Hazard and Vulnerability Assessment

Public Health
Prevent. Promote. Protect.

Review History

An update of the Noble County Health Department Hazard & Vulnerability Assessment (HVA) will be conducted every 2 years or as there are significant changes to the community profile such as facility closures or major construction.

Date	Reviewed By	Comments
December 2017	Mark Johnson	Annual review

Contents

Introduction

This Hazard & Vulnerability Assessment (HVA) is an element of hazard mitigation allowing public health to set goals according to the public's need for protection. This document enhances public and private agency understanding and awareness, influencing the adoption of hazard mitigation programs. The findings revealed in the Hazard Vulnerability Analysis also serve as a basis for preparedness as well as influencing effective response and recovery programs. The Hazard Vulnerability Analysis explores hazards through the public health perspective

Purpose

The purpose of this document is to explain the public health risks associated with responders and their consequences to the local community and primary and support agencies. The HVA describes how each hazard impacts the local health department's capabilities, resources and operations, including estimated loss of life and infrastructure. The most dangerous and likely hazards based on historical analysis have been identified and are included in this document. An update of the public health hazard analysis/risk assessment will be conducted every 2 years or as there are significant changes to the community profile such as factory closures or major construction.

Each local County Emergency Management Agency has a comprehensive Hazard Identification and Risk Assessment **(**HIRA) that coincides with this public health HVA. The plans may be used in synchronization with each other to provide a successful response to variable hazards.

Existing Public Health Warning Systems:

- **EPICENTER:** (formally RODS) is installed in Southeastern Medical Center and East Ohio Regional Medical Center. EpiCenter incorporates advanced algorithms and other statistical management and analytical techniques that process and correlate multiple streams of health-related data in real time. The system pinpoints and manages emerging and current threats to public health and safety, such as infectious disease outbreaks. EpiCenter also features new collaborative work tools to enable public health officials to manage investigations and to share analysis and findings with colleagues and across regions.

- **OPHCS:** Ohio Public Health Communications System: OPHCS is the official emergency planning, alerting, and notification system administrated by the Ohio Department of Health, Bureau of Health Preparedness. It serves as a single, central point for finding, creating, and sharing information. OPHCS provides alerting, notification, and emergency preparation tools for state and local officials.

Risk: The predicted impact that a hazard would have on the people, services, and specific facilities in the community. For example, during heavy rains, a specific road might be at risk of flooding, leading to restricted access to a critical facility.[1]

In surveying risk, it is helpful to develop response priorities. The following is a suggested hierarchy for setting priorities:

- Priority 1: Life safety (including hazard areas, high-risk populations, and potential search and rescue situations). Keep in mind that response personnel cannot respond if their own facilities are affected.

- Priority 2: Essential facilities.

- Priority 3: Critical infrastructure (utilities, communication, and transportation systems).

[1] FEMA, IS 235b, Emergency Planning Independent Study, Unit 3 pg. 3.8, December 2011

Potential threats in Noble County can largely been attributed to the geographic location, accessibility, technology, and intentional human action. Potential threats that would impact the NCHD's jurisdiction may also originate in surrounding counties/ jurisdictions. These external events have the ability to directly impact both public health and medical services by causing a high demand for preventative and healthcare measures. Most notably, public health threats such as infectious diseases, have the ability to arrive to the county through any travel-related mechanism. Other neighboring threats include water runoff from Guernsey County's Seneca lake, or the Muskingum Watershed District, gas pipeline transmission through all neighboring counties, Chemical plants located in Washington county and riots or acts of terrorism that could take place in any neighboring jurisdiction or statewide.

Types of Threats:

Natural: Natural threats tend to occur repeatedly in the same geographical locations because they are related to weather patterns and/or physical characteristics of an area. Examples include: severe weather, fire, drought, typhoons, epidemics, etc.

Technological: Technological threats originate from technological or industrial accidents, infrastructure failures, or certain human activities. Technological threats may include: cyber/database failures, urban fires, radiological or hazardous material releases, power failures, transportation accidents, dam failures, bridge collapses, etc.

Adversarial or Human-Caused: Human-caused threats arise from deliberate, intentional human actions to threaten or harm the well-being of others, Human-caused threats may include: kidnappings, hostage situations, sabotage, civil disturbances, bombings, hijackings, terrorist acts, etc.[2]

Neighboring Jurisdictions:

Guernsey County
Monroe County
Morgan County
Washington County
Belmont County

Neighboring Primary Public Health Agencies

Belmont County Health Department
Coshocton County Health Department
Coshocton City Health Department
Guernsey County Health Department
Harrison County Health Department
Jefferson County Health Department
Steubenville City Health Department
Monroe County Health Department
Morgan County Health Department
Zanesville-Muskingum County health Department
Noble County Health Department
Perry County Health Department
Washington County Health Department
Marietta City Health Department
Belpre City Health Department

Threat List

Natural Threats	Technological Threats	Human-Caused Threats
• Drought • Earthquake • Epidemic/ Infectious • Flood/ Water Run-off • Hurricane	• Airplane crash • Dam failure • Hazmat release • Power failure • Radiological release	• Civil disturbance • School violence • Terrorist act • Sabotage

[2] FEMA, IS 235b, Emergency Planning Independent Study, Unit 3 pg. 3.2, December 2011

• Landslide • Tornado • Wildfire • Winter storm	• Train derailment • Urban conflagration	

Primary Healthcare Agencies

Barnesville Hospital	Belmont Co.
Belmont Community Hospital	Belmont Co.
East Ohio Regional Hospital	Belmont Co.
Coshocton Memorial Hospital	Coshocton Co.
Southeast Ohio Regional Medical Center	Guernsey Co.
Harrison Community Hospital	Harrison Co.
Trinity Medical Center West	Jefferson Co.
Marietta Memorial Hospital	Washington Co.
Selby General Hospital	Washington Co.

Support Agencies

Southeast Regional Public Health Steering Committee	Local EMA
South Central Regional Coordination Center	Ohio State Highway Patrol
Local Health Departments	Volunteer Organizations
Southeast Regional Coordination Center	SE Ohio Regional Healthcare Coalition
Southeast Regional Hospital Coordination Center	Noble County 911/LEPC/HS

Noble County Profile

2012 Census Data:
Total population: 14,628
Households in the Region: 4,883

County	Population	Number of Households	Persons Per Household
Belmont	69,571	28,239	2.33
Coshocton	36,760	14,495	2.51
Guernsey	39,636	15,690	2.51
Harrison	15,622	6395	2.43
Jefferson	67,964	28,326	2.35
Monroe	14,585	6111	2.37
Morgan	14,904	6204	2.39
Muskingum	85,231	33,976	2.47
Noble	14,628	4883	2.47
Perry	35,997	13,793	2.59
Washington	61,310	25,029	2.39
Total Population	456,208	183,141	Avg. 2.43

Source: 2012 Census: http://quickfacts.census.gov/qfd/states/39/39013.html
Updated 12/31/2014

Regular/ recurring Events

While limited in number, size and scale Noble County does have regular recurring events that could pose a threat to public health. These events are identified utilizing the daily SOAR bulletin upcoming events list, which is received daily by the Health Commissioner, Director of Environmental Health and Emergency Coordinator.

Incident Severity Ratings

The following is an explanation of *Severity Ratings* that may be used in this HVA

Severity	Characteristics
Catastrophic	Multiple deaths Complete shutdown of critical facilities for 30 days or more More than 50% of property severely damaged
Critical	Injuries and/or illness result in permanent disability Complete shutdown of critical facilities for at least two weeks
Limited	Injuries and/or illness do not result in permanent disability Complete shutdown of critical facilities for more than 1 week More than 10% of property is severely damaged
Negligible	Injuries and/or illness treatable with first aid Minor quality of life lost Less than 10% of property is severely damaged

FEMA, IS 235b, *Emergency Planning Independent Study*, *Unit 3, Hazard Analysis* pg. 3.9, December 2011

Disease Profiles

Seasonal Influenza	
Potential magnitude (Percentage of the community that may be affected): ☒ **Catastrophic: More than 50% Critical: 25 to 50%** ☒ Limited: 10 to 25% ☐ Negligible: Less than 10%	
Frequency of Occurrence: ☒ **Highly likely: Near 100% probability in next year**. ☐ Likely: Between 10 and 100% probability in next year, and at least one chance in next 10 years. ☐ Possible: Between 1 and 10% probability in next year, and at least one chance in next 100 years. ☐ Unlikely: Less than 1% probability in next 100 years.	**Seasonal Pattern:** Winter months November -March
Areas Likely to be Most Affected: Community at large	
Probable Duration: 1-2 weeks (Illness duration) and 3-4 months + (Outbreak duration)	
Potential Speed of Onset (Probable amount of warning time): ☐ Minimal (or no) warning. ☐ 6 to 12 hours warning. ☐ 12 to 24 hours warning. ☒ **More than 24 hours warning**.	
Existing Warning Systems: EPI-Center at Local Hospital	

Foodborne (See Class B-1 & B-2 below)

Potential magnitude (Percentage of the community that may be affected):

☐ Catastrophic: More than 50%
☐ Critical: 25 to 50%
☐ Limited: 10 to 25%
☒ **Negligible: Less than 10%**

Frequency of Occurrence:	**Seasonal Pattern:**
☐ Highly likely: Near 100% probability in next year. ☒ **Likely: Between 10 and 100% probability in next year or at least one chance in next 10 years.** ☐ Possible: Between 1 and 10% probability in next year or at least one chance in next 100 years. ☐ Unlikely: Less than 1% probability in next 100 years.	

Areas Likely to be Affected Most:
Community at large

Probable Duration:
1-2 weeks (Illness duration) and 1 month + (Outbreak duration)

Potential Speed of Onset (Probable amount of warning time):

☒ **Minimal (or no) warning.**
☐ 6 to 12 hours warning.
☐ 12 to 24 hours warning.
☐ More than 24 hours warning.

Existing Warning Systems: EPI-Center at Local Hospital

Class B-1	**Class B-2**
E. Coli	Botulism
Hepatitis A	Campylobacteriosis
Listeriosis	Creutzfeldt-Jakob
Salmonellosis	Cryptosporidiosis
Shigellosis	Giardiasis
Typhoid Fever	Leptospirosis
	Trichinosis
	Vibriosis
	Yersiniosis

Vectorborne (See Class B-1 & B-2 below)

Potential magnitude (Percentage of the community that may be affected):

☐ Catastrophic: More than 50%
☐ Critical: 25 to 50%
☐ Limited: 10 to 25%
☒ **Negligible: Less than 10%**

Frequency of Occurrence:	**Seasonal Pattern:**
☐ Highly likely: Near 100% probability in next year. ☐ Likely: Between 10 and 100% probability in next year or at least one chance in next 10 years. ☒ **Possible:** Between 1 and 10% probability in next year or at least one chance in next 100 years. ☐ Unlikely: Less than 1% probability in next 100 years.	

Areas Likely to be Affected Most:
Community at large

Probable Duration:
1-2 weeks (Illness duration) and 1 month + (Outbreak duration)

Potential Speed of Onset (Probable amount of warning time):

☒ **Minimal (or no) warning.**
☐ 6 to 12 hours warning.
☐ 12 to 24 hours warning.
☐ More than 24 hours warning.

Existing Warning Systems: EPI-Center at Local Hospital

Class B-1	**Class B-2**
Cyclosporiasis	Ehrilichiosis
Dengue	Lyme Disease
Eastern equine Encephalitis	Rocky Mountain Spotted Fever
LaCrosse Encephalitis	Typhus Fever
St. Louis Encephalitis	
West Nile Encephalitis	
Western equine Encephalitis	
Other arthropod-borne disease	
Hantavirus	
Malaria	
Meningitis, aseptic, including viral	

Waterborne (See Class B-1 & B-2 below)

Potential magnitude (Percentage of the community that can be affected):
Depending on the water system affected the magnitude may differ

- ☐ **Catastrophic: More than 50% - Public Water Systems**
- ☒ Critical: 25 to 50%
- ☐ Limited: 10 to 25%
- ☐ **Negligible: Less than 10% - Private Water Systems**

Frequency of Occurrence:

- ☐ Highly likely: Near 100% probability in next year.
- ☒ **Likely: Between 10 and 100% probability in next year or at least one chance in next 10 years.**
- ☐ Possible: Between 1 and 10% probability in next year or at least one chance in next 100 years.
- ☐ Unlikely: Less than 1% probability in next 100 years.

Seasonal Pattern:

Areas Likely to be Affected Most: Community at large

Probable Duration: 1-2 weeks (Illness duration) and 1 month + (Outbreak duration)

Potential Speed of Onset (Probable amount of warning time):

- ☒ **Minimal (or no) warning.**
- ☐ 6 to 12 hours warning.
- ☐ 12 to 24 hours warning.
- ☐ More than 24 hours warning.

Existing Warning Systems: EPI-Center at Local Hospital

Class B-1	**Class B-2**
E. Coli	Amebiasis
Hepatitis A	Campylobacteriosis
Listeriosis	Cryptosporidiosis
Salmonellosis	Giardiasis
Shigellosis	Leptospirosis
Typhoid Fever	Vibriosis
	Yersiniosis

Anthrax	
Potential magnitude (Percentage of the community that may be affected): ☐ Catastrophic: More than 50% ☐ Critical: 25 to 50% ☐ Limited: 10 to 25% ☒ **Negligible: Less than 10%**	
Frequency of Occurrence: ☐ Highly likely: Near 100% probability in next year. ☐ Likely: Between 10 and 100% probability in next year or at least one chance in next 10 years. ☒ **Possible: Between 1 and 10% probability in next year or at least one chance in next 100 years.** ☐ Unlikely: Less than 1% probability in next 100 years.	**Seasonal Pattern:** None
Areas Likely to be Affected Most: All may be affected	
Probable Duration: Short-term unless source is not immediately found and release is continual.	
Potential Speed of Onset (Probable amount of warning time): ☒ **Minimal (or no) warning.** ☐ 6 to 12 hours warning. ☐ 12 to 24 hours warning. ☐ More than 24 hours warning.	
Existing Warning Systems: EPI-Center at Local Hospital	

Botulism

Potential magnitude (Percentage of the community that may be affected):

Depending on the food source contaminated and if this was intentional contamination, magnitude could vary

- ☐ Catastrophic: More than 50%
- ☐ Critical: 25 to 50%
- ☐ Limited: 10 to 25%
- ☒ **Negligible: Less than 10%**

Frequency of Occurrence:

- ☐ Highly likely: Near 100% probability in next year.
- ☐ Likely: Between 10 and 100% probability in next year or at least one chance in next 10 years.
- ☒ **Possible**: **Between 1 and 10% probability in next year or at least one chance in next 100 years.**
- ☐ Unlikely: Less than 1% probability in next 100 years.

Seasonal Pattern:

Fall to winter (consumption of home-canned food

Areas Likely to be Affected Most:

Rural areas, home canners

Probable Duration:

Weeks to months dependent on early diagnosis and treatment and identifying and removing the source of contamination**.** Months to years for individual recovery

Potential Speed of Onset (Probable amount of warning time):

- ☒ **Minimal (or no) warning**.
- ☐ 6 to 12 hours warning.
- ☐ 12 to 24 hours warning.
- ☐ More than 24 hours warning.

Existing Warning Systems: EPI-Center at Local Hospital

Cholera	
Potential magnitude (Percentage of the community that may be affected): Depending on the water system affected the magnitude may differ ☐ **Catastrophic: More than 50%** ☒ Critical: 25 to 50% - Public Water Systems ☐ Limited: 10 to 25% ☒ **Negligible: Less than 10% -** Private Water Systems	
Frequency of Occurrence: ☐ Highly likely: Near 100% probability in next year. ☐ Likely: Between 10 and 100% probability in next year or at least one chance in next 10 years. ☐ Possible: Between 1 and 10% probability in next year or at least one chance in next 100 years. ☒ **Unlikely: Less than 1% probability in next 100 years.**	**Seasonal Pattern:** Winter months November-March
Areas Likely to be Most Affected: Community areas near water	
Probable Duration: 1-2 weeks (Illness) and 1 month + (Outbreak duration)	
Potential Speed of Onset (Probable amount of warning time): ☒ **Minimal (or no) warning.** ☐ 6 to 12 hours warning. ☐ 12 to 24 hours warning. ☐ More than 24 hours warning.	
Existing Warning Systems: EPI-Center at Local Hospital	

Diphtheria	
Potential magnitude (Percentage of the community that may be affected): ☐ Catastrophic: More than 50% ☐ Critical: 25 to 50% ☐ Limited: 10 to 25% ☒ **Negligible: Less than 10%**	
Frequency of Occurrence: ☐ Highly likely: Near 100% probability in next year. ☐ Likely: Between 10 and 100% probability in next year or at least one chance in next 10 years. ☐ Possible: Between 1 and 10% probability in next year or at least one chance in next 100 years. ☒ **Unlikely: Less than 1% probability in next 100 years.**	**Seasonal Pattern:** Considered a disease of the colder months
Areas Likely to be Affected Most: **Community at large.** Inadequately or unimmunized children <15 years of age and also in adults with inadequate immunization. Rarely found in infants.	
Probable Duration: Communicability varies, but is usually **two weeks or less** and **seldom more than four. Chronic carriers** (**which are rare**) might shed organisms for **six months or more**.	
Potential Speed of Onset (Probable amount of warning time): Incubation is 2-5 days, with a range of 1-10days ☐ Minimal (or no) warning. ☐ 6 to 12 hours warning. ☐ 12 to 24 hours warning. ☒ **More than 24 hours warning.**	
Existing Warning Systems: EPI-Center at Local Hospital	

Influenza A – Novel Virus	
Potential magnitude (Percentage of the community that may be affected): ☒ **Catastrophic: More than 50%** ☒ **Critical: 25 to 50%** ☐ Limited: 10 to 25% ☐ Negligible: Less than 10%	
Frequency of Occurrence: ☐ Highly likely: Near 100% probability in next year. ☐ Likely: Between 10 and 100% probability in next year or at least one chance in next 10 years. ☒ **Possible: Between 1 and 10% probability in next year or at least one chance in next 100 years.** ☐ Unlikely: Less than 1% probability in next 100 years.	**Seasonal Pattern:** Winter months November-March
Areas Likely to be Affected Most: Community at large	
Probable Duration: 1-2 weeks (Illness duration) and 3-4 months + (Outbreak duration) and will come in waves	
Potential Speed of Onset (Probable amount of warning time): ☐ Minimal (or no) warning. ☐ 6 to 12 hours warning. ☐ 12 to 24 hours warning. ☒ **More than 24 hours warning**.	
Existing Warning Systems: EPI-Center at Local Hospital	

Measles

Potential magnitude (Percentage of the community that may be affected):

☐ Catastrophic: More than 50%
☐ Critical: 25 to 50%
☐ Limited: 10 to 25%
☒ **Negligible: Less than 10%**

Frequency of Occurrence:

☐ Highly likely: Near 100% probability in next year.
☐ Likely: Between 10 and 100% probability in next year or at least one chance in next 10 years.
☒ **Possible: Between 1 and 10% 100 cases reported annually in the United States**
☐ Unlikely: Less than 1% probability in next 100 years.

Most Affected:	**Seasonal Pattern:**
Recently measles has been seen most frequently in preschool children and in young adults attending high schools or colleges.	Winter months November-March

Probable Duration:
7-9 days

Potential Speed of Onset (Probable amount of warning time):
Communicability is greatest from four days before the onset of rash until four days after the onset of rash.

☒ **Minimal (or no) warning**
☐ 6 to 12 hours warning.
☐ 12 to 24 hours warning
☐ More than 24 hours warning

Existing Warning Systems: EPI-Center at Local Hospital

Note: Measles is an acute, highly contagious respiratory disease caused by a virus. The virus normally grows in the back of the throat and in the cells that line the lungs.
(See IDCM) http://www.odh.ohio.gov/pdf/IDCM/measles.pdf

Meningococcal disease	
Potential magnitude (Percentage of the community that may be affected): Depending on speed of index case isolation/treatment, quarantine/prophylaxis of contacts the magnitude may change ☐ Catastrophic: More than 50% ☐ Critical: 25 to 50% ☐ Limited: 10 to 25% ☒ **Negligible: Less than 10% when utilizing prevention and control measures**	
Frequency of Occurrence: ☐ **Highly likely: Near 100% probability in next year**. ☒ Likely: Between 10 and 100% probability in next year or at least one chance in next 10 years. ☐ Possible: Between 1 and 10% probability in next year or at least one chance in next 100 years. ☐ Unlikely: Less than 1% probability in next 100 years.	**Seasonal Pattern:** N/A
Areas Likely to be Most Affected: High Risk Population Notation: Meningococcal Polysaccharide Vaccine (MPSV4) is recommended for individuals aged 2-10 years and over 55 years who are at high risk.	
Probable Duration: 1-2 weeks (Illness) and 1 month + Outbreak duration	
Potential Speed of Onset (Probable amount of warning time): ☒ **Minimal (or no) warning.** ☐ 6 to 12 hours warning. ☐ 12 to 24 hours warning. ☐ More than 24 hours warning.	
Existing Warning Systems: EPI-Center at Local Hospital	

Plague	
Potential magnitude (Percentage of the community that may be affected): ☐ Catastrophic: More than 50% ☒ **Critical: 25 to 50% - if Pneumonic** ☐ Limited: 10 to 25% ☒ **Negligible: Less than 10% - if Bubonic**	
Frequency of Occurrence: ☐ Highly likely: Near 100% probability in next year. ☐ Likely: Between 10 and 100% probability in next year or at least one chance in next 10 years. ☐ Possible: Between 1 and 10% probability in next year or at least one chance in next 100 years. ☒ **Unlikely: Less than 1% probability in next 100 years (in Ohio).**	**Seasonal Pattern:** Especially high in summer months – June to September.
Areas Likely to be Most Affected: Impoverished areas with unsanitary conditions.	
Probable Duration: Rapid clinical course – Death within 1-2 days of symptoms if not treated.	
Potential Speed of Onset (Probable amount of warning time): 1 to 6 days depending on type ☒ **Minimal (or no) warning.** ☐ 6 to 12 hours warning. ☐ 12 to 24 hours warning. ☐ More than 24 hours warning.	
Existing Warning Systems: EPI-Center at Local Hospital	

<table>
<tr><th colspan="2">Rabies</th></tr>
<tr><td colspan="2">Potential magnitude (Percentage of the community that may be affected):
☐ Catastrophic: More than 50%
☐ Critical: 25 to 50%
☐ Limited: 10 to 25%
☒ Negligible: Less than 10%</td></tr>
<tr><td>Frequency of Occurrence:

☐ Highly likely: Near 100% probability in next year.
☐ Likely: Between 10 and 100% probability in next year or at least one chance in next 10 years.
☒ Possible: Between 1 and 10% probability in next year or at least one chance in next 100 years.
☐ Unlikely: Less than 1% probability in next 100 years.</td><td>Seasonal Pattern:

Spring-Fall</td></tr>
<tr><td colspan="2">Areas Likely to be Most Affected:
Wildlife officers, veterinarians, animal care workers</td></tr>
<tr><td colspan="2">Probable Duration:
Progresses to coma or death within 10 days after the first symptom.</td></tr>
<tr><td colspan="2">Potential Speed of Onset (Probable amount of warning time):
Incubation period in humans, usually 31-90 days, with a range from 9 days to as long as a year or more.
☒ Minimal (or no) warning.
☐ 6 to 12 hours warning.
☐ 12 to 24 hours warning.
☐ More than 24 hours warning.</td></tr>
<tr><td colspan="2">Existing Warning Systems: EPI-Center at Local Hospital</td></tr>
</table>

Rubella	
Potential magnitude (Percentage of the community that may be affected): Depending on the number of unvaccinated people, the magnitude may differ ☒ Catastrophic: More than 50% ☐ Critical: 25 to 50% ☐ Limited: 10 to 25% ☒ Negligible: Less than 10%	
Frequency of Occurrence: ☐ **Highly likely: Near 100% probability in next year.** ☐ Likely: Between 10 and 100% probability in next year or at least one chance in next 10 years. ☒ Possible: Between 1 and 10% probability in next year or at least one chance in next 100 years. ☐ Unlikely: Less than 1% probability in next 100 years.	**Seasonal Pattern:** Worldwide. Most prevalent in Winter and Spring**.**
Areas Likely to be Most Affected: Humans are the only reservoir. Must be in contact with nasal or throat secretions of infected persons. Pregnant women, children under 1 or any unvaccinated person.	
Probable Duration: The incubation period for rubella is 12-23 days; in most cases, symptoms appear within 16-18 days. Rubella may be transmitted from seven days before to seven days after rash onset.	
Potential Speed of Onset (Probable amount of warning time): ☒ **Minimal (or no) warning.** ☐ 6 to 12 hours warning. ☐ 12 to 24 hours warning. ☐ More than 24 hours warning.	
Existing Warning Systems: EPI-Center at Local Hospital	

<table>
<tr><th colspan="2">Severe Acute Respiratory Syndrome (SARS)</th></tr>
<tr><td colspan="2">Potential magnitude (Percentage of the community that may be affected):

☐ Catastrophic: More than 50%
☐ Critical: 25 to 50%
☐ Limited: 10 to 25%
☒ Negligible: Less than 10%</td></tr>
<tr><td>Frequency of Occurrence:
Possible:
Between 1 and 10% probability in the next year. “The likelihood of SARS is very low compared to other causes of atypical pneumonia”. http://www.bioterrorism-uab.ahrq.gov/EI/sars/clinical.html</td><td>Seasonal Pattern:
N/A</td></tr>
<tr><td colspan="2">Areas likely to be Most Affected:
Unknown</td></tr>
<tr><td colspan="2">Probable Duration:
2-7 days, but may be as long as 10 (up to 14) days</td></tr>
<tr><td colspan="2">Potential Speed of Onset (Probable amount of warning time):
Abrupt
☒ Minimal (or no) warning.
☐ 6 to 12 hours warning.</td></tr>
<tr><td colspan="2">Existing Warning Systems: EPI-Center at Local Hospital</td></tr>
<tr><td colspan="2">Note: Available information suggests that people with SARS are most likely to be infectious only when they have symptoms, such as fever or cough. (See IDCM) http://www.odh.ohio.gov/pdf/IDCM/sars.pdf</td></tr>
</table>

Smallpox

Potential magnitude (Percentage of the community that may be affected):

☒ **Catastrophic: More than 50%** - Direct person to person contact, rarely in aerosol form.
☐ Critical: 25 to 50%
☐ Limited: 10 to 25%
☐ Negligible: Less than 10% -

Frequency of Occurrence:	**Seasonal Pattern:**
☐ Highly likely: Near 100% probability in next year. ☐ Likely: Between 10 and 100% probability in next year or at least one chance in next 10 years. ☐ Possible: Between 1 and 10% probability in next year or at least one chance in next 100 years. ☒ **Unlikely: Less than 1% probability in next 100 years.**	Eradicated from world, possible terrorist biological weapon.

Areas Likely to be Most Affected:
All Communities/ All Areas

Probable Duration:

- Incubation Period (Duration: 7 to 17 days) *Not contagious*
- Initial Symptoms *(Prodrome)* (Duration: 2 to 4 days) *Sometimes contagious**
- Early Rash (Duration: about 4 days) *Most contagious*
- Pustule Rash (Duration: about 5 days) *Contagious*
- Pustules and Scabs (Duration: about 5 days) *Contagious*
- Resolving Scabs (Duration: about 6 days) *Contagious*
- Scabs resolved *Not contagious*

Potential Speed of Onset (Probable amount of warning time):

☒ **Minimal (or no) warning.**
☐ 6 to 12 hours warning.
☐ 12 to 24 hours warning.
☐ More than 24 hours warning.

Existing Warning Systems: EPI-Center at Local Hospital

Tularemia	
Potential magnitude (Percentage of the community that may be affected): **Negligible: Less than 10%** Ohio averages less than 1 case per year	
Frequency of Occurrence: ▪ **Possible:** Between 1 and 10% probability in next year	**Seasonal Pattern:** Hunters, trappers, hikers, campers and others who spend a great deal of time outdoors and are exposed to tick and deer fly bites or handle wild animals are at risk. (November-January)
Areas Likely to be Most Affected: Outdoor wooded areas, those with close contact with wild animals	
Probable Duration: Incubation Period (Duration: 3to 5 days) Organisms may be present in blood during the first two weeks of disease and in cutaneous lesions for as long as 1 month if untreated	
Potential Speed of Onset (Probable amount of warning time): Symptoms may appear 2-10 days after exposure, but are generally evident after 3 days. ☒ **Minimal (or no) warning.** ☐ 6 to 12 hours warning. ☐ 12 to 24 hours warning. ☐ More than 24 hours warning.	
Existing Warning Systems: EPI-Center at Local Hospital	

Viral Hemorrhagic Fever (VHF)	
Potential magnitude (Percentage of the community that may be affected): **Negligible:** Less than 10%	
Frequency of Occurrence: **Possible:** Between 1 and 10% probability in next year	**Seasonal Pattern:** N/A
Areas Likely to be Most Affected: VHF viruses are distributed throughout the world. Each virus is associated with one or more nonhuman hosts, restricting natural occurrence of VHF to the areas inhabited by these species. Viruses causing hemorrhagic fevers are initially transmitted to humans when the habitats of the infected reservoir hosts and humans overlap. Risk of VHF is associated with human incursion into such areas. In general, humans are incidental ("dead-end") hosts for these enzootic diseases.	
Probable Duration: Ebola hemorrhagic fever: 2-21 days Lassa fever: 1-3 weeks Marburg hemorrhagic fever: 5-10 days	
Potential Speed of Onset (Probable amount of warning time): Abrupt onset with Ebola and Marburg, varies with Lassa Fever ☒ **Minimal (or no) warning.** ☐ 7-14 days	
Existing Warning Systems: EPI-Center at Local Hospital	
Note: Viral hemorrhagic fevers (VHFs) refer to a group of illnesses that are caused by several distinct families of viruses. In general, the term "viral hemorrhagic fever" is used to describe a severe multi-organ system syndrome. The three most common VHFs are Ebola hemorrhagic fever, Lassa fever and Marburg hemorrhagic fever. (See IDCM) http://www.odh.ohio.gov/pdf/IDCM/vhf.pdf Mortality rates range from 50% * 90% depending on the strain of the virus. http://www.bioterrorism-uab.ahrq.gov/CategoryA/VHF/summary.asp	

Yellow Fever (a flavivirus)	
Potential magnitude (Percentage of the community that may be affected): ☐ Catastrophic: More than 50% ☐ Critical: 25 to 50% ☐ Limited: 10 to 25% ☒ **Negligible:** Less than 10% for non-epidemic (traveler infection). Magnitude may be greater if vector pool becomes contaminated	
Frequency of Occurrence: ☐ Highly likely: Near 100% probability in next year. ☐ Likely: Between 10 and 100% probability in next year or at least one chance in next 10 years. ☒ **Possible: Between 1 and 10% probability in next year or at least one chance in next 100 years.** ☐ Unlikely: Less than 1% probability in next 100 years.	**Seasonal Pattern:** Summer/ Vector borne (Mosquitoes)
Areas Likely to be Most Affected: Areas around travelers returning from endemic areas (South America and Africa) Colleges, aid workers, etc.	
Probable Duration: 3-6 days incubation period; 5 months for vector cycle	
Potential Speed of Onset (Probable amount of warning time): ☐ Minimal (or no) warning. ☐ 6 to 12 hours warning. ☐ 12 to 24 hours warning. ☒ **More than 24 hours warning**. For community outbreak	
Existing Warning Systems: EPI-Center at Local Hospital	
Note: The last epidemic of yellow fever in North America occurred in New Orleans in 1905. CDC* Given the current yellow fever epidemics and the worldwide distribution of Aedes aegypti, there is a risk of importation of yellow fever into new areas by infected travelers.	

Hazard Matrix

Hazard	Public Health Risk	Responders	Impact on the Local Public Health Department		
			Resources	**Capabilities**	**Operations**
Flood **Dam Failure**	• Exposure to mold • Communicable Disease • Animal Decomposition • Contaminated Water/Wells • Vector Control • Hazardous Material • Debris	**Lead Agency:** Fire/Unified Command **Support Agency:** LHD **Responder Risk:** Tetanus Hepatitis Mental Stress/Physical Stress	Potential Facility & Infrastructure loss, Reduced personnel, depleted PPE, Alternate communication methods necessary	Water Sampling, Surveillance, Inspections, Vaccinations, Subject Matter Guidance	Call volume increases, ICS activation, Official Notification Specific Guidance Request, Document for reimbursement
Wildfire	• Animal Decomposition • Hazardous Waste • Exposure Debris	**Lead Agency:** Fire/Unified Command **Support Agency:** LHD **Responder Risk:** Tetanus Hepatitis Mental Stress/Physical Stress	Potential Facility & Infrastructure loss, Reduced personnel, depleted PPE, Alternate communication methods necessary	Surveillance, Inspections, Subject Matter Guidance	Call volume increases, ICS activation, Official Notification Specific Guidance Request, Document for reimbursement
Winter Storm	• Cold Exposure	**Lead Agency:** Law Enforcement/ Unified Command **Support Agency:** LHD/ Sheriff/ Fire **Responder Risk:** Hypothermia/frostbite Mental Stress/Physical Stress	Potential Facility & Infrastructure loss, Reduced personnel, Alternate communication methods necessary	Surveillance, Subject Matter Guidance, Vaccination	Call volume increases, ICS activation, Official Notification Specific Guidance Request, Document for reimbursement
Tornado/Severe Weather	• Exposure to mold • Communicable Disease • Animal Decomposition • Contaminated Water/Wells • Vector Control • Hazardous Material • Debris	**Lead Agency:** Public Works/Unified Command **Support Agency:** LHD, LE **Responder Risk:** Tetanus Hepatitis Mental Stress/Physical Stress	Potential Facility & Infrastructure loss, Reduced personnel, depleted PPE, Alternate communication methods necessary	Surveillance, Sampling	Call volume increases, ICS activation, Official Notification Specific Guidance Request, Document for reimbursement

Hazard	Public Health Risk	Responders	Impact on the Local Public Health Department		
			Resources	Capabilities	Operations
Pipeline	• Hazardous Material Exposure	**Lead Agency:** Fire/Unified Command **Support Agency:** LHD **Responder Risk:** Tetanus Hepatitis Mental Stress/Physical Stress	Potential Facility & Infrastructure loss, Reduced personnel, Alternate comm. methods necessary	Surveillance, Sampling, Vaccination	Call volume increases Possible ICS activation, Official Notification & information, Communication with Partners Specific Guidance Request, Documentation, Requirements for Disaster reimbursement
Subsidence/ Landslide	• Debris	**Lead Agency:** Public Works/ Unified Command **Support Agency:** LHD **Responder Risk:** Mental/Physical Stress	Potential Facility & Infrastructure loss, Reduced personnel, Alternate comm. methods necessary	Subject matter Guidance, Vaccinations and Surveillance	Call volume increases Communication with Partner agencies, Specific Guidance Request, Documentation
Energy Emergency	• Panic/Civil Unrest	**Lead Agency:** Public Works/ Unified Command **Support Agency:** EPA, LHD **Responder Risk:** Mental/Physical Stress	Alternate comm. methods necessary, Potential facility loss or reduction in ops	Subject matter Guidance	Call volume increases Communication with Partner agencies, Specific Guidance Request, Documentation
Water Shortage	• Panic/Civil Unrest	**Lead Agency:** Public Works/ Unified Command **Support Agency:** LHD **Responder Risk:** Mental/Physical Stress	Potential facility loss or reduction in operations	Subject matter Guidance	Call volume increases Communication with Partner agencies, Specific Guidance Request, Documentation
Drought	• Contaminated Water • Animal Decomposition	**Lead Agency:** Public Works/Unified Command **Support Agency:** LHD **Responder Risk:** Mental/Physical Stress	Potential reduction in operations	Water Sampling, Surveillance, Inspections, Vaccinations, SME Guidance	Call volume increases Communication with Partner agencies, Specific Guidance Request, Documentation
Earthquake	• Mass Fatality • Contaminated Water • Communicable Disease	**Lead Agency:** Fire/Unified Command **Support Agency:** LHD, LE **Responder Risk** Mental/Physical Stress, Hepatitis, Tetanus	Potential Facility & Infrastructure loss, Reduced personnel, depleted PPE, Alternate comm. methods necessary	Water Sampling, Surveillance, Inspections, Vaccinations, SME Guidance, Vital Stats	Call increases Possible ICS activation, Official Notification & information, exchange with Partners Documentation, for Disaster reimbursement

Infectious Disease	Public Health Risk	Responders	Impact on the Local Public Health Department		
			Resources	Capabilities	Operations
Anthrax	• Exposure/Illness • Panic • Mental Stress • Potential Death	**Lead Agency:** LHD Unified Command **Support Agency**: LHD/ODH/EMA/FBI/ Local Hosp **Responder Risk:** Mental/Physical Stress	Potential Reduction in Personnel, Overwhelm Local Resources Depending Upon the Nature and Scale of the Incident	Surveillance, Subject Matter Guidance, Prophylaxis, Case Investigation, Vital Stats	Increase in call volume Initiate Public Information Activate ICS Communicate with Partners Documentation for reimbursement
Botulism	• Exposure/Illness • Potential Death	**Lead Agency:** LHD **Support Agency**: ODH/ODA/ Local Hosp **Responder Risk:** Mental/Physical Stress	Potential Reduction in Personnel, Overwhelm Local Resources	Surveillance, Food Sampling, Vital Stats, Antitoxin Administration, SME Guidance, Case Investigation	Increase in call volume Initiate Public Information Activate ICS Communicate with Partners Documentation for reimbursement
Cholera	• Exposure/Illness • Potential Death	**Lead Agency:** LHD **Support Agency**: ODH/ Local Hosp **Responder Risk:** Mental/Physical Stress	Potential Reduction in Personnel, Shortage of Vaccine Supplies, Overwhelm Local Resources	Surveillance, Subject Matter Guidance, Vaccination, Vital Stats, Case Investigation	Increase in call volume Initiate Public Information Activate ICS Communicate with Partners Documentation for reimbursement
Diphtheria	• Exposure/Illness • Secondary Transmission • Potential Death	**Lead Agency:** LHD **Support Agency:** ODH/ Local Hosp **Responder Risk:** Exposure, Illness, Mental/Physical Stress	Potential Reduction in Personnel, Shortage of PPE, Vaccine and Supplies, Overwhelm Local Resources	Surveillance, Subject Matter Guidance, Vaccination, Vital Stats, Case/Contact Investigation	Increase in call volume Initiate Public Information Activate ICS Communicate with Partners Documentation for reimbursement
Measles	• Exposure/Illness • Secondary Transmission • Potential Death	**Lead Agency:** LHD **Support Agency**: ODH/ Local Hosp **Responder Risk:** Exposure, Illness, Mental/Physical Stress	Potential Reduction in Personnel, PPE Vaccine and Supplies, Overwhelm Local Resources	Surveillance, Subject Matter Guidance, Vaccination, Vital Stats, Case/Contact Investigation	Increase in call volume Initiate Public Information Activate ICS Communicate with Partners Documentation for reimbursement

Infectious Disease	Public Health Risk	Responders	Impact on the Local Public Health Department		
			Resources	Capabilities	Operations
Meningococcal Disease	• Exposure/Illness • Secondary Transmission • Potential Death	**Lead Agency:** LHD **Support Agency**: ODH/ Local Hosp **Responder Risk:** Exposure, Illness, Mental/Physical Stress	Potential Reduction in Personnel, PPE, Overwhelm Local Resources Depending Upon the Nature and Scale of the Incident	Surveillance, SME Guidance, Prophylaxis, Vital Stats, Case/Contact Investigation	Increase in call volume Initiate Public Information Activate ICS Communicate with Partners Documentation for reimbursement
Plague	• Exposure/Illness • Secondary Transmission • Potential Death • Mental Stress	**Lead Agency:** LHD **Support Agency**: ODH/LOCAL HOSPITAL/FBI/ODA **Responder Risk:** Exposure, Illness, Mental/Physical Stress	Potential Reduction in Personnel, Possible Shortage of PPE, Overwhelm Local Resources Depending Upon the Nature and Scale of the Incident	Surveillance, SME Guidance, Prophylaxis, Vital Stats, Case/Contact Investigation	Increase in call volume Initiate Public Information Activate ICS Communicate with Partners Documentation for reimbursement
Rabies	• Exposure/Illness • Death	**Lead Agency:** LHD **Support Agency**: ODH/ODA/ODNR/ Local Hosp **Responder Risk:** Mental/Physical Stress	Shortage of Vaccine Supplies	Surveillance, SME Guidance, Vaccine and Immune Globulin Administration, Vital Stats, Case Investigation	Increase in call volume Initiate Public Information Activate ICS Communicate with Partners Documentation for reimbursement
Rubella	• Exposure/Illness • Secondary Transmission • Potential Death	**Lead Agency:** LHD **Support Agency:** ODH/ Local Hosp **Responder Risk:** Exposure, Illness, Mental/Physical Stress	Potential Reduction in Personnel, Shortage of Vaccine and Supplies	Surveillance, SME Guidance, Vaccination, Vital Stats, Case/Contact Investigation	Increase in call volume Initiate Public Information Activate ICS Communicate with Partners Documentation for reimbursement
SARS	• Exposure/Illness • Secondary Transmission • Potential Death • Mental Stress	**Lead Agency:** LHD **Support Agency**: ODH/EMA/ Local Hosp **Responder Risk:** Exposure, Illness, Mental/Physical Stress	Reduction in Personnel, Shortage of PPE, Potential to Overwhelm Local Resources Depending Upon the Nature and Scale of the Incident	Surveillance, SME Guidance, Vital Stats, Case/Contact Investigation	Increase in call volume Initiate Public Information Activate ICS Communicate with Partners Documentation for reimbursement

Infectious Disease	Public Health Risk	Responders	Impact on the Local Public Health Department		
			Resources	**Capabilities**	**Operations**
Smallpox	• Exposure/Illness • Secondary Transmission • Potential Death • Mental Stress	**Lead Agency:** LHD **Support Agency**: ODH/FBI/EMA/ Local Hosp **Responder Risk:** Exposure, Illness, Mental/Physical Stress	Reduction in Personnel, Shortage of PPE, Vaccine Supplies, Overwhelm Local Resources Depending Upon the Nature and Scale of the Incident	Surveillance, SME Guidance, Vaccination, Vital Stats, Case/Contact Investigation	Increase in call volume Initiate Public Information Activate ICS Communicate with Partners Documentation for reimbursement
Tularemia	• Exposure/Illness • Potential Death	**Lead Agency:** LHD **Support Agency**: ODH/LOCAL HOSPITAL/FBI/EMA **Responder Risk:** Mental/Physical Stress	Potential Reduction in Personnel, Overwhelm Local Resources	Surveillance, SME Guidance, Vital Stats, Case/Contact Investigation	Increase in call volume Initiate Public Information Activate ICS Communicate with Partners Documentation for reimbursement
Viral Hemorrhagic Fever (VHF)	• Exposure/Illness • Secondary Transmission • Potential Death • Mental Stress	**Lead Agency:** LHD **Support Agency**: ODH/ Local Hosp **Responder Risk:** Exposure, Illness, Mental/Physical Stress	Potential Reduction in Personnel, Overwhelm Local Resources	Surveillance, SME Guidance, Vital Stats, Case/Contact Investigation	Increase in call volume Initiate Public Information Activate ICS Communicate with Partners Documentation for reimbursement
Yellow Fever	• Exposure/Illness • Potential Death	**Lead Agency:** LHD **Support Agency**: ODH/ Local Hosp **Responder Risk:** Mental/Physical Stress	Lack of Mosquito Control Equipment & Supplies	Surveillance, SME Guidance, Vital Stats, Case Investigation	Increase in call volume Initiate Public Information Activate ICS Communicate with Partners Documentation for reimbursement
Influenza A-Novel Virus	• Exposure/Illness • Secondary Transmission • Potential Death • Mental Stress	**Lead Agency**: LHD **Support Agency:** ODH/EMA/Local Hosp **Responder Risk:** Exposure, Illness, Mental/Physical Stress	Reduction in Personnel, Shortage of PPE, Overwhelm Local Resources	Surveillance, Investigation Vaccination, Antiviral Distribution, SME Guidance,	Increase in call volume Initiate Public Information Activate ICS Communicate with Partners Documentation for reimbursement

Infectious Disease	Public Health Risk	Responders	Impact on the Local Public Health Department		
			Resources	Capabilities	Operations
Seasonal Influenza	• Exposure/Illness • Secondary Transmission • Potential Death	**Lead Agency:** LHD **Support Agency:** ODH/Local Hosp **Responder Risk:** Exposure, Illness	Potential Reduction in Personnel, Potential for Vaccine Shortage	Surveillance, Subject Matter Guidance, Vaccination, Vital Stats	Increase in call volume Initiate Public Information Activate ICS Communicate with Partners Documentation for reimbursement
Vectorborne	• Exposure/Illness • Potential Death	**Lead Agency:** LHD **Support Agency:** ODH/ODA/Local Hosp **Responder Risk:** Mental/Physical Stress	Potential Reduction in Personnel Lack of Mosquito Control Equipment & Supplies	Surveillance, Subject Matter Guidance, Vital Stats, Case Investigation	Increase in call volume Initiate Public Information Activate ICS Communicate with Partners Documentation for reimbursement
Waterborne	• Exposure/Illness • Secondary Transmission • Potential Death	**Lead Agency:** LHD **Support Agency:** ODH/Local Hosp **Responder Risk:** Exposure, Illness, Mental/Physical Stress	Potential Reduction in Personnel Potential to Overwhelm Local Resources Depending Upon the Nature and Scale of the Incident	Surveillance, Subject Matter Guidance, Vital Stats, Inspections, Case Investigation	Increase in call volume Initiate Public Information Activate ICS Communicate with Partners Documentation for reimbursement
Foodborne	• Exposure/Illness • Secondary Transmission • Potential Death	**Lead Agency:** LHD **Support Agency:** ODH/ODA/Local Hosp **Responder Risk:** Exposure, Illness, Mental/Physical Stress	Potential Reduction in Personnel Potential to Overwhelm Local Resources Depending Upon the Nature and Scale of the Incident	Surveillance, Subject Matter Guidance, Vital Stats, Inspections, Case Investigation	Increase in call volume Initiate Public Information Activate ICS Communicate with Partners Documentation for reimbursement
Other	• Exposure/Illness • Secondary Transmission • Potential Death	**Lead Agency:** LHD **Support Agency:** ODH/ Local Hosp **Responder Risk:** Exposure, Illness, Mental/Physical Stress	Potential Reduction in Personnel	Surveillance, Subject Matter Guidance, Vital Stats, Case Investigation	Increase in Call Volume, Initiate Public Information, Communicate with Partner Agencies

Infectious Disease	Public Health Risk	Responders	Impact on the Local Public Health Department		
			Resources	Capabilities	Operations
Agriculture: Infectious Animal Diseases	• Animal Decomposition • Communicable Disease • Contaminated Water	**Lead Agency:** Director ODA ORC 941.1 **Support Agency**: LHD/ODH/ODA/ODNR/EPA/EMA **Responder Risk:** Exposure, Illness, Mental/Physical stress	Possible Shortage of PPE, Potential to Overwhelm Local Resources Depending Upon the Nature and Scale of the Incident	Water Sampling, Surveillance, Inspections, Vaccinations, SME Guidance	Increase in Call volume, Activate ICS, Communicate with Partner agencies
Nuclear Attack	• Mass Fatality • Psychological • Panic/Civil Unrest	**Lead Agency:** Fire/Unified Command **Support Agency:** LHD **Responder Risk** Exposure Mental Stress, Physical stress	Potential Facility & Infrastructure loss, Reduced personnel, depleted PPE, Alternate communication methods necessary	Surveillance, Vaccinations, Subject Matter Guidance Vital Stats	Increase in call volume Initiate Public Information Activate ICS Communicate with Partners Documentation for reimbursement
Terrorist/WMD Attack	• Mass Fatality • Psychological • Panic/Civil Unrest	**Lead Agency:** Fire / Unified Command **Support Agency:** LHD **Responder Risk** Exposure Mental Stress, Physical Stress	Potential Facility & Infrastructure loss, Reduced personnel, depleted PPE, Alternate communication methods necessary	Surveillance, Vaccinations, Subject Matter Guidance, Vital Stats	Increase in call volume Initiate Public Information Activate ICS Communicate with Partners Documentation for reimbursement

Infectious Disease	Public Health Risk	Responders	Impact on the Local Public Health Department		
			Resources	Capabilities	Operations
Civil Disorder	• Mass Fatality • Psychological • Panic/Civil Unrest	**Lead Agency:** Sheriff/Unified Command **Support Agency:** LHD **Responder Risk**: Mental and physical stress	Potential Facility & Infrastructure loss, Reduced personnel, depleted PPE, Alternate communication methods necessary	Surveillance, Vaccinations, Subject Matter Guidance, Vital Stats	Increase in call volume Initiate Public Information Activate ICS Communicate with Partners Documentation for reimbursement
Transportation Incidents	• Mass Fatality • Psychological • Panic/Civil Unrest	**Lead Agency:** Sheriff/Unified Command **Support Agency:** LHD **Responder Risk** Exposure Mental Stress, physical stress	Potential Facility & Infrastructure loss, Reduced personnel, depleted PPE, Alternate communication methods necessary	Surveillance, Vaccinations, Subject Matter Guidance, Vital Stats	Increase in call volume Initiate Public Information Activate ICS Communicate with Partners Documentation for reimbursement

Attachment 1: Hazard Specific Safety Guidance

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Utility Emergency

1. Gas Line Break:

- Clear the immediate area
- Evacuate building
- Assembly point after evacuation is the parking lot south of the building.
- Call 911 or the local fire department
- Notify your County Maintenance Department
- Call local gas company

Complete roll call and inform first responders of unaccounted for employees or other persons that may have been in the building at the time of the incident.

The Health Commissioner or designee will determine if the employees are to go home or operate from an alternate facility based on the incident and situation.

DO NOT return to the building until the “all clear” is issued by the first responders and it is declared a safe area.

2. Electric Power Failure

- Health Commissioner or designee will determine if staff continue work
- Confirm operation back- up generator system
- Contact electric company to report outage
- Notify the County Maintenance Department

3. Water Main Break

- Evacuate the flooded area
- Notify the County Maintenance Department

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Tornado/Severe Thunder Storm

1. **TORNADO OR SEVERE THUNDERSTORM WATCH**: a forecast or one or more tornadoes or severe thunderstorms in the area. Continue normal activities, monitor local weather.

2. **TORNADO WARNING:** a tornado has been sighted and may be approaching. If a tornado is sighted, or a warning is issued immediate actions are:
    - Monitor radio and television outlets for developments.
    - Announce warning to staff using intercom.
    - If in the immediate area, evacuate to designated safety areas. Offices without windows or outside walls.
    - If "roar" or "freight train" noise is heard, drop to floor and seek immediate protection.
    - Wait for "all clear" before returning to work area.

3. **SEVERE THUNDERSTORM WARNING**: a severe thunderstorm has been detected and may be approaching.
    - Employees will be advised to take appropriate measures to safeguard staff, clients and equipment.

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Fire/Explosion

In the event of fire/explosion:

1. Sound the fire alarm vocally and at pull boxes throughout the building. If possible use the telephone system all page to announce evacuation of the building; notify the Health Commissioner or designee of the location of the fire/explosion if possible.
2. Evacuate immediately. On the way out, check to insure total evacuation.
3. The assembly point after evacuation is the parking lot south of the building.
4. Call the fire department using 911.
    - Give name
    - Give address
    - Give location of fire/explosion in building

Complete roll call and inform first responders about unaccounted for employees or other persons that may have been in the building at the time of the fire/explosion.

1. Only the fire department official at the scene will give the order to return to the building.
2. Only the Health Commissioner or designee can direct the employees to go home

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Suspicious Letter or Package

Possible Indicators:

- No return addresses
- Restrictive markings
- Oily stains, discolored, or crystallization on wrapper
- Excessive tape
- Possibly mailed from foreign countries
- Misspellings
- Addressed to title only, may have incorrect title
- Badly typed or written
- Uneven or lopsided, rigid or bulky packaging
- Strange Odor

If a suspicious letter or package is found:

- Notify the Health Commissioner or designee immediately – they will call 911
- Keep anyone from handling it or going near it.
- Do not use any portable radio equipment within 100 feet of the package.

If a suspicious letter or package is received:

- Notify the Health Commissioner or designee immediately – they will call 911
- Handle with care – do not bump or shake
- Isolate it immediately
- Don’t open, smell, touch or taste
- Treat it as a threat
- Wash your hands with soap and water as soon as possible

If necessary the building will be evacuated under the direction of the health commissioner or designee.

All clear will be given to return to the building by appropriate personnel.

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Workplace Violence

Call 911 immediately if you feel threatened or a threat is indicated.

Close and lock office doors and windows if possible to stop the intrusion of the threat.

DO NOT go to an area where threat may be indicated or can be heard.

Staff should proceed with clients to designated rooms offices without windows and that can be locked from the inside without allowing access without a key.

Remain in designated rooms until “all clear” is indicated.

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Chemical Accident

Chemical events may include transportation accidents or leaks/spills at a local manufacturing plant. They may include liquid or toxic gases. Should such an accident endanger employees and/or clients visiting the health department, evacuation or shelter-in-place may be appropriate and the following actions should be accomplished:

If first responders are not yet on site the Health Commissioner or designee will determine the need to evacuate the building and/or the area or initiate shelter-in-place.

The Health Commissioner or designee will contact 911

Evacuation

1. During evacuation, move crosswind or upwind to avoid fumes
2. Render first aid as necessary.
3. Insure roll call is complete and inform first responders about unaccounted for employees or other persons that may have been in the building at the time of the incident.
4. Follow all directions of the first responders.
5. The Health Commissioner or designee will determine if the employees are to go home based on the incident and situation.
6. DO NOT return to the building until the “all clear” is issued by the first responders and it is declared a safe area.

Shelter in Place

1. Render first aid as necessary.
2. Insure roll call is complete and inform first responders about unaccounted for employees.
3. Follow all directions of HD leadership and first responders.
4. DO NOT leave to the building until the “all clear” is issued by the first responders and the area is declared safe.

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Earthquake

Warnings for earthquakes are seldom, if ever, given. The first indication of a pending earthquake may be erratic behavior noticed in animals. There are usually a few moments of mild tremors before the earthquake. ***This is the time for staff to take immediate action.***

If Indoors

1. Take cover under desks, tables or other heavy furniture.
2. Take cover in interior doorways or narrow hallways.
3. Stay away from windows and beware of falling objects such as filing cabinets or bookcases.
4. Move from under light fixtures or other suspended objects.

If Outdoors

1. Move away from buildings. Lie down and stay flat on the ground if possible.
2. Avoid utility poles and overhead or falling wires.

After Quake Is Over

1. Evacuate the building.
    - Assembly point after evacuation is away from building.
2. Be aware of possible gas leaks.
3. Complete roll call to ensure that first responders are aware of unaccounted for individuals who were in the building at the time of the earthquake.
4. Avoid contact with downed electrical wires.
5. If a radio is available turn it on for latest safety bulletins.
6. The building must be checked for structural damage/stability and other dangerous situations that may occur i.e. fire, gas leaks, water line ruptures.

DO NOT re-enter the building until an “all clear” is issued.

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Bomb Threat

Name of person receiving the call: _____
Time and date of call: _____
What did the caller say (be as specific as possible): _____
_____
Keep the caller on the line to obtain as much information as possible.

Notify the health commissioner and/or his designee immediately. 911 will be called and any specific directions will be given at that time.

Questions to Ask:

When is the bomb going to explode? _____

Where is the bomb? _____

What does it look like? _____

What kind of bomb is it? _____

What will cause it to explode? _____

Did you place the bomb? _____

Where are you calling from? _____

What is your address? _____

What is your name? _____

Listen to the caller's voice and describe the voice: calm, stutter, giggling, stressed, disguised, slow, deep, accent, nasal, sincere, crying, loud, angry, lisp, squeaky, slurred, broken, rapid, excited, or normal.

Is the voice familiar? Who did it sound like? _____

Do you hear any background noises? _____

The health commissioner and or designee will assess the threat and evacuate the building if necessary. Fire drill be announced and procedure followed.

If instructed inspect the building for the possible device. Look for items out of the ordinary. If the device is detected, **DO NO TOUCH IT**.

NOTE: This inspection should be accomplished by one individual from each area that is familiar with the area and will be able to detect things "out of place" or "different".

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Aircraft Crash

If an aircraft were to crash into or near the health department the following actions will be accomplished:

The health commissioner or department supervisor will determine which actions, if any, should be implemented. Where necessary, the department supervisor will take immediate action for the safety of employees and clients without waiting further directions.

The health commissioner or department supervisor will notify:

1. 911
2. Local Fire Department and EMS
3. Ohio Highway Patrol
4. Sheriff's Office

All employees will be kept at a safe distance to protect from a possible explosion.

If possible, determine the type of aircraft such as military, commercial or private and advise the first responders.

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Nuclear Attack

Alert Level Descriptions

Warning:
This is a notification that enemy initiated hostilities may be imminent.

- Dissemination will be by news media – radio, television and newspapers. Public warning (sirens) will not be sounded.

- No estimate can be made of the duration of a warning. The time may vary from several hours to several weeks.

Actions:

- The health commissioner or his designee may release employees.

- The local Emergency Management Agency will be contacted for further information and instruction.

Surprise Attack:

Little to no warning:

- Initial notification will be a 3 to 5 minute steady tone on area siren systems, possibly or television and/or radio warning, or even the detonation of the weapon. This could be accompanied by an extremely intense light flash and heat weave. The flash then may be followed by heavy shock waves.

Actions:
All employees will assume the "DROP" position. (On their knees, with head tucked down, hands clasped/folded together on head)

- Following the siren warning or blast wave, employees will assemble in the shelter area for protection from fallout. Offices without windows or outside wall contact may be used. At this time role call will be taken to account for employees and clients. Employees then may be released to go back to work, home or to report for emergency duties as assigned.

- Monitor radio for update information.