Introduction: Since 2002, through the Centers for Disease Control and Prevention's Public Health Emergency Preparedness (PHEP) cooperative agreement, St. Clair is one of forty-five local health departments receive earmarked funding for emergency preparedness.

The Emergency Preparedness Division is directed to develop the health department’s capacity and capability to effectively respond to the public health consequences of not only terrorist threats, but also infectious disease outbreaks, natural disasters, and biological, chemical, nuclear, and radiological emergencies.

The health department’s all-hazard Emergency Operations Plans are annually reviewed, exercised, and revised as needed to meet stringent requirements from the Centers of Disease Control & Prevention (CDC), the Michigan Department of Community Health’s Office of Public Health Preparedness (OPHP).

These plans are constructed to meet the demands of constant change in the nature and severity of public health threats to this community within our jurisdiction, and to be able to coordinate effective and efficient response with local first and emergency responders and across borders as well.

National Standards for Public Health Preparedness: Capabilities: To help public health departments with their strategic planning, CDC identified 15 public health preparedness capabilities to serve as national public health preparedness standards. State and local jurisdictions use CDC’s Public Health Preparedness Capabilities: National Standards for State and Local Planning to better organize their work and identify the capabilities they have the resources to build or sustain.

Public Health Interventions and Countermeasures:

Michigan Strategic National Stockpile (MISNS) Program: The Strategic National Stockpile (SNS) is a national repository of life-saving pharmaceuticals and medical supplies designed to protect the American public during a public health emergency severe enough to deplete state and local assets. Michigan is well-prepared to receive and distribute these assets and has consistently received the highest marks from the federal government for its state and local strategic national stockpile planning efforts.

Community Dispensing Clinics: An essential public health mission; provide prophylaxis or preventive medications to individuals who may have been exposed and/or at risk of exposure to a communicable or infectious disease.

Crisis, Emergency, and Risk Communications: The health department is tasked to provide accurate, credible, actionable, and timely public information as well as essential guidance, advisories and updates for stakeholders and partners in response to emerging events. Effective risk communication requires collaboration amongst all local partners and responders to insure so the best delivery channels can be utilized to keep everyone informed. The health department has numerous risk
communication strategies for providing information during emergencies across all populations and routinely tests these systems.

Key Non-Pharmaceutical Interventions and Containment Strategies Include:

**Isolation:** For People Who Are Ill: Isolation refers to the separation of persons who have a specific infectious illness from those who are healthy and the restriction of their movement to stop the spread of that illness. Isolation allows for the focused delivery of specialized health care to people who are ill, and it protects healthy people from getting sick. People in isolation may be cared for in their homes, in hospitals, or in designated healthcare facilities. Isolation is a standard procedure used in hospitals today for patients with tuberculosis (TB) and certain other infectious diseases. In most cases, isolation is voluntary; however, many levels of government (federal, state, and local) have basic authority to compel isolation of sick people to protect the public.

**Quarantine:** For People Who Have Been Exposed But Are Not Ill: Quarantine refers to the separation and restriction of movement of persons who, while not yet ill, have been exposed to an infectious agent and therefore may become infectious. Quarantine of exposed persons is a public health strategy, like isolation, that is intended to stop the spread of infectious disease. Quarantine is medically very effective in protecting the public from disease.

**Social Distancing:** Use of social distancing measures to reduce contact between persons in the community and workplace, including, for example, cancellation of large public gathering and alteration of workplace environments and schedules to decrease social density and preserve a healthy workplace to the greatest extent possible without disrupting essential services. Enable institution of workplace leave policies that align incentives and facilitate adherence with the non-pharmaceutical interventions. Dismissal of students from school (including public and private schools as well as colleges and universities) and school-based activities and closure of childcare programs, coupled with protecting children and teenagers through social distancing in the community to achieve reductions of out-of-school social contacts and community mixing.

**Restriction of Movement**

1. If the Health Officer (or designate) determines that progressive control of an outbreak or epidemic is necessary to protect community-wide health, an *Emergency Order* may be issued to restrict, limit, or prohibit the gathering of people (MCL 333.2453);

2. The *Emergency Order* establishes procedures to be followed by persons, including local governmental entities in order to insure continuation of essential public health services with enforcement of health laws, and prevent further or unnecessary spread of the infectious disease condition.

3. *Emergency Orders* may also be utilized to prohibit persons from entering or leaving a building or area suspected as being a source of a communicable disease and being an imminent danger to the public. Law enforcement may be requested to assure compliance in certain situations (if required).
### Information, Education and Training

**Indicator of a suspect (accidental, natural or intentional) biological event.....**

<table>
<thead>
<tr>
<th>Unusual numbers, of sick or dying people or animals.</th>
<th>Illness or death may occur hours to days to weeks after an incident or exposure has occurred.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pharmacies, medical hotlines, schools, medical clinics or emergency departments busier than usual – report similar signs and symptoms.</td>
<td>The time required before symptoms are observed is dependent on the agent / pathogen and the dose received. Additional symptoms likely to occur include unexplained gastrointestinal illnesses and upper respiratory problems similar to flu/colds.</td>
</tr>
<tr>
<td>Atypical presentation of disease.</td>
<td>Those affected may share a common: event, activity, time, place, population demographic, travel history, shopping habit, animals...</td>
</tr>
</tbody>
</table>

**Video:** "The History of Bioterrorism"
Describes the role of Category A agents—such as anthrax, plague, smallpox, botulism, viral hemorrhagic fevers, & tularemia—as weapons of bioterrorism.  
Mar 24, 2005

### Indicators of a possible chemical incident......

<table>
<thead>
<tr>
<th>Clusters of dead animals/birds/fish or lack of insect life.</th>
<th>Not occasional roadkill, but numerous animals (wild and domestic, small and large), birds and fish in the same area.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical symptoms and severity</td>
<td>Individuals experiencing unexplained water-like blisters, wheals (like bee stings), pinpointed pupils, choking, respiratory ailments and/or rashes. Individuals exhibiting unexplained serious health problems ranging from nausea to disorientation to difficulty in breathing to convulsions to death – not associated with biologic pathogens. Rapid onset.</td>
</tr>
<tr>
<td>Areas that look different in appearance</td>
<td>Not just a patch of dead weeds, but trees, shrubs, bushes, food crops, and/or lawns that are dead, discolored, or withered. (No current drought.) Coatings or films.</td>
</tr>
<tr>
<td>Unexplained odors</td>
<td>Smells may range from fruity to flowery to sharp/pungent to garlic/horseradish-like to bitter almonds/peach kernels to new mown hay. It is important to note that the particular odor is completely out of character with its surroundings.</td>
</tr>
<tr>
<td>Low-lying clouds</td>
<td>Low-lying cloud/fog-like condition that is not explained by its surroundings.</td>
</tr>
</tbody>
</table>

**Video Webcast:** "Recognition of Chemical Associated Gastrointestinal Foodborne Illness"
Will provide training to clinicians & health officials on accurately recognizing, reporting, & managing victims of a covert chemical-associated event such as the intentional contamination & subsequent distribution of food.

**Video Webcast:** "Grand Round Series: Assessing Chemical Exposure: A Different Approach"
Provides instruction on identification of chemical agents & mechanisms of potential chemical weapons.

**Video Webcast:** "Recognition of Illness Associated With Chemical Exposure"
This webcast aims to increase the likelihood that health-care providers will recognize a chemical-release–related illness & that public health authorities will implement the appropriate emergency response & public health actions.
Indicators of a possible radiological incident .....

| Unusual numbers, of sick or dying people or animals | Casualties may occur hours to days or weeks after an incident has occurred. The time required before symptoms are observed is dependent on the radioactive material used and the dose received. Additional symptoms include skin reddening and, in severe cases, vomiting. |
| Unusual metal debris | Unexplained bomb/munitions-like material. |
| Radiation symbols | Containers may display a radiation symbol. |
| Heat emitting material | Material that seems to emit heat without any sign of an external heating source. |
| Glowing material/particles | If the material is strongly radioactive, then it may emit a radio luminescence. |

Sources: Chemical/Biological/Radiological Incident Handbook (October 1998) and Centers for Disease Control and Prevention

Guidelines for Handling Decedents Contaminated With Radioactive Material
Mar 31, 2008  Video.

Radiological Terrorism: Medical Response to Mass Casualties
Apr 17, 2006  A self-study training program for clinicians on immediate medical response to mass casualties following a radiological or nuclear terrorism incident. Web-based.

Just in Time Training for Hospital Clinicians
Sep 9, 2005  Brief video covering key radiation principles & radiological procedures

REAC/TS Poster: Radiation Patient Treatment

Mass Casualty Event Preparedness and Response

Info for the General Public
- Coping With a Traumatic Event
- Emergency Wound Care
- Injuries
- Brain Injuries
- Burns

Related Resources
- Mass Casualties: Related Links
- State & Local Health Departments
- CDC’s Injury and Violence Prevention and Control (Non-emergency information)

Info for Professionals
- Medical Record Abstraction Form for Domestic Bombing Events
- Blast Injury Fact Sheets
- Emergency Medical Services (EMS) Providers
- Media & Communication Professionals: Suicide Bombs
- Surge Capacity in the Health Care System

Guidance and Educational Materials
- Interim Planning Guidance for Preparedness and Response to a Mass Casualty Event Resulting from Terrorist Use of Explosives
- In a Moment’s Notice: Surge Capacity in Terrorist Bombings
- Bombings: Injury Patterns and Care

Clinicians join COCA Email List: http://www.bt.cdc.gov/coca/

The CDC Emergency Communication System’s Clinician Communication Team manages the Clinician Outreach Communication Activity (COCA) to ensure that clinicians have the up-to-date information they need. COCA is designed to provide two-way
communication between clinicians and the CDC about emerging health threats, such as pandemics, natural disasters, and terrorism. COCA serves a wide variety of clinicians, including: physicians, nurses, physician’s assistants, pharmacists, paramedics, veterinarians, epidemiologists, public health practitioners, and state and local health department officials.

**Preparedness for Businesses**

**Emergency Preparedness for Business**
Instructions to building occupants, actions to be taken by facility management, & first responder notification procedures. From the National Institute for Occupational Safety & Health (NIOSH)

**Guidance for Protecting Building Environments from Airborne Chemical, Biological, or Radiological Attacks**  May 2002. From the National Institute for Occupational Safety & Health, CDC

**Personal Preparedness**

**Emergency Preparedness & You**
Centers for Disease Control and Prevention (CDC) and the American Red Cross have teamed up to answer common questions and provide step by step guidance you can take now to protect you and your loved ones.

**Chemical Emergencies: Facts About Sheltering in Place**
How to find temporary shelter in a chemical emergency

**Chemical Emergencies: Facts About Evacuation**
Knowing when & how to evacuate an area in a chemical emergency

**Chemical Emergencies: Facts About Personal Cleaning & Disposal of Contaminated Clothing**
What to do if you come in physical contact with dangerous chemicals

**Radiation Emergencies: Sheltering in Place**
How to find temporary shelter in a radiation emergency

**Preparedness for Healthcare Facilities**

**Adapting Standards of Care under Extreme Conditions: Guidance for Professionals During Disasters, Pandemics, and Other Extreme Emergencies** *(2 MB/26 pages)*
This policy paper can be used a basis for protocol development and refinement, especially in regard to ethics and standards that apply to decisions about care made during unusual or extreme circumstances such as those resulting from emergencies, disasters, or pandemics. Prepared for the American Nurses Association by the Center for Health Policy, Columbia University School of Nursing.

**Bioterrorism Readiness Plan: A Template for Healthcare Facilities** *(1.5 MB/34 pages)*

**OSHA Best Practices for Hospital-Based First Receivers of Victims**
Information to assist hospitals in developing & implementing emergency management plans for protecting hospital-based emergency department personnel during the receipt of contaminated victims from mass casualty incidents occurring at locations other than the hospital.

**Other Training and Educational Resources:**

**MI-TRAIN:**  [https://mi.train.org](https://mi.train.org)

**CDC Learning Connection:**  [http://www.cdc.gov/learning](http://www.cdc.gov/learning)

**Federal Emergency Management Agency:**  [www.fema.gov](http://www.fema.gov)

**American Red Cross:**  [www.arc.org](http://www.arc.org)

**Disaster Preparedness in Michigan**  [http://www.michigan.gov/michiganprepares](http://www.michigan.gov/michiganprepares)

Interested in volunteering for public health emergencies... complete and mail!

Attention: Diane Forys, EPC

I may be interested in public health emergency volunteerism, please send me an information packet with an application!

Sign: ______________________________________

Current Position / Title(s): ___________________________________________________________

Pertinent Past Position / Title(s): __________________________________________________

(Briefly) General Skills or Experiences:

Print Full Name: _________________________________________________________________

Street Address: _________________________________________________________________

City: __________________________ State: _________ Zip: _____________________________

Home Phone: __________________________ Work Phone: _____________________________

Fax#: ___________________________ Cell: ___________________________

Mail or Fax to:
St. Clair County Health Department
Attn: Diane Forys EPC
3415 28th Street
Port Huron, MI 48060
FAX: 810-987-0630

Also consider: Michigan Volunteer Registry: http://www.mivolunteerregistry.org