early detection of increased disease incidence. These systems should collect data on an ongoing basis to allow comparison of the number of new disease cases (incidence) with the historical incidence of similar cases for a similar time period.

### Information Needed for Investigation

A report of a suspected outbreak may be received in a variety of ways (e.g., active or passive surveillance systems, concerned citizens, healthcare providers, media, law enforcement, etc.). The purpose of these guidelines is to recommend procedures for investigating confirmed or suspected cases associated with an outbreak. All outbreaks or suspected outbreaks must be reported as soon as possible (by phone and/or entry into the Ohio Disease Reporting System-ODRS) to the Ohio Department of Health (ODH).

**\*\*\*Always consider the possibility of intentional contamination when investigating an outbreak. If a bioterrorism event is suspected, notify the Ohio Department of Health and appropriate law enforcement officials immediately.\*\*\***

Investigation will be initiated immediately, and in all cases will meet the 3 hour ODH window to begin investigation, upon initial notification of a disease report that has outbreak potential.

Information will be entered into ODRS in a timely manner and into the National Outbreak Reporting System (NORS) within 30 days of receiving an ODRS Outbreak number from ODH.

### Key Points for Smooth, Efficient Outbreak Investigation:

- Identify agency / department leaders and points of contact prior to an outbreak.
- Communicate early, often, and accurately.
- Establish regular communication among local, regional, and state agencies.
- Understand roles / responsibilities of agencies conducting investigations.
- Develop and use standard procedures / tools to allow for interagency consistency.
- Develop and maintain contact lists.

Outbreak investigation requires the collection and processing of a great deal of information. The method for collecting the initial information depends on the source of the report. When the suspected outbreak is reported by an individual (such as a physician or school nurse), then the initial information should be requested from her/him. If s/he does not have all the relevant information, ask if there is someone else who does and contact that person. When the suspected outbreak is detected through routine surveillance, then follow-up calls to several health care providers may be necessary.

**1. Obtain initial report including the following information:**

- Identify person making report; obtain name and phone number if possible
- Point of contact for the situation – name and phone number if different from person making report
- Diagnosis of illness (laboratory findings or physician diagnosis)
- Signs and symptoms of illness
- Identify person(s) or groups ill, number ill, number potentially exposed
- Date and hour of onset and duration of illness for the first few known cases
- Date, time and location of any event thought to be related to the outbreak cause; potential exposures such as contact with an ill person(s) or a common gathering or facility within appropriate incubation period for illness (or within the previous 72 hours if diagnosis is unknown)
- Location of illness in community (addresses of ill persons)
- Reporter's hypothesis as to cause of illness
- Suspected mode of transmission (e.g., ingestion, inhalation, or direct contact exposure)

**2. Are there other associated cases? Determine extent of illness:**

- Review recent surveillance data. Do any other recent cases have the same diagnosis, laboratory findings, or syndrome as the currently reported case(s)?
- Intensify surveillance in the affected area. Contact medical providers (e.g., primary care physicians, hospital emergency rooms) and other surveillance sites in the area to find out if similar cases have been identified.

**Yes →**

- ✓ Expand investigation to find additional cases, persons at risk, and associations between the cases to identify exposure(s).
- ✓ Collect basic descriptive data on all cases identified, including all the information listed above under Step 1.
- ✓ Develop preliminary case definition based on signs, symptoms and laboratory findings.
- ✓ Develop a list of possible agents. If the agent is unknown, but the exposure and onset times are known, use the incubation periods listed to identify potential causative agents.
- ✓ If the agent and onset times are known, use the incubation period to identify possible exposure times.
- ✓ Proceed with investigative steps outlined below.

**No →**

- ✓ Epidemiological investigations of single cases of illness are generally not fruitful. If no similar cases (based on diagnosis, lab findings or geographical association) have been identified, and the agent is known, follow the procedures in the appropriate disease section of the Infectious Disease Control Manual. Maintain all Enteric Case Reports and Food-borne Disease reports. This is also important if the agent is unknown in case additional cases are reported.

**3. Is the suspected agent transmissible from person to person?**

**Yes →**

- ✓ Investigate any suspected place of exposure to determine/identify others who may have been exposed when the identified cases were exposed.
- ✓ Determine when the identified cases were infectious.
- ✓ If case is currently infectious, recommend practices to prevent further transmission of the illness.
- ✓ Identify contacts for possible secondary transmission.

- ✓ Identify previous contacts that may be incubating the disease or may have become ill. Provide appropriate education and follow-up.

**No** →

- ✓ Investigate place of exposure to find others who may have been exposed when the identified cases were exposed.

**Unknown** →

- ✓ Proceed as if the agent were transmissible person-to-person.

#### 4. Is the suspected agent transmissible through the environment (including food or water)?

**Yes** →

- ✓ Notify environmental team members to investigate any suspected place of exposure for environmental conditions and/or contaminated food or water that may have led to exposure.
- ✓ Environmental division to provide local and state notification if a regulated public water supply is a possible source.

**No** →

- ✓ Focus investigation on potential for person-to-person transmission.

**Unknown** →

- ✓ Proceed as if the agent were transmissible through the environment.

#### 5. Plan investigation.

- Notify team members from appropriate disciplines. Team members may also include personnel from other agencies and levels of government (DHSS, CDC, FDA, USDA, Ohio Department of Natural Resources (ODNR), Ohio Department of Agriculture and/or the private sector).
- Select a team leader to coordinate the outbreak and make job assignments. Utilize ICS structure to determine roles. If outbreak encompasses multiple jurisdictions (areas/agencies) determine appropriate lead agency.
- Formulate tentative hypothesis constructed from time, place, and person associations to form the basis for the investigation. The hypothesis should be written as soon as enough information has been gathered to formulate one. It is very important not to be too restrictive in your focus, thereby excluding potentially important cases or events. By focusing too narrowly on one hypothesis you may miss pertinent cases.
- Develop the hypothesis by interpreting available data to determine:
  - ✓ Identity of most likely agent(s)
  - ✓ Most likely source(s) of agent
  - ✓ Most likely mode or means by which agent was transmitted
- Utilize NECO Case Investigation Form or develop interview questions and design an outbreak investigation form (questionnaire) based on information from initial surveillance efforts (person, place, and time variables) and the hypothesized agent, source and mode of transmission.
- Develop study design to test the hypothesis. Select an appropriate study design (e.g., cohort or case-control) based on the circumstances. The design should specify how a comparison group of non-ill persons will be selected and what statistical analyses will be performed. Seek consultation from ODH regarding study design, to minimize lost time and rework.

#### 6. Conduct investigation.

- For all **ill** cases that meet the preliminary case definition, obtain appropriate information:
  - ✓ Complete outbreak investigation form/questionnaire for each person. Do not vary questions asked on questionnaire to prevent compromising your analysis and overall conclusions.
  - ✓ Complete on all confirmed and probable cases (see case definitions for specific diseases).
  - ✓ If agent is transmissible person-to-person, complete appropriate outbreak investigation form/questionnaire on contacts of cases.
  - ✓ Implement appropriate control measures for all ill persons.
- For the selected comparison group of **non-ill** persons, obtain information using the outbreak investigation form/questionnaire.

- ✓ Statistical analysis of outbreak data cannot be performed without information from an appropriate non-ill comparison group.
- ✓ Instruct well persons who had the relevant exposure (to point source or ill person) in appropriate control measures. Whether exposed or not, educate interviewed well persons about the illness and alert them to contact their health care provider if they become ill.
- Collect clinical specimens.
  - ✓ Determine what clinical specimens have been collected by health care providers and obtain results. As soon as an outbreak is apparent, request that the laboratory save the specimens for further specialized testing by ODH State Public Health Laboratory.
  - ✓ Consult with ODH regarding what additional specimens may be necessary.
  - ✓ Follow protocols for submitting specimens.
- Conduct environmental assessment and collect specimens.
  - ✓ When a suspect establishment, event, and/or means of transmission (e.g., food) is identified, an Environmental Sanitarian should inspect the site and collect the appropriate specimens.
- Coordinate analysis of both clinical and environmental specimens with ODH.

## **7. Formulate a case definition for analytical purposes.**

- Combine clinical characteristics, laboratory test results, and epidemiological information into criteria for the categorization of cases and prepare a line list of relevant case information that has been gathered
- Categorize the cases according to the case definition.
  - ✓ Confirmed case – implement appropriate control measures
  - ✓ Probable / Suspect case – implement appropriate control measures
  - ✓ Presumptive case – implement appropriate control measures
  - ✓ Ill, but does not meet case definition – monitor to see whether individual develops signs and symptoms characteristic of the agent; if so, refer to health care provider for testing and (if appropriate) treatment.

## **8. Analyze the cases and characterize by time, place, and person.**

- Prepare a frequency distribution of cases by location and by personal characteristics. If appropriate to the situation, obtain denominator data to calculate attack rates. Identify potential associations and risk factors. Update this information at least daily.
- Create Epi curve (histogram) that reflects onset times and incubation period for the organism. Update this information at least daily.
- Select the categories to be analyzed for risk factors and/or associations using Epi Info or other suitable statistical computer software such as SAS.
- Analyze the data to identify differences in exposure frequencies between the ill and well groups (if case/control study), or differences in illness rates between exposed and non-exposed (if cohort study), to confirm or refute the hypothesis. As data from the interviews is analyzed, it may be necessary to modify the direction of the investigation or to formulate a new hypothesis.
- Statistical expertise is available through TIER 2 EPI and regional Epidemiologists.

## **9. Evaluate hypothesis**

- Use the information from the statistical analysis, along with laboratory data, environmental inspection findings, and any other relevant information, to evaluate the hypothesis and formulate conclusions. If the hypothesis does not appear to be confirmed, it may be necessary to modify the direction of the investigation or to formulate a new hypothesis.

## **10. Select and implement control measures.**

- Implement the control measures that are indicated by the statistical, environmental, laboratory and other findings to prevent further spread of the agent. For additional information, see **Control Measures**.

## **11. Evaluate the control measures for efficacy.**

- Determine if solution(s) specified in control plan are being achieved.
- Yes, control measures are being carried out** →
  - ✓ Consider solution(s) have been achieved if additional cases are prevented.

- ✓ If more than two incubation periods have passed and new cases are still occurring, then the outbreak is not under control. New cases may represent continuing exposure from a common source, a new common source, or person-to-person transmission from old cases. Consult with ODH to identify next steps.

**No, control measures are not being carried out →**

- ✓ Identify problem(s), develop new solution(s), implement and evaluate.

**12. Prepare report of investigation.**

- The final report is an important document that summarizes the outbreak. Reliable, complete information about outbreaks contributes to understanding the trends and causal factors in disease incidence, and to detecting and evaluating new diseases and risks.

- The outbreak report should contain the following components:

- ✓ Summary (similar to an abstract)
- ✓ Introduction
- ✓ Background information
- ✓ Methods
- ✓ Results
- ✓ Analysis or interpretations
- ✓ Conclusions (optional)
- ✓ Control measures
- ✓ Recommendations

- The final outbreak report may also be used to justify resources that were expended and/or to identify a need for additional resources for future incidents. The final report is a public document and may serve as evidence in legal proceedings.

- Outbreaks must be closed in NORS within 90 days.

**13. Distribute approved final report to all agencies that contributed to the investigation effort.**

**14. Conduct after-action evaluation as needed.**

- Include all team members in the evaluation process.

**15. Special circumstances.**

- **Release of Information and Public Notification:**

- ✓ It may be advisable to release information to the public because there is a continuing risk of exposure, or
- ✓ The public or the press request details of the investigation before it has been completed.
- ✓ Follow protocols in Communication Plan for release of information and to send HAN alerts.

- **Exclusion of Food Service and Other High Risk Workers:**

For guidance regarding testing and exclusion from work during outbreaks follow the requirements in the Infectious Disease Control Manual based on OAC Chapter 3701-3-01, defining sensitive occupation; 3701-3-13, restricting workers with diarrhea from working in sensitive occupations; and specific follow-up testing needed to allow return to work.

- **Multi-state Outbreaks:**

Because food distribution may occur over a wide geographical area, outbreaks may affect multiple states. **Multistate Foodborne Outbreak Investigations: Guidelines for Improving Coordination and Communication**, published by the U.S. Food and Drug Administration, provides recommendations for these types of investigations.

It may be accessed at

[http://www.fda.gov/downloads/ForFederalStateandLocalOfficials/FoodSafetySystem/UCM143338.pdf?utm\\_campaign=Google2&utm\\_source=fdaSearch&utm\\_medium=website&utm\\_term=Multistate Foodborne Outbreak Investigations: Guidelines for Improving Coordination and Communication,&utm\\_content=1](http://www.fda.gov/downloads/ForFederalStateandLocalOfficials/FoodSafetySystem/UCM143338.pdf?utm_campaign=Google2&utm_source=fdaSearch&utm_medium=website&utm_term=Multistate+Foodborne+Outbreak+Investigations:+Guidelines+for+Improving+Coordination+and+Communication,&utm_content=1)

**Notification**

- Contact the Ohio Department of Health at **614-722-7221** immediately upon learning of a suspected outbreak. This is a single public health response number to report Class A(1) infectious diseases, suspect bioterrorism acts, chemical and radiation incidents and/or natural disasters.

**Control Measures**

- Appropriate control measures depend upon the situation. Consideration should be given to the agent, the mode(s) of transmission, the specific vehicle and setting, and any other relevant findings from the investigation.
- Control measures may include any or all of the following:
  - ✓ Providing vaccine or immune globulin to contacts of known cases
  - ✓ Recalling, embargoing, or destroying food
  - ✓ Correcting a contaminated water source or supply system
  - ✓ Making a public announcement of the outbreak
  - ✓ Improving sanitation, food handling or infection control practices
  - ✓ Closing a restaurant until corrections can be made
  - ✓ Recommending antibiotic treatment and/or exclusion (from work, child care etc.)
  - ✓ Use of barrier precautions such as masks and gloves, or
  - ✓ Other measures
- Control measures should be implemented as soon as there is sufficient information.
- Some basic control measures (good infection control practices, environmental sanitation) are generic to almost every acute illness outbreak.
- Control measures should be continuously evaluated as new information comes in, and changed as necessary.

## Directions to the State of Ohio Laboratories Complex

8995 E. Main St., Reynoldsburg, OH 43068

**From the North:**

I-71 South to I-270 East. Follow I-270 to the Main Street/Reynoldsburg exit. Travel east on Main St. through Reynoldsburg to the complex which will be on your right (south).

**From the East:**

I-70 West to St. Rt. 256/Reynoldsburg exit. Travel north on SR-256 to a five-way stop. Take Graham Rd. which angles to the right from the intersection. Travel north on Graham Rd. to Main St. and turn right (east). Take Main St. east to the complex which will be on your right (south).

**From the South:**

I-71 North to I-270 East. Travel on I-270 East to the Main St./Reynoldsburg exit. Travel east on Main St. through Reynoldsburg to the complex which will be on your right (south).

**From the West:**

I-70 East to SR-256/Reynoldsburg exit. Travel north on St. Rt. 256 to a five-way stop. Take Graham Rd. which angles to the right from the intersection. Travel north on Graham Rd. to Main St. and turn right (east). Take Main St. east to the complex which will be on your right (south).

**Stackhouse Lab – Zoonotic Disease Program (Z)**

Use the Central Entrance off Main St., bear right then left at the split. Proceed straight and turn left into the parking lot (P1). Walk up the front steps and ring the buzzer for the attendant and visitor ID.  
Phone: (614) 752-1029

**Vector-borne mosquito & dead bird sample drop-off (V)**

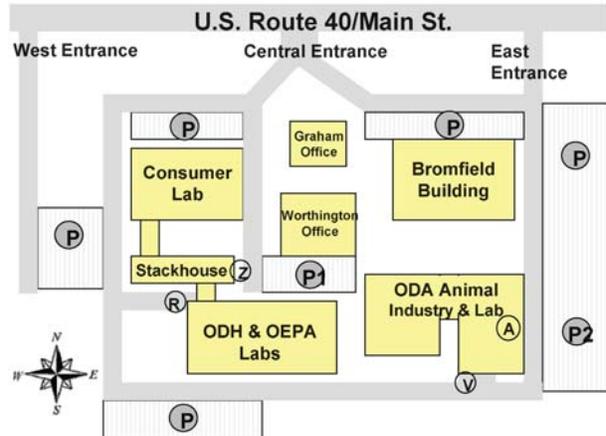
Use the East Entrance off Main St., proceed past Bromfield and ODA Animal Industry building. Turn right, before entering the parking lot. At loading dock there is a large walk-in cooler door marked for mosquito and dead bird boxes. Place boxes within the refrigerated holding area.

**ODH Zoonotic Disease Program and Vector-Borne shipment, and Rabies sample drop-off (R)**

Use the Central Entrance off Main St., bear right and then right again at the split. Proceed past the parking lot, turn left and then pass 2 buildings. Turn left and back into loading dock to unload boxes or shipments.

**ODA Animal Industry & Animal Disease Diagnostic Laboratory (A)**

Use the East Entrance off Main St., proceed past the Bromfield building and park in eastern lot (P2) by the ODA ADDL building. Through the main doors is a receptionist who will take information on an animal submitted for necropsy.



- (Z) Entrance to Zoonotic Disease Program offices
- (R) Rabies sample drop-off (loading dock)
- (V) Vector-borne lab & drop-off (loading dock)
- (A) ODA Animal Disease Diagnostic Lab entrance
- (P1) Parking for Stackhouse & ODH/OEPA Labs
- (P2) Parking for ODA ADDL Lab

ODH Lab (Rabies), Zoonotic Disease Program – Vector Borne Lab  
Hours: Monday through Friday, 7:30 am - 4:30 pm Phone: (888) 722-4371

ODA Animal Disease Diagnostic Lab  
Hours: Monday through Friday, 8 am – 5 pm Phone: (614) 728-6220

NO AFTER HOURS SAMPLE DROP-OFF

TAB E

**Chain of Custody Form**

Description of item taken into custody: \_\_\_\_\_

Reason for taking item into custody: \_\_\_\_\_

1	Person Handing over item (print & sign name)	Telephone Number	Date	Time
	Person Receiving Item (print & sign name)	Telephone Number	Date	Time
	Disposition of Item			
2	Person Handing over item (print & sign name)	Telephone Number	Date	Time
	Person Receiving Item (print & sign name)	Telephone Number	Date	Time
	Disposition of Item			
3	Person Handing over item (print & sign name)	Telephone Number	Date	Time
	Person Receiving Item (print & sign name)	Telephone Number	Date	Time
	Disposition of Item			
4	Person Handing over item (print & sign name)	Telephone Number	Date	Time
	Person Receiving Item (print & sign name)	Telephone Number	Date	Time
	Disposition of Item			

## Incident Management Document: NECO-5 Epidemiology

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### I. INTRODUCTION:

#### A. OBJECTIVE:

- To continue surveillance activities of infectious diseases coupled with effective preventive strategies and being prepared to respond to emergent events that threaten the health and safety of our citizens, such as newly emergent infections, terrorist acts, or natural disasters while coordinating epidemiological resources in the NECO Region.

#### B. DEFINITIONS

- **Epidemiology:** is the study of factors affecting the health and illness of populations, and serves as the foundation and logic of interventions made in the interest to study design, data collection and analysis including the development of statistical models to test hypotheses and the documentation of results.

### II. ENABLING POLICIES LEGISLATION:

#### A. NECO-5 Specific Agreements & Policies:

- NECO Region 5 Public Health Mutual Aid Agreement.

#### B. Ohio Administrative Code (OAC):

- Ohio Administrative Code 3701-3-01-3701-3-30 regarding Communicable Disease Rules and pertinent chapters of the Ohio Revised Code that describe the powers and duties of public health officials.

### III. SITUATIONS AND ASSUMPTIONS:

#### A. Situations

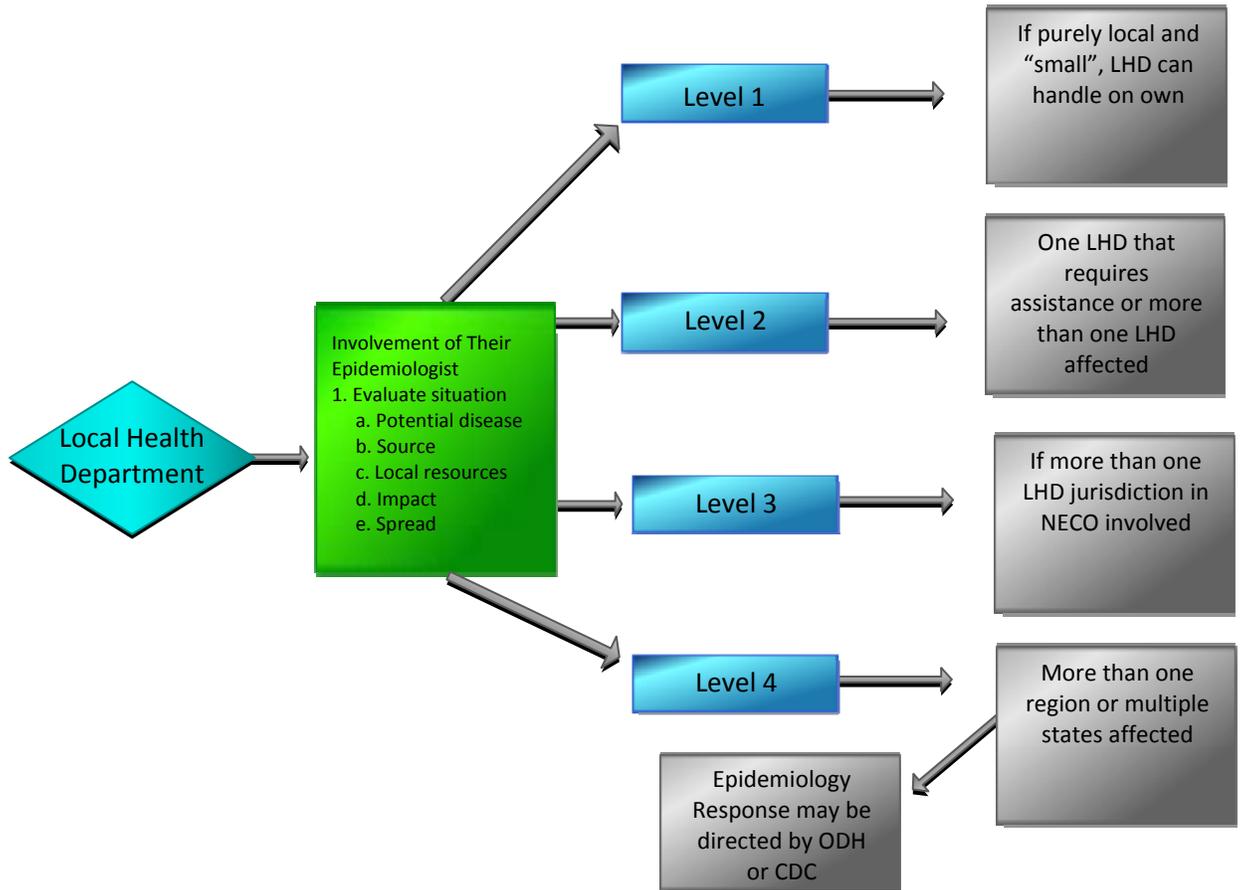
- All emergencies, disasters, and incidents begin locally and are managed locally in NECO Region 5.
- There is no jurisdictional authority or governing body vested with coordination of prevention, preparedness, response, recovery, or mitigation activities regionally during emergencies, disasters, or regional incidents in NECO Region 5.
- Health Departments and/or Health districts maintain jurisdictional authority and autonomy regarding the coordination and implementation of Incident Management Plans and strategies within their respective jurisdictions.
- NECO Region 5 Health Departments and/or Health Districts maintain legal authority and jurisdictional autonomy regarding the coordination and implementation of Public Health prevention, preparedness, response, and recovery operations within their jurisdiction.
- NECO Region 5 Health Departments and/or Health Districts maintain legal authority and jurisdictional autonomy regarding the coordination and implementation of Epidemiological Incident Management strategies locally.

- County Emergency Management Agencies in NECO Region 5 maintain county emergency operations plans and procedural documents that outline the incident management capabilities, responsibilities, and resources the Emergency Management Agency may utilize to support coordination and communication between local, regional, and state partners.
- The Ohio Department of Health (ODH) and the Centers for Disease Control and Prevention (CDC) may provide assistance with epidemiology surveillance and response in specific outbreaks.
- Coordinating regional assistance may not be needed for every aspect of investigation and control; e.g., prophylaxis and control may require regional assistance with some diseases while the actual investigation/interview may be done by individual health departments and/or health districts. In other cases, interviewing and specimen collection may require regional assistance but not prophylaxis and control.

## **B. Assumptions**

- Epidemiological strategies will be coordinated regionally through communication.
- Implementation of epidemiological strategies will occur at a local level, using the guidance set forth in the Ohio Infectious Disease Control Manual.
- Incidents requiring regional coordination will be managed through utilization of the ICS structure; whereby, each jurisdiction will implement the Incident Command System.
- Local Emergency Operation Centers will act as the Multi Agency Coordination Center of each jurisdiction; whereby, they provide operational support by providing a common operation picture to the local jurisdiction through communication with regional and State partners.
- NECO Region 5 Health Departments and/or Health Districts maintain emergency plans and procedural documents that address at a minimum what must be done and how local jurisdictions will implement epidemiology surveillance.
- Each Health Department and/or Health District has an epidemiological plan and/or procedure which addresses the following minimum elements:
  - protocols for assessing health information
  - protocols for gathering and analyzing surveillance data
  - protocols for notifying CDC of cases on the NNID list
  - recommendations and initiation of containment and mitigation actions
  - investigation report templates
  - staffing capacity for routine investigations
  - epidemiologists with tier 1 competencies and skills
  - access to health information infrastructure and surveillance systems
  - procedures to ensure 24/7 local health department access
  - legal and procedural framework that supports information exchange
- There is no established regional authority and primary responsibilities of the epidemiologists lie with the needs of their own jurisdiction. In any event, the epidemiologist will follow the guidelines of their health departments and/or health district and / or ODH.
- Each Health Department and/or Health District will provide a current list of personnel and other resources needed for interviewing, scribes, data entry, data analysis, specimen collection, handling and shipping.
- The NECO Region 5 epidemiologists will work together on common education, training, and exercises to ensure a common foundation for epidemiological investigation.

- This epidemiologic incident management document is directed towards acute communicable disease issues. It may not be applicable to non-infectious disease investigations.
- When necessary, Mutual Aid Agreements (MAAs) will be utilized when epidemiologic surveillance and investigation resources are needed to effectively manage the outbreak.
- The Ohio Department of Health and Centers for Disease Control and Prevention will provide epidemiological guidance.



#### IV. CONCEPT OF OPERATIONS (CONOPS):

##### A. Determination of Regional Assistance Algorithm-Local Health District (LHD) receives disease or outbreak report (Questions to be considered)

- Is it a common or an unusual disease?
- Level of previous experience of LHD with disease or outbreak?
- Outbreak involves more than one LHD (patients, hospitals, work place, etc.)?
- LHD has enough personnel to adequately investigate and/or control disease or outbreak?
- LHD has adequate supplies needed to investigate disease or outbreak?

- Impact of disease (lab supplies, environmental testing, educational materials) This will be dependent on:
  - Number of cases
  - Communicability
  - Public/media perception of risk/fear
  - Adequate control measures (medical, fire, law enforcement, emergency management agency involvement)

## B. Response Level

- **Level 1 Response:** One health jurisdiction is affected and the response can be handled without regional assistance or resources. The event is thought to be small in scope and is not expected to escalate.
  - Recommend Actions:
    1. No regional response required.
    2. Conduct a situation assessment.
    3. Implement local health department epidemiology plan.
    4. Implement ICS and activate appropriate positions as applicable to local plans.
    5. General notification of the incident may be made to the region during regular business hours.
    6. Continue local cost and time tracking procedures.
- **Level 2 Response:** One health jurisdiction is affected; the response may require regional assistance or resources. The event is localized to one health jurisdiction but with multiple occurrences and is anticipated to escalate.
  - Recommend Actions:
    1. Review level 1 response recommended action.
    2. Conduct a situation assessment.
    3. Use established guidelines (found in regional assistance algorithm) to determine what type of assistance is needed from the unaffected health jurisdictions.
    4. The affected health jurisdiction may notify the region.
    5. Provide notification of incident to various local, regional and/or state partners.
    6. Continue local cost and time tracking procedures.
    7. If more than one jurisdiction becomes involved move to Level 3.

- **Level 3 Response:** More than one health jurisdiction is affected within the region and requires regional assistance and resources. The event is widespread and expected to escalate. A Public Health Emergency may be declared for the incident. ODH and/or the CDC may be involved in initiating response and updates for this level.
  - Recommend Actions:
    1. Review level 1 and 2 response recommended action.
    2. Conduct a situation assessment.
    3. Follow the established guidelines (found in regional assistance algorithm) to coordinate epidemiology regional assistance.
    4. Notify all NECO Region 5 epidemiologists (May use OPHCS high level alert or NECO regional phone tree especially if incident is occurring after hours).
    5. Hold briefing updates with region as often as necessary.
    6. ODH and CDC may be involved in initiating a response and updates for this level.
    7. Continue local cost and time tracking procedures.
    8. If more than one region in the state or multiple states become involved move to Level 4.
  
- **Level 4 Response:** More than one region in the state or multiple states are affected. A Public Health Emergency will be declared by some level of government. Response will be coordinated regionally through local EOCs acting as the Multi Agency Coordination (MAC) Center of each jurisdiction; whereby providing operational support through establishment of a common operational picture to the local jurisdiction through communication with regional and State partners. The response may be directed by ODH and/or the CDC; however, local and regional coordination of efforts will occur through the MACS.
  - Recommend Actions:
    1. Review Level 1, 2 and 3 response recommended actions.
    2. Conduct a situation assessment.
    3. Use the established guidelines (found in regional assistance algorithm) to initiate investigation and notification of the region.
    4. Response may be directed by ODH and/or CDC.
    5. Assess and refine local emergency declaration for a public health incident.
    6. Continue local cost and time tracking procedures.

**C. Recovery Actions to be Considered and Discussed:**

1. Cost Recovery
  - Tally your total time and cost
  - Evaluate opportunities for reimbursement
  - Complete appropriate documentation
  - Submit appropriate documentation
2. Assess need for mental health interventions
3. Resend orders as applicable and issue new recommendation if appropriate

**Note: Refer to local jurisdictions recovery plans**

**V. DOCUMENT REVISION**

**Insert Document Revision Statements utilizing bulleted format as presented in the explanation below.**

- This Document will be reviewed on an **annual** basis. This Document may be revised based on instances including but not limited to: best practices, changes in government structure, changes in equipment, changes in infrastructure, or as the result of After Action Reports (AAR), Improvement Plans (IP), Exercises and real events.

**NECO Region 5 Epidemiology Alert Guidelines**

All three alerting systems are documented in these guidelines. OPHCS should be used as the primary alerting system. The email contact list and phone tree can be used if needed or in the event that OPHCS cannot be accessed.

**Section 1: Quick Reference**

	<b>OPHCS</b>	<b>Email Communications</b>	<b>Phone Tree</b>
<b>Low Alert</b>	X- Email Only	X (backup)	
<b>Medium Alert</b>	X	X (backup)	X- If necessary (backup)
<b>High Alert</b>	X	X (backup)	X (backup)

## Section 2: Instructions by Alert Type:

### Primary Alerting Procedures:

#### OPHCS Alert:

##### A. How to send an OPHCS alert:

1. Sign onto OPHCS: <https://ophcs.odh.ohio.gov>
2. Click on “Alerts”
3. Click on “Send Alert by Role”
4. On the left side of the page Choose:
  - a. Homeland Security Regions
  - b. Northeast Central Ohio
  - c. Northeast Central Ohio Epidemiologists
5. Choose the “Alert Priority” from the drop down list
6. Choose the “Alert Sensitivity” from the drop down box (Yes – No)
7. Choose the duration of the alert
8. Choose Alert type
  - a. For “LOW” Alerts, Choose “EMAIL ONLY”. All others choose “USE ALERT PROFILE”
9. Choose the Event Status: Actual – Exercise – or Test
10. Choose the Jurisdictional Level: National – State – Territorial – or Local. For the NECO test choose **Local**.
11. Type the Subject and Message for the alert
  - a. Subject: “NECO Regional Epi Alert Test:
  - b. Message: “This is a test for the NECO Regional Epidemiology Workgroup. It is also a reminder to ensure your Phone Tree contact information is up to date. Please respond to this alert as soon as possible. Thank you.”
12. Click “Send Alert”

##### B. Use OPHCS alerts for “Low”, “Medium”, and “High” Alerts

##### C. Confirming Alert Status in OPHCS:

1. Click on “Alerts” on the top of the OPHCS Main Page
2. Click on “View my Sent Alerts”
3. You can choose the date of the Sent alert and/or the alerting group that the alert was sent to.
4. Choose the “Alert” that you sent
5. Take note of all persons who confirmed the alert and those who did not.

### Backup Alerting Procedures:

#### A. NECO Email Contacts

- NECO Epidemiology Email Contact Sheet on OPHCS via the following pathway: Document Library : Documents : Ohio Homeland Security Regions : Northeast Central Region : Neco Region V Collaboration : Epidemiologist Issues : Contact Information
- Use NECO Email Contact Sheet for “Low”, “Medium”, and “High” Alerts

#### B. NECO Phone Tree

- NECO Regional Phone Trees on OPHCS via the following pathway: Document Library : Documents : Ohio Homeland Security Regions : Northeast Central Region : Neco Region V Collaboration : Epidemiologist Issues : Contact Information
- Please refer to the Emergency Phone Contact Procedure Document for instructions. The affected zone epidemiologist or designee will contact the other zone epidemiologist to determine who will start contacting the remaining zones to begin the Phone Tree
- Use complete NECO Epidemiology Phone Tree for **High Alerts ONLY**

- Partial initiation of the NECO Epidemiology Phone Tree can be used at your discretion for **Medium Alerts**.
- If your ZONE or surrounding Zones may be affected by your information and need to be aware of the situation quickly.

### Section 3: Instructions by Alert Priority

#### Low Priority

- A. **“Low Priority”** Alert will be issued when an illness that may or may not be confirmed is occurring in your jurisdiction and/or county and there is a low likelihood of spreading out of your area. **This is a “For Your Information” alert ONLY.**
- B. This is an “Email Only” Alert
  - **Primary: Use OPHCS: “Low Alert”, “Email Only”**
  - **Secondary: Use NECO Epidemiology Email Contact Sheet**

#### Medium Priority

- A. **“Medium Priority”** Alert will be issued when an illness that may or may not be confirmed is occurring in your jurisdiction and/or county and there is a possibility of spreading out of your area. This may or may not have the potential to affect your neighboring jurisdictions and/or counties
- B. This is an Email Only Alert and/or partial initiation of the NECO Phone Tree
  - **Primary: Use OPHCS: “Medium Alert”, “Use Alert Profile”**
  - **Secondary: Use NECO Epidemiology Email Contact Sheet**
  - **Secondary: If Necessary (not mandatory)**, initiate part of the NECO Phone Tree: Contact your Zone and/or surrounding Zones. (This is only if a spread to other surrounding jurisdictions has been seen and there needs to be a quick notification of the surrounding jurisdictions and/or counties.)

#### High Priority

- A. **“High Priority”** Alert will be issued when an illness is a confirmed Class A1 Disease that if it hasn’t already, has a high likelihood of spreading to the NECO region or is an unusual illness (such as Smallpox, Anthrax) that the region needs made aware of immediately.
- B. This is an Email and Phone Alert
  - **Primary: Use OPHCS: “High Alert”: “Use Alert Profile”**
  - **Secondary: Use NECO Epidemiology Email Contact Sheet**
  - **Secondary: Initiate the full NECO Region 5 Epidemiology Phone Tree**

# Ohio Public Health Communication System (OPHCS) Alerting Instructions

## Logging Into OPHCS

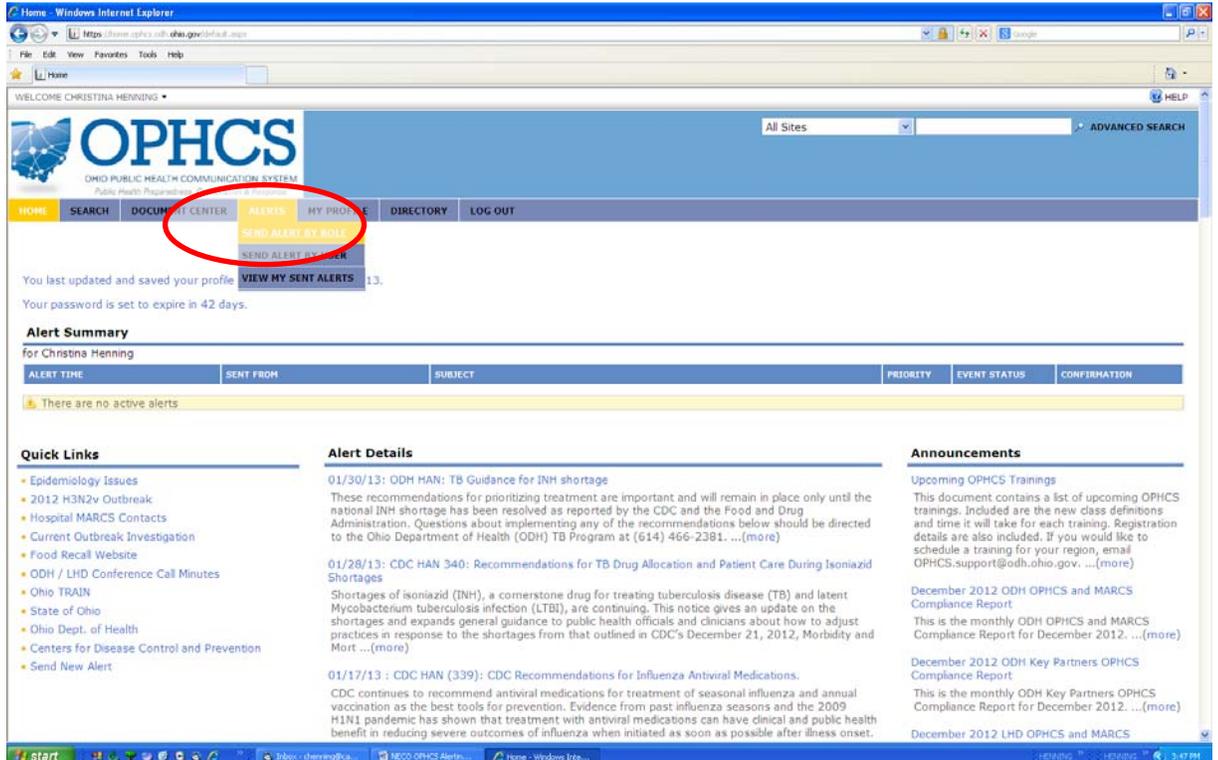
1. Click on your Internet Explorer or other appropriate icon to activate your Web browser.
2. Type <https://home.ophcs.odh.ohio.gov/default.aspx> in the address bar and press ENTER. The following dialog box will appear:



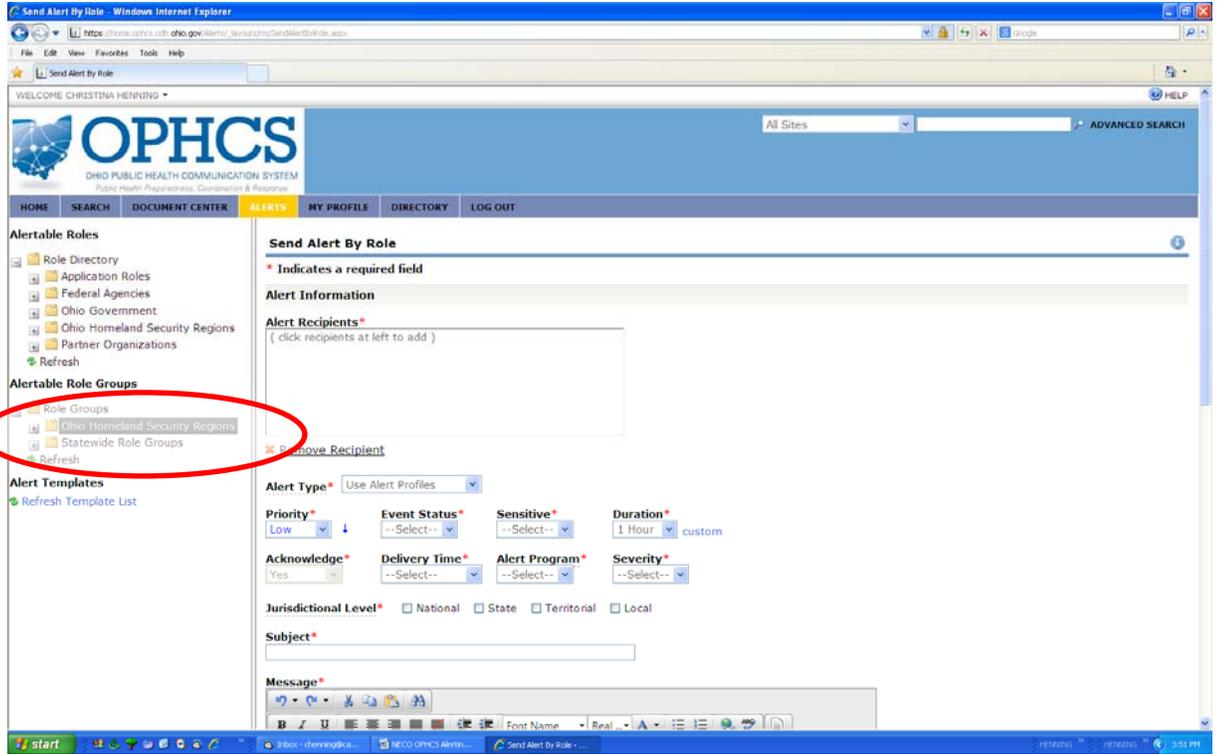
3. Enter your User name and Password in the login box. (Both the Username and Password are case sensitive). Click OK or press ENTER.

## Selecting Roles to Alert

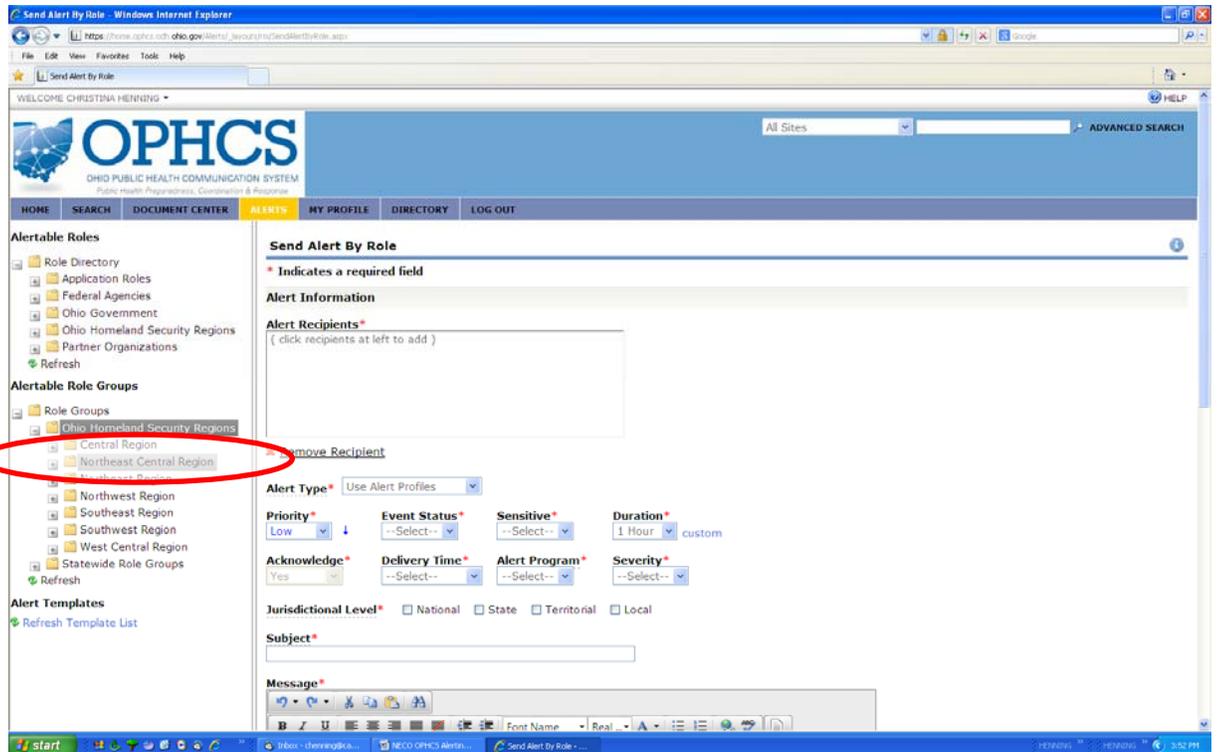
1. On the OPHCS home page select *Send Alerts by Role*, as shown below:



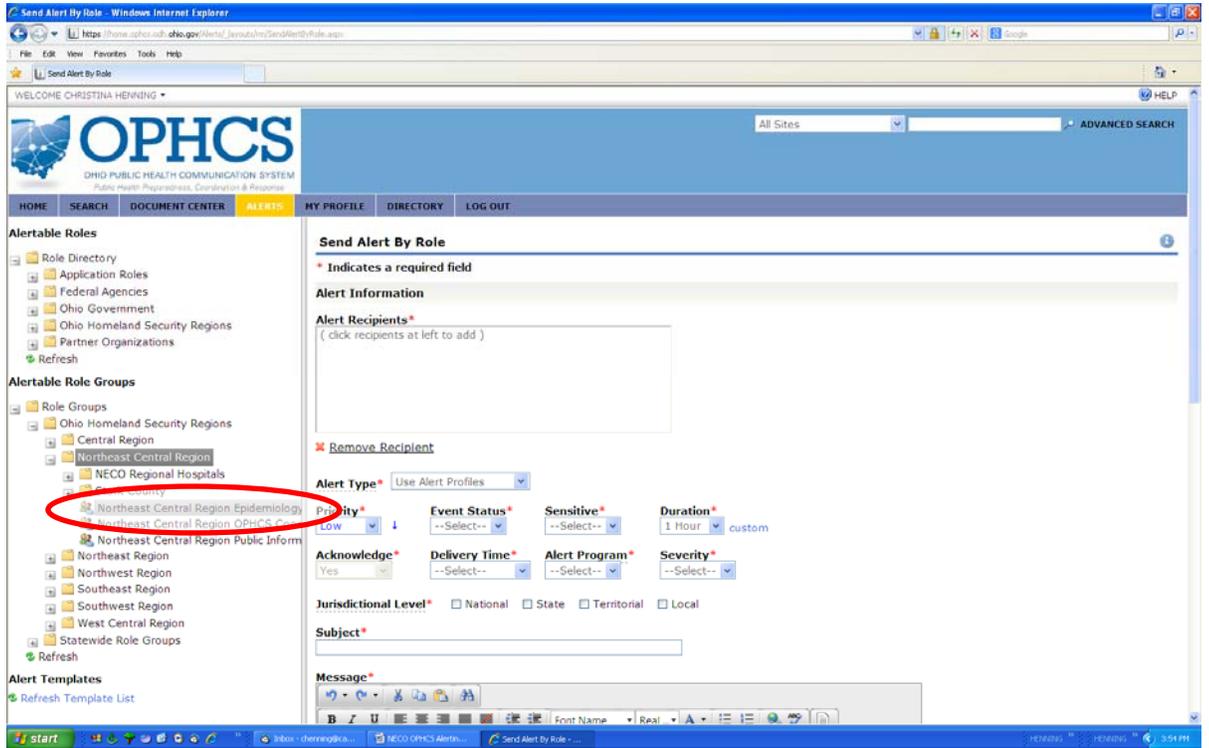
2. On the Send Alert By Role page click on *Ohio Homeland Security Regions* in the Alertable Role Groups section, as shown below:



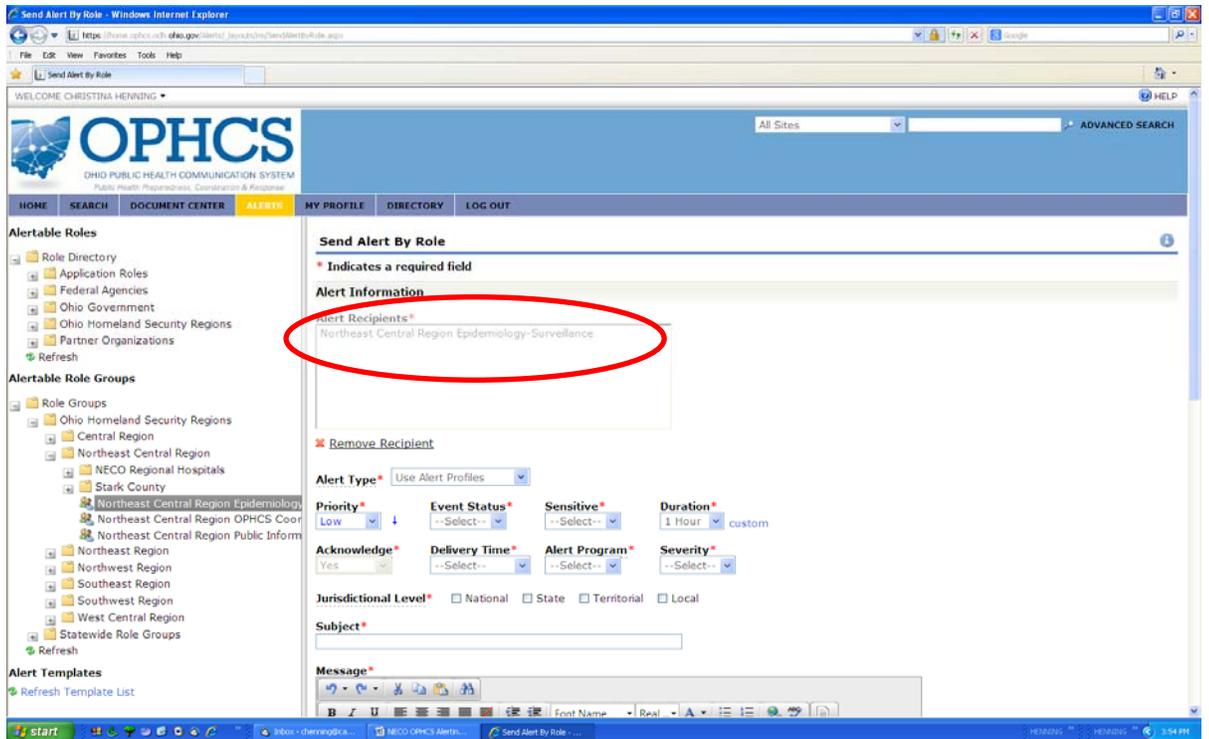
3. Click on *Northeast Central Region*, as shown below:



4. Click on *Northeast Central Region Epidemiologist*, as shown below:

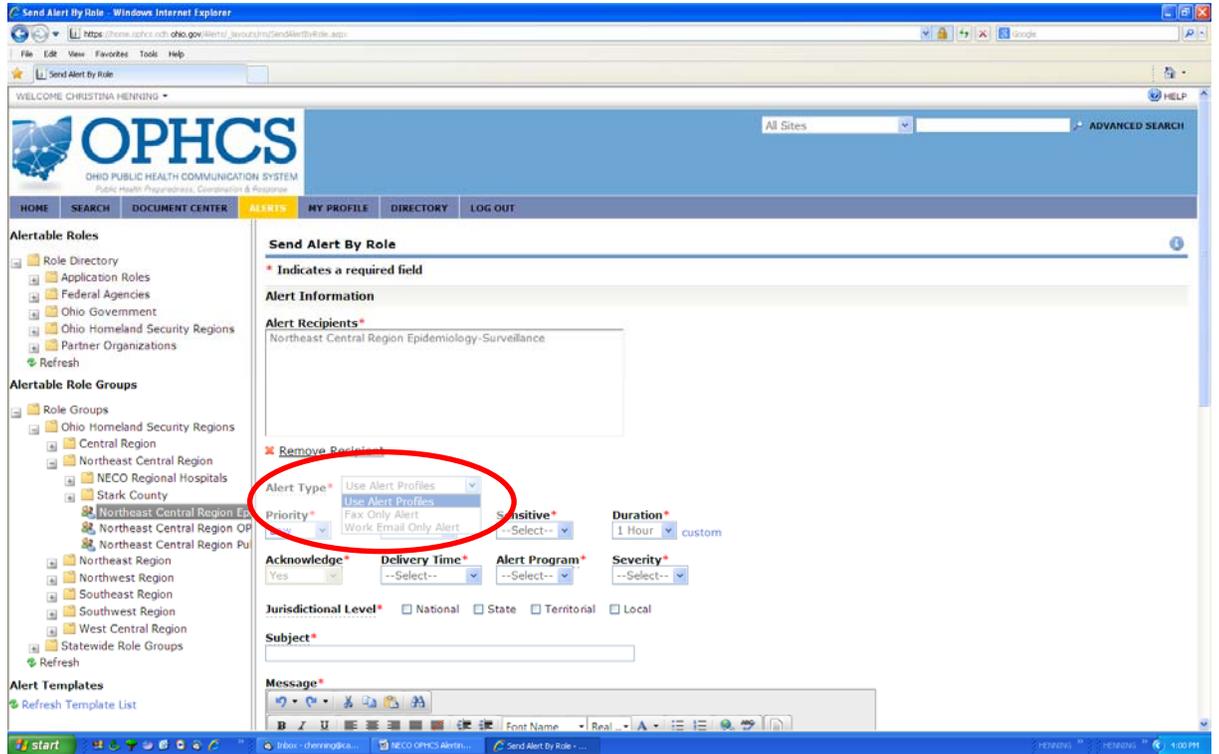


5. Note that *Northeast Central Region Epidemiologist* is now listed as an Alert Recipient, as shown below:

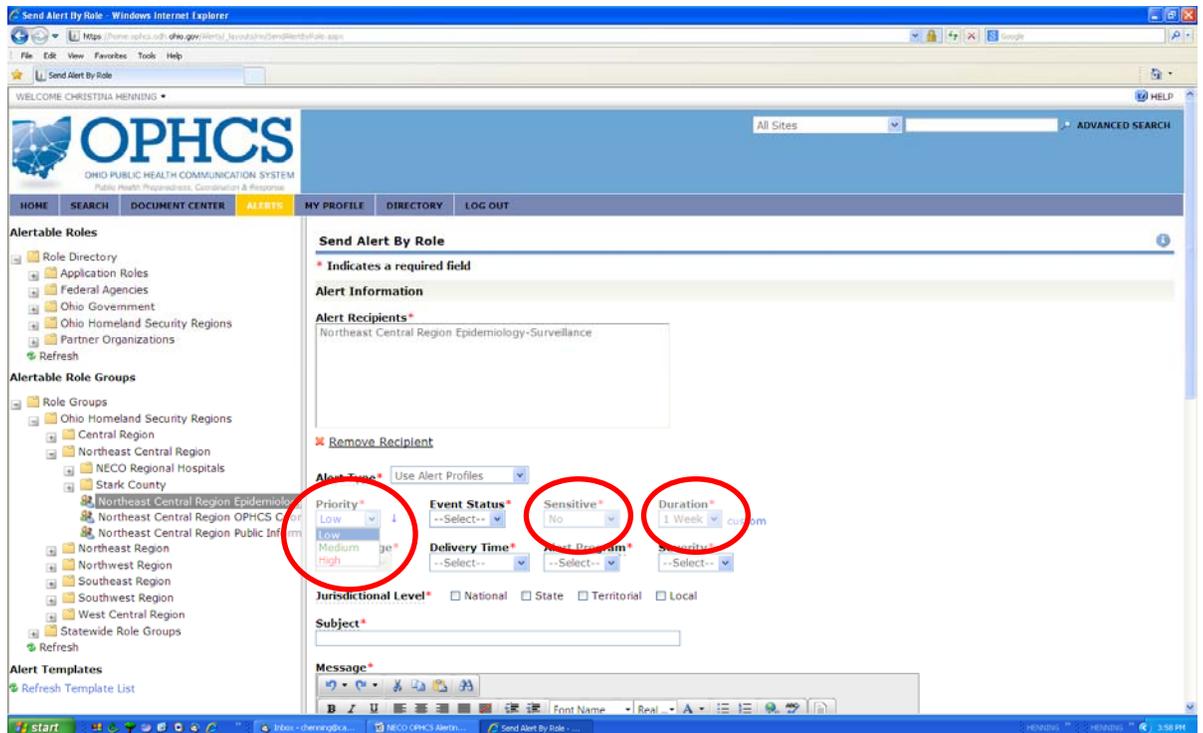


## Creating the Message

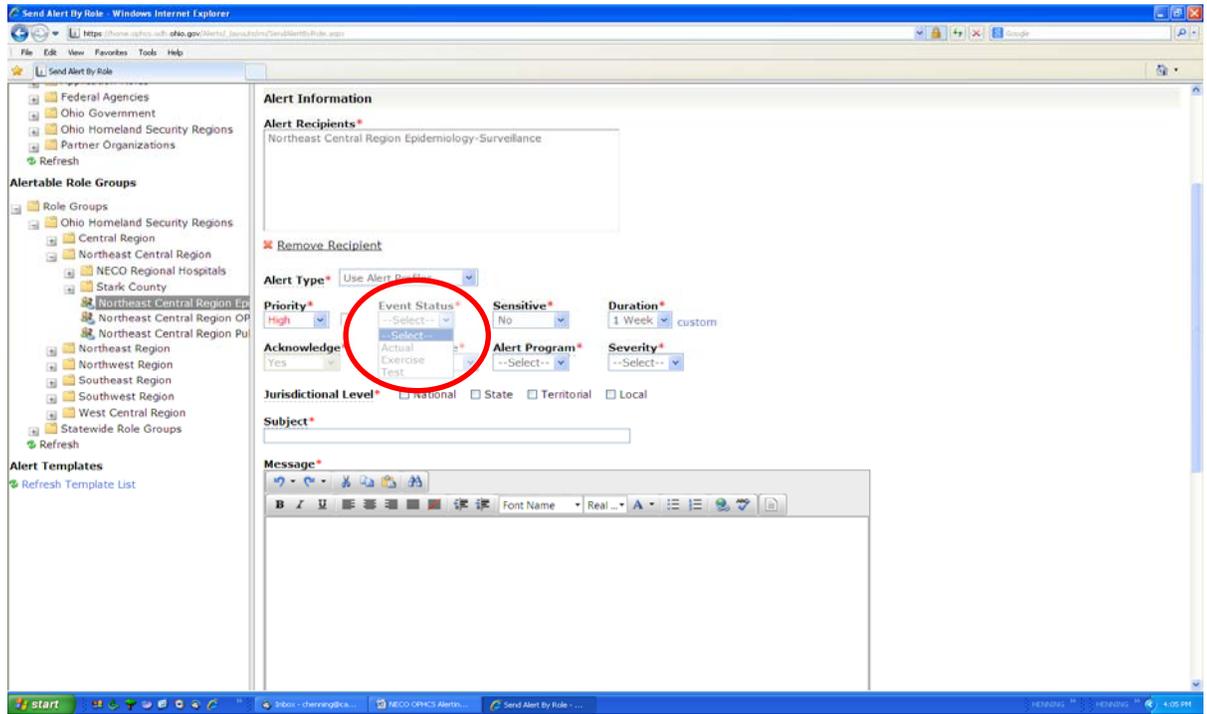
1. Select the Alert Type (always Use Alert Profiles)



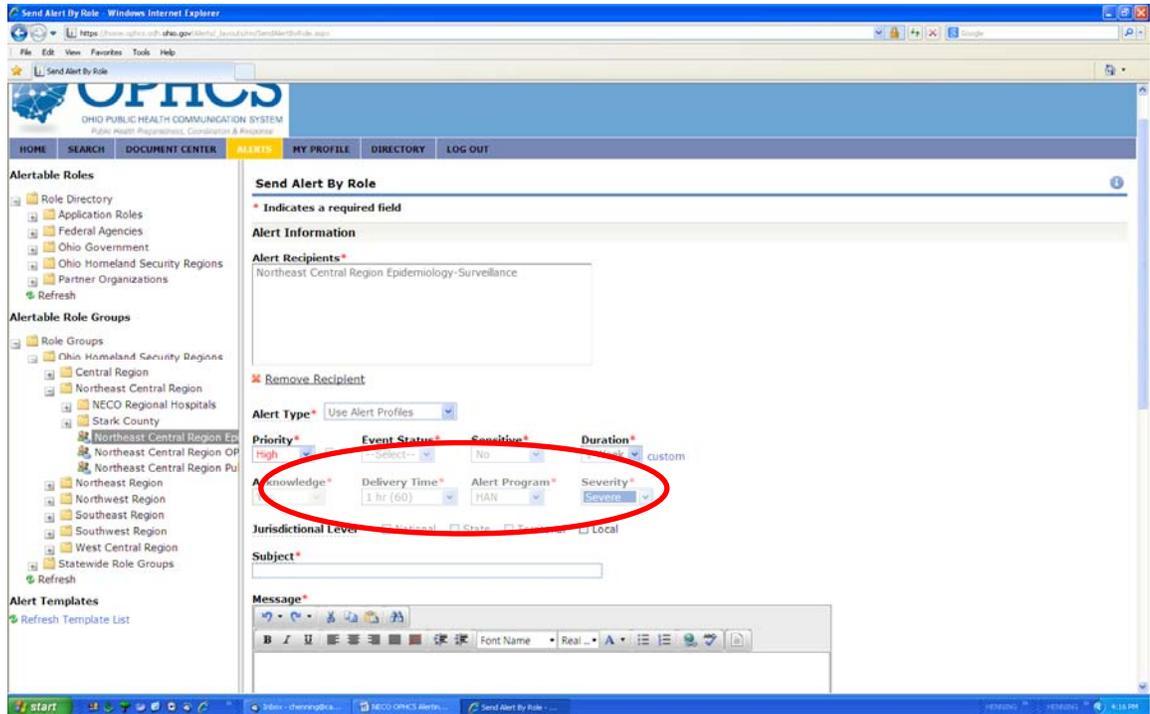
2. Select the Priority (Low, Medium, or High), Sensitivity (No for testing) and Duration (always 1 week), as shown below:



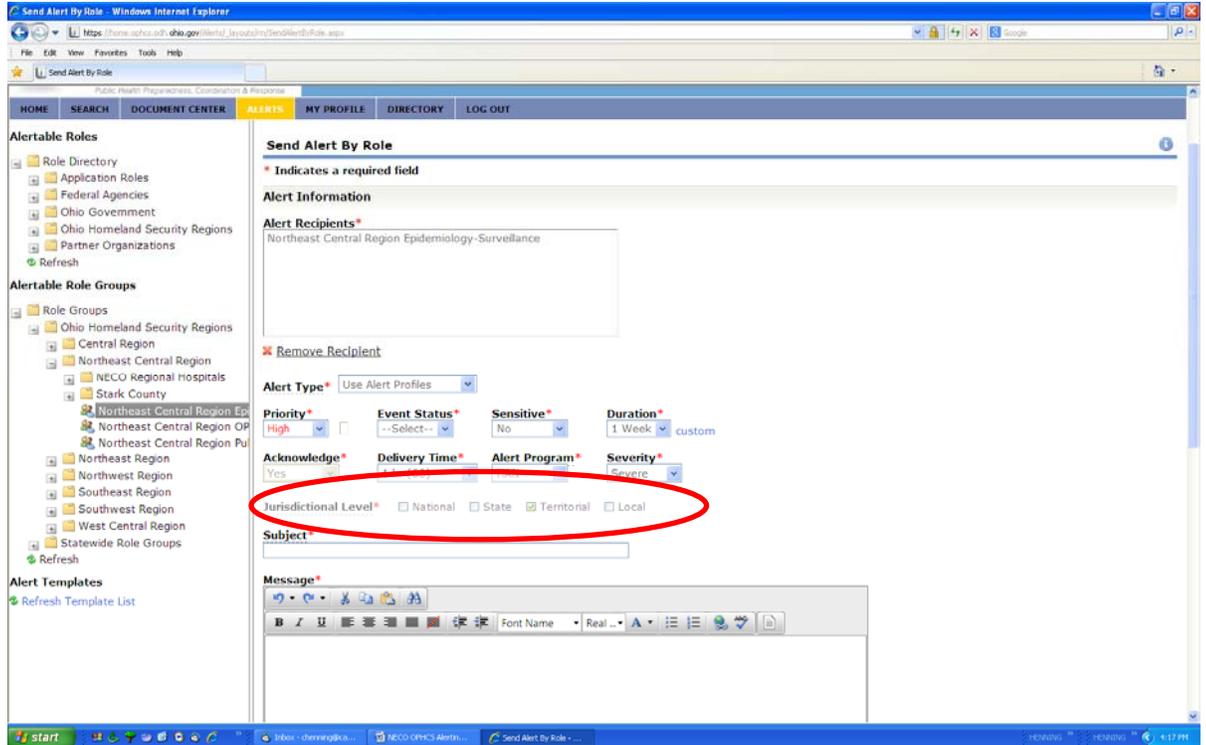
3. Select the, Event Status (Actual, Exercise or Test), , as shown below:



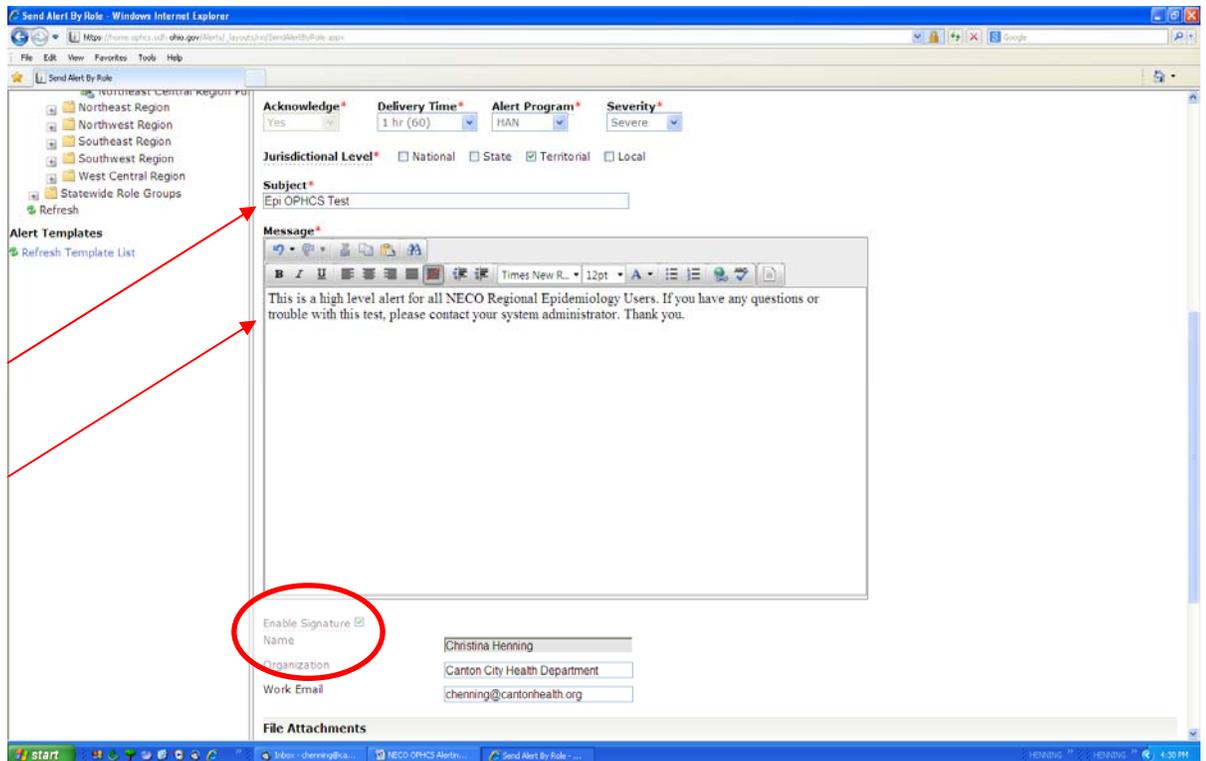
4. Select the Delivery Time (15 minutes should not be used, 1 hour for High Priority Alerts, 24 hours for Medium Priority Alerts, or 72 hours for Low Priority Alerts). Select the Alert Program (always use HAN). Select the Severity (Extreme, Severe, Moderate, Minor, or Unknown). *Please Note: If Extreme or Severe are selected, the e-mail message will direct you to where to read the alert, however you will hear the entire alert on the phone.* A sample Delivery Time, Alert Program, and Severity are shown below:



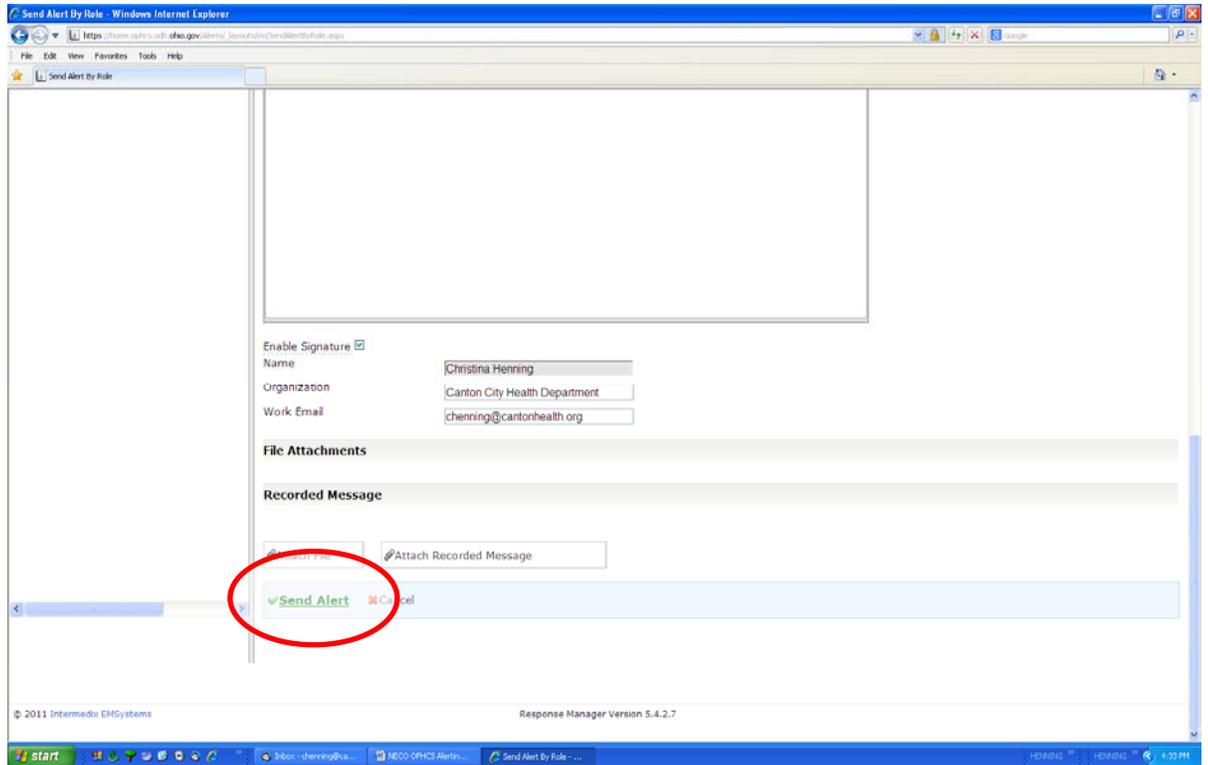
5. Select the Jurisdictional Level (National, State, Territorial (i.e. Regional) or Local), as shown below:



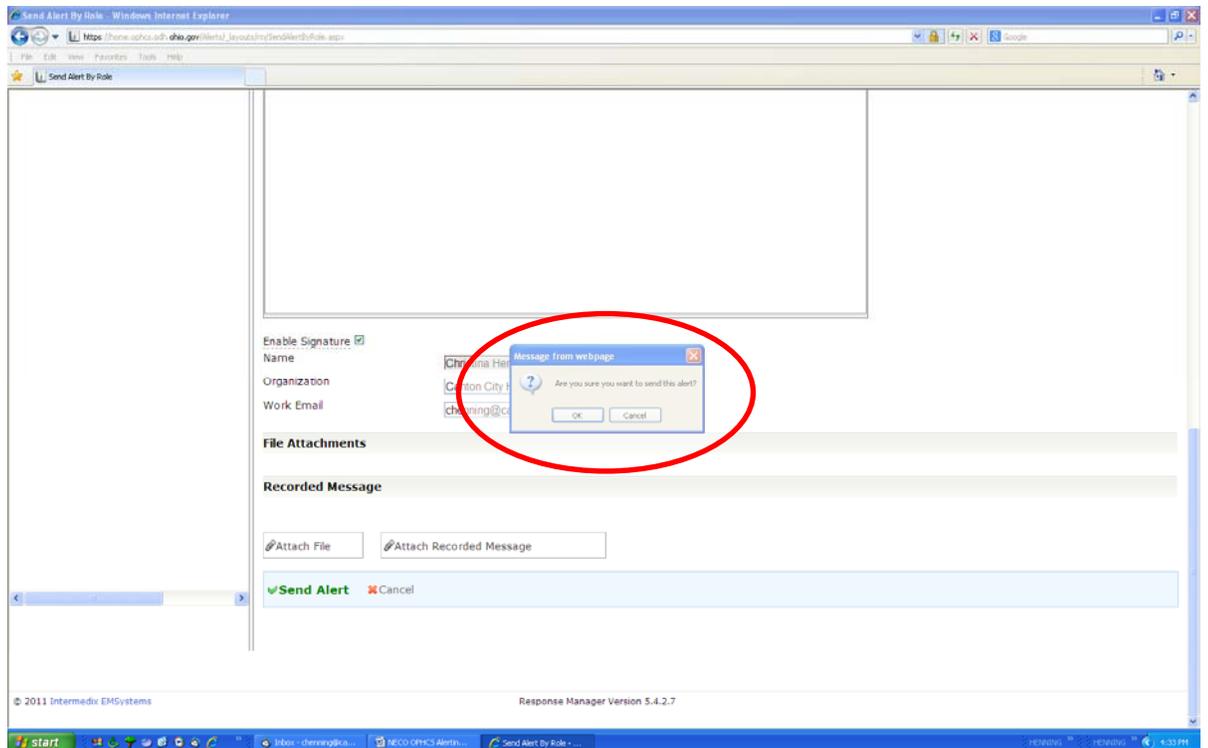
6. Type in the subject and the message and check the Enable Signature box, as shown below:



7. When everything is entered the way you want it, click *Send Alert*, as shown below:

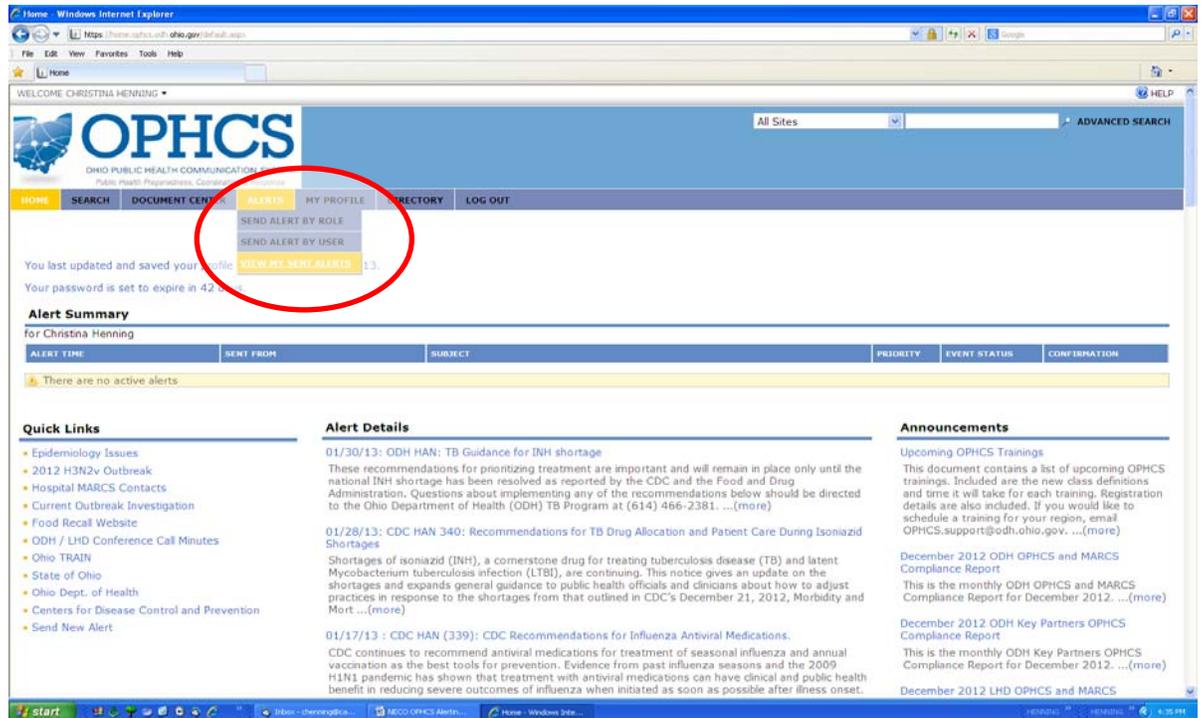


8. A confirmation box will appear. Click OK to confirm, as shown below:



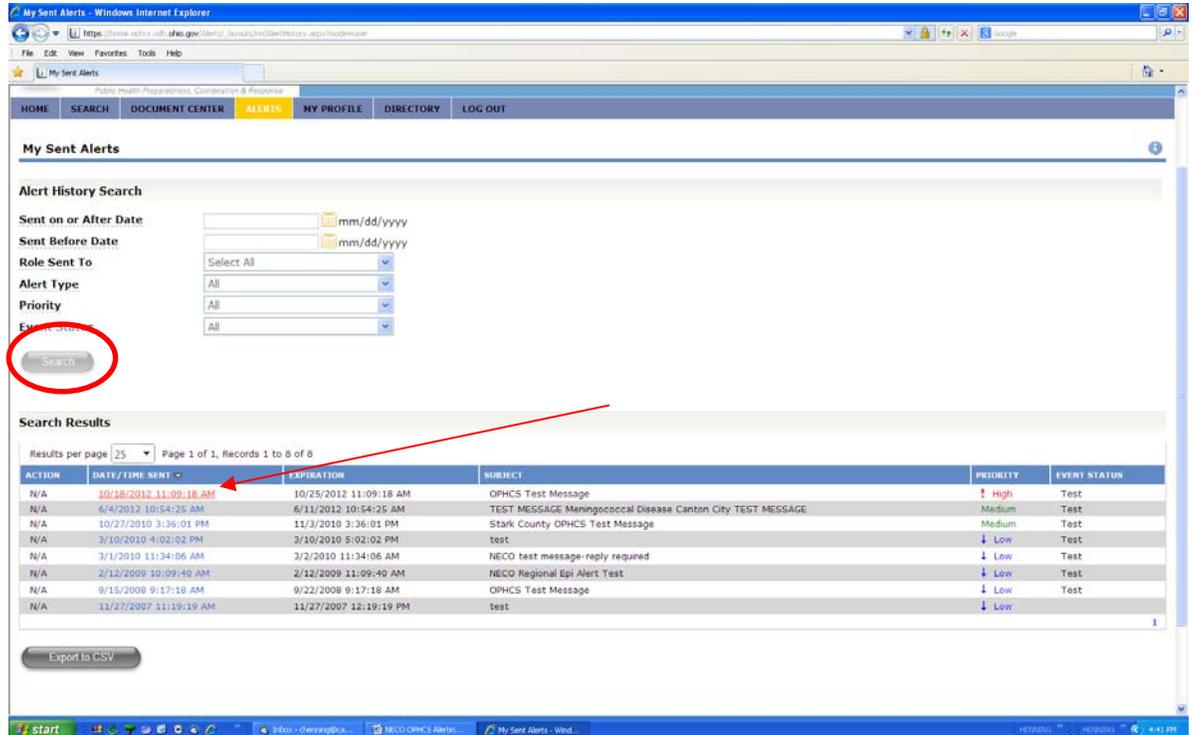
## Review and Report Alerting Details

1. To review the confirmation details, click View My Sent Alerts, as shown below:



The screenshot shows the OPHCS (Ohio Public Health Communication System) web application. The user is logged in as Christina Henning. The navigation menu includes HOME, SEARCH, DOCUMENT CENTER, ALERTS, MY PROFILE, DIRECTORY, and LOG OUT. The 'ALERTS' menu is expanded, showing options: SEND ALERT BY ROLE, SEND ALERT BY USER, and VIEW MY SENT ALERTS (13). The 'VIEW MY SENT ALERTS' option is circled in red. Below the navigation, there is an 'Alert Summary' section for Christina Henning, indicating no active alerts. The page also features 'Quick Links', 'Alert Details' (with a list of recent alerts), and 'Announcements'.

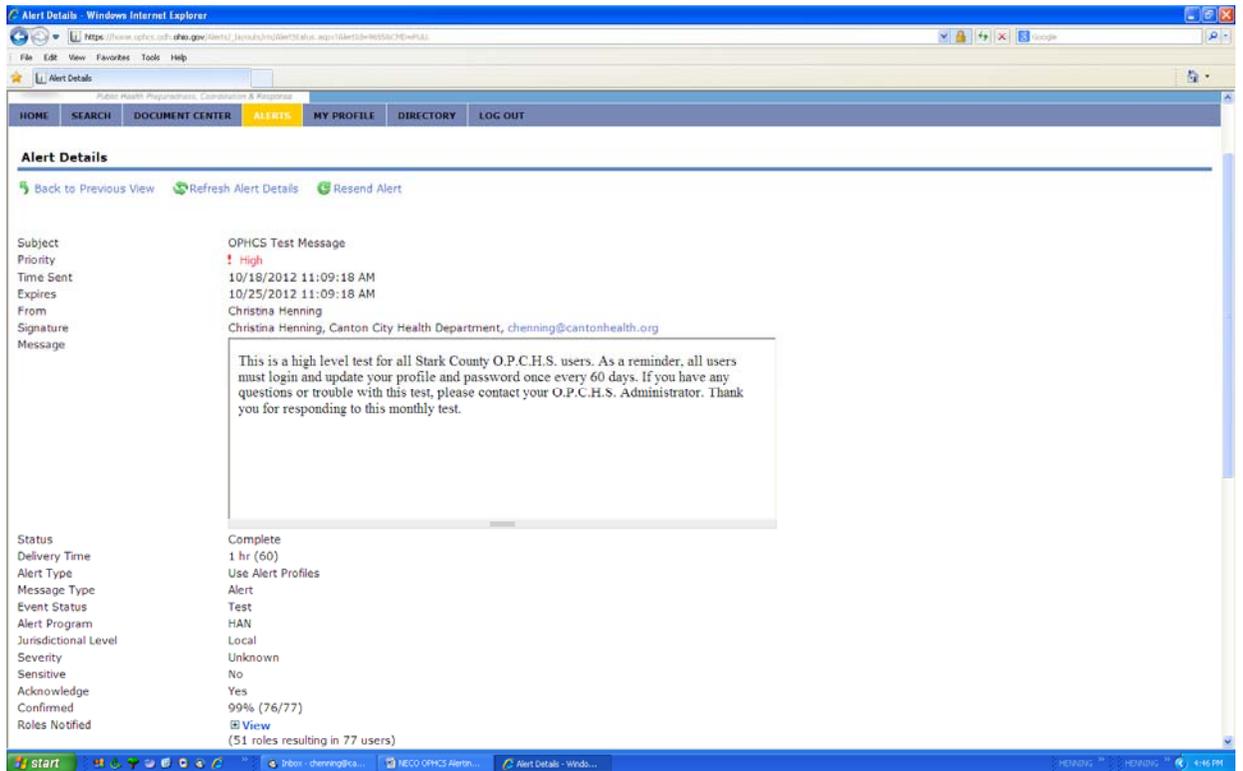
2. Click the *Search* button and then select the desired test by clicking on the blue date and time sent field, as shown below:



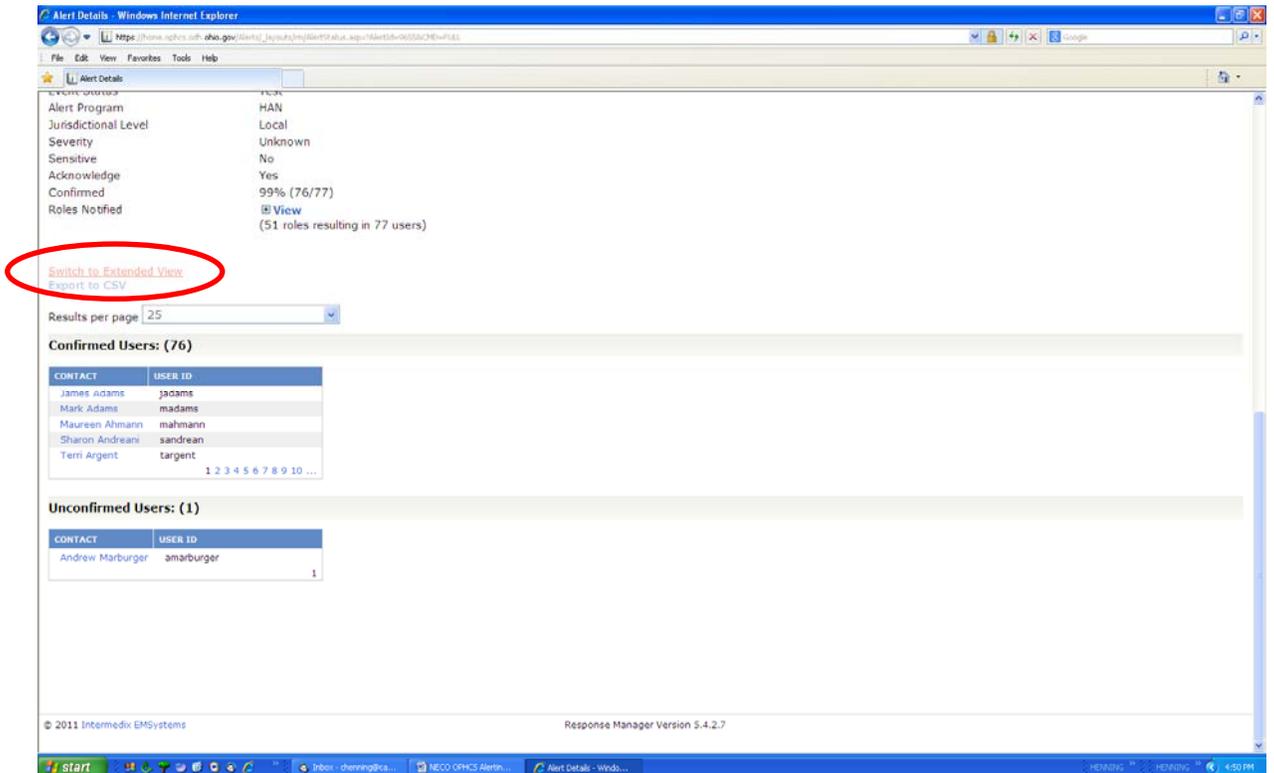
The screenshot shows the 'My Sent Alerts' page. The search filters are: Sent on or After Date, Sent Before Date, Role Sent To (Select All), Alert Type (All), Priority (All), and Event Status (All). The 'Search' button is circled in red. Below the filters, the 'Search Results' section shows a table of alerts. The first row is highlighted in blue, and a red arrow points to the 'DATE/TIME SENT' field.

ACTION	DATE/TIME SENT	EXPIRATION	SUBJECT	PRIORITY	EVENT STATUS
N/A	10/18/2012 11:09:18 AM	10/25/2012 11:09:18 AM	OPHCS Test Message	High	Test
N/A	8/4/2012 10:54:25 AM	6/11/2012 10:54:25 AM	TEST MESSAGE Meningococcal Disease Canton City TEST MESSAGE	Medium	Test
N/A	10/27/2010 3:36:01 PM	11/3/2010 3:36:01 PM	Stark County OPHCS Test Message	Medium	Test
N/A	3/10/2010 4:02:02 PM	3/10/2010 5:02:02 PM	test	Low	Test
N/A	3/1/2010 11:34:06 AM	3/2/2010 11:34:06 AM	NECO test message-reply required	Low	Test
N/A	2/12/2009 10:09:40 AM	2/12/2009 11:09:40 AM	NECO Regional Epi Alert Test	Low	Test
N/A	9/15/2008 9:17:18 AM	9/22/2008 9:17:18 AM	OPHCS Test Message	Low	Test
N/A	11/27/2007 11:19:19 AM	11/27/2007 12:19:19 PM	test	Low	Test

- The basic confirmation details are listed, as shown below:



- To see the extended details, scroll down the page and click *Switch to Extended View*, as shown below:



- Confirmed users are at the top, as shown below:

Alert Details - Windows Internet Explorer

https://home.aphis.usda.gov/alerts/alerts/Jayou65/rm/Alert3/status.aspx?AlertID=96558CPD=FULL

Alert Details

**Confirmed Users: (76)**

CONTACT	USER ID	TYPE	LOCATION	STATUS	REASON	ATTEMPTS	TIME STAMP	ALERT PRIORITY
James Adams	jadams	Phone	(330) 323-2143	Canceled	Confirmed via alternate location	0	10/18/2012 11:10:54 AM	10
		Phone	(330) 438-4623	Canceled	Confirmed via alternate location	0	10/18/2012 11:10:54 AM	10
		Email	jadams@cantonhealth.org	In Progress	Waiting for confirmation	1	10/18/2012 11:09:21 AM	10
Mark Adams	madams	Phone	(330) 412-1621	Confirmed	Message received	1	10/18/2012 11:15:37 AM	10
		Phone	(330) 438-4641	Canceled	Confirmed via alternate location	0	10/18/2012 11:15:37 AM	10
		Phone	(330) 854-5950	Canceled	Confirmed via alternate location	0	10/18/2012 11:15:37 AM	10
Maureen Ahmann	mahmann	Email	madams@cantonhealth.org	In Progress	Waiting for confirmation	1	10/18/2012 11:09:21 AM	10
		Email	buickconvertible@yahoo.com	In Progress	Waiting for confirmation	1	10/18/2012 11:09:21 AM	10
		Phone	(330) 203-5982	Attempted	No answer or no digits entered	3	10/18/2012 12:09:55 PM	10
Sharon Andreani	sandrean	Email	meahmann@yahoo.com	Confirmed	Message received	1	10/18/2012 1:27:09 PM	10
		Phone	(330) 806-1482	Confirmed	Message received	1	10/18/2012 11:16:42 AM	10
		Phone	(330) 821-7373 x13	Canceled	Confirmed via alternate location	0	10/18/2012 12:48:19 PM	10
Terri Argent	target	Email	smandreani@gmail.com	In Progress	Waiting for confirmation	1	10/18/2012 11:09:21 AM	10
		Phone	(330) 830-1712	Canceled	Confirmed via alternate location	1	10/18/2012 11:14:38 AM	10
		Phone	(330) 832-7257	Canceled	Confirmed via alternate location	0	10/18/2012 11:14:38 AM	10
Debbie Arner	darner	Email	target@massillonohio.com	Confirmed	Message received	1	10/18/2012 11:14:38 AM	10
		Email	TERRIARG@yahoo.com	In Progress	Waiting for confirmation	1	10/18/2012 11:09:21 AM	10
		Email	arnerd@starkhealth.org	Confirmed	Message received	1	10/18/2012 11:40:49 AM	10
Amy Ascani	arosia	Phone	(330) 493-9914 x115	Canceled	Confirmed via alternate location	1	10/18/2012 11:23:06 AM	10
		Phone	(330) 704-5504	Confirmed	Message received	1	10/18/2012 11:23:06 AM	10
		Phone	(330) 837-0930	Canceled	Confirmed via alternate location	0	10/18/2012 11:23:06 AM	10
		Phone	(330) 493-9904 x267	Canceled	Confirmed via alternate location	1	10/18/2012 11:38:48 AM	10
		Email	ascania@starkhealth.org	Confirmed	Message received	1	10/18/2012 11:38:48 AM	10

1 2 3 4 5 6 7 8 9 10 ...

**Unconfirmed Users: (1)**

CONTACT	USER ID	TYPE	LOCATION	STATUS	REASON	ATTEMPTS	TIME STAMP	ALERT PRIORITY
Andrew Marburger	amarburger	Email	amarburger@aultman.com	In Progress	Waiting for confirmation	1	10/18/2012 11:09:21 AM	10
		Phone	(330) 495-9871	Attempted	No answer or no digits entered	3	10/18/2012 12:10:14 PM	10

1

6. Scroll down to see the unconfirmed users, as shown below:

Alert Details - Windows Internet Explorer

https://home.aphis.usda.gov/alerts/alerts/Jayou65/rm/Alert3/status.aspx?AlertID=96558CPD=FULL

Alert Details

Health Department :: Canton... | Alert Details

Mark Adams	madams	Email	jadams@cantonhealth.org	In Progress	Waiting for confirmation	1	10/18/2012 11:09:21 AM	10
		Email	adamsjam@gmail.com	Confirmed	Message received	1	10/18/2012 11:10:54 AM	10
		Phone	(330) 412-1621	Confirmed	Message received	1	10/18/2012 11:15:37 AM	10
		Phone	(330) 438-4641	Canceled	Confirmed via alternate location	0	10/18/2012 11:15:37 AM	10
		Phone	(330) 854-5950	Canceled	Confirmed via alternate location	0	10/18/2012 11:15:37 AM	10
Maureen Ahmann	mahmann	Email	madams@cantonhealth.org	In Progress	Waiting for confirmation	1	10/18/2012 11:09:21 AM	10
		Email	buickconvertible@yahoo.com	In Progress	Waiting for confirmation	1	10/18/2012 11:09:21 AM	10
		Phone	(330) 203-5982	Attempted	No answer or no digits entered	3	10/18/2012 12:09:55 PM	10
Sharon Andreani	sandrean	Email	meahmann@yahoo.com	Confirmed	Message received	1	10/18/2012 1:27:09 PM	10
		Phone	(330) 806-1482	Confirmed	Message received	1	10/18/2012 11:16:42 AM	10
		Phone	(330) 821-7373 x13	Canceled	Confirmed via alternate location	0	10/18/2012 12:48:19 PM	10
Terri Argent	target	Email	smandreani@gmail.com	In Progress	Waiting for confirmation	1	10/18/2012 11:09:21 AM	10
		Phone	(330) 830-1712	Canceled	Confirmed via alternate location	1	10/18/2012 11:14:38 AM	10
		Phone	(330) 832-7257	Canceled	Confirmed via alternate location	0	10/18/2012 11:14:38 AM	10
Debbie Arner	darner	Email	target@massillonohio.com	Confirmed	Message received	1	10/18/2012 11:14:38 AM	10
		Email	TERRIARG@yahoo.com	In Progress	Waiting for confirmation	1	10/18/2012 11:09:21 AM	10
		Email	arnerd@starkhealth.org	Confirmed	Message received	1	10/18/2012 11:40:49 AM	10
Amy Ascani	arosia	Phone	(330) 493-9914 x115	Canceled	Confirmed via alternate location	1	10/18/2012 11:23:06 AM	10
		Phone	(330) 704-5504	Confirmed	Message received	1	10/18/2012 11:23:06 AM	10
		Phone	(330) 837-0930	Canceled	Confirmed via alternate location	0	10/18/2012 11:23:06 AM	10
		Phone	(330) 493-9904 x267	Canceled	Confirmed via alternate location	1	10/18/2012 11:38:48 AM	10
		Email	ascania@starkhealth.org	Confirmed	Message received	1	10/18/2012 11:38:48 AM	10

1 2 3 4 5 6 7 8 9 10 ...

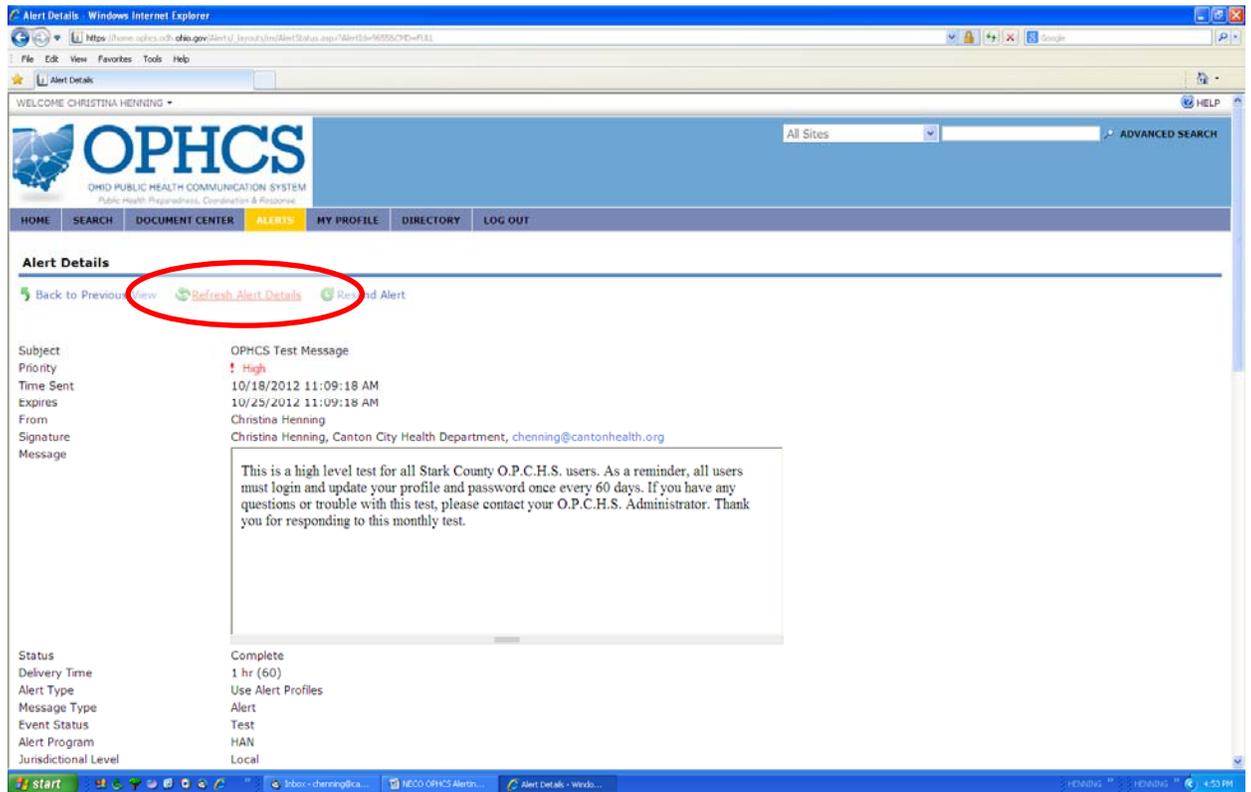
**Unconfirmed Users: (1)**

CONTACT	USER ID	TYPE	LOCATION	STATUS	REASON	ATTEMPTS	TIME STAMP	ALERT PRIORITY
Andrew Marburger	amarburger	Email	amarburger@aultman.com	In Progress	Waiting for confirmation	1	10/18/2012 11:09:21 AM	10
		Phone	(330) 495-9871	Attempted	No answer or no digits entered	3	10/18/2012 12:10:14 PM	10

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7. If you are monitoring the confirmed responses you will need to Click Refresh Alert Details to update the confirmation data, as shown below:



8. OPHCS keeps a history of all alerts sent, therefore you can return at anytime to see the details of your alert. To see your alert details:
  - a. Login to OPHCS
  - b. Click on Alerts
  - c. Starting in section titled *Review and Reporting Details* and follow steps 2 through 9.
  
9. When the alert time period has ended a report must be completed. This is usually posted 1 week following the initial test.
  - a. For samples see previous reports posted in the OPHCS Documents folder at the following location: Team Site > Document Center > Documents > Local Folders > NECO > NECO Collaboration > Epi Issues > Communication Test Reports
  - b. After the report is completed and posted, ensure a copy is also emailed to our Regional PHEP Coordinator. If you are unsure who the coordinator is simply email it to either of the NECO Regional Epi Committee Co Chairs, indicating that it was or was not already forwarded to the Regional Coordinator.

For questions regarding OPHCS, please consult your OPHCS Coordinator.



## Northeast Central Ohio Standardized Case Patient Interview Form

ODRS ID# (if applicable): \_\_\_\_\_  
 Date of Interview: \_\_\_\_\_  
 Interviewer Name: \_\_\_\_\_

### Section 1: Demographic Information

Last Name:		First Name:			M.I.			
Gender: <input type="checkbox"/> Male <input type="checkbox"/> Female		Age: _____ years _____ months _____ days		DOB: _____		m dd yyyy		
Physical Street Address:			City:		State:		County:	
Mailing Address (if different than above):			City:		State:		County:	
Day Phone # :			Evening Phone # :		Alt.			
E-Mail Address:								
Race: <input type="checkbox"/> White <input type="checkbox"/> Black <input type="checkbox"/> Amer.Indian <input type="checkbox"/> Asian/Pacific <input type="checkbox"/> Islander <input type="checkbox"/> Bi-Racial <input type="checkbox"/> Other		Hispanic: <input type="checkbox"/> Yes <input type="checkbox"/> No						
Place of Employment:			City:		State:		Phone # :	
					Co			
Brief Description of Job Duties:								
Sensitive Occupation?								
No		Yes, Food Handler		Yes, Direct Pt Care				
Pregnant? <input type="checkbox"/> Yes <input type="checkbox"/> No		Deceased? <input type="checkbox"/> Yes <input type="checkbox"/> No		Long-Term Care Facility?				
NIA		Date of Death:		<input type="checkbox"/> Yes <input type="checkbox"/> No				
Is the patient in daycare, or does the patient have children in daycare?				<input type="checkbox"/> NIA <input type="checkbox"/> Yes <input type="checkbox"/> No				
Name of Daycare/Children:								

### Section 2: Physician Information

Did you seek medical attention for your current condition? <input type="checkbox"/> Yes <input type="checkbox"/> No			
Were you hospitalized?			
Yes		No	
Admit Date		Discharge Date	
Date of first visit:	Facility Name:	Facility Phone # :	
Date of first visit:	Physician Name:	Physician Phone # :	
Did you receive any medications for your current condition? (if yes, list below) <input type="checkbox"/> Yes <input type="checkbox"/> No			
Medication Name:		Dosage and duration of tx:	
1.			
2.			
3.			

**General Comments:**