



EHSSENTENTIALS 2016

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PRESENTED BY



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Infectious Diseases:
Converting Your Pandemic
Plan Into an Infectious
Disease & Pandemic Guide

Agenda

- Why Have a Combined Plan?
- Disease Definitions and History
- Disease Plans are Different
- Infectious Disease Plan Components
- It's Only a Matter of Time

Why Have a Combined Plan?

Because...

- Conditions are ripe for spreading disease:
 - Large cities.
 - Crowded slums.
 - Easy global travel.
- Zoonotic infections are found all over:
 - Avian flu in the U.S. (largest outbreak worldwide).
 - MERS in South Korea.
 - Ebola in the U.S.
 - Zika – Coming to your area soon!

Infectious Diseases

- Common diseases can affect your business:
 - Measles.
 - Mumps.
 - Whooping cough.
 - Flu.
 - Drug-resistant TB.



Adult Male with Measles

And Two More Reasons

- Converting to a combination infectious disease and pandemic plan can:
 1. Emphasize that diseases, by their very nature, are local and can impact your business/region.
 2. Highlight that common diseases can severely impact your business. A disease doesn't have to be something "unusual" to cause problems running your company.

Disease Definitions and History

Definitions

- **Infectious diseases** are caused by pathogenic microorganisms, such as bacteria, viruses, parasites or fungi; the diseases can be spread, directly or indirectly, from one person to another.
- **Zoonotic diseases** are infectious diseases of animals that can cause disease when transmitted to humans.
- A **pandemic** is a disease outbreak occurring over a wide geographic area and affecting an exceptionally high proportion of the population.

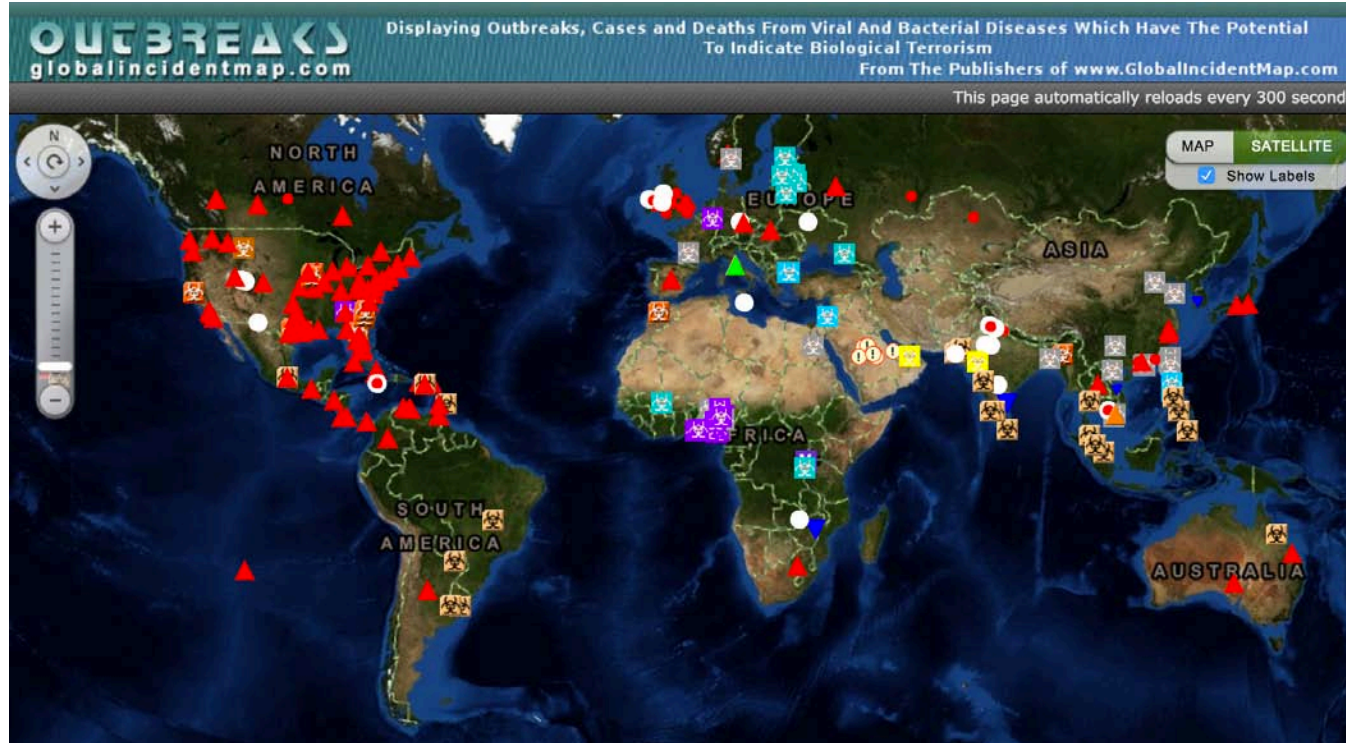
Rich History of Disease

- In the 14th century, the Black Plague killed as many people as half the population of Europe (between 75 and 200 million worldwide).
- The Spanish flu of 1918 was carried around the world by soldiers. It killed between 50 and 100 million people, many more than died in WWI, and maybe more than have died in any war.

Recent Times

- SARS:
 - China, Canada.
- Ebola:
 - Africa, U.S.
- MERS:
 - Saudi Arabia, South Korea.
- Zika virus.
 - Brazil and more!





<http://outbreaks.globalincidentmap.com/>

Zika Virus



- The Zika virus is a mosquito-transmitted infection related to dengue, yellow fever, and West Nile virus. Discovered in Uganda in 1947, it is common in Africa and Asia.
- It is spread by mosquitoes of the **Aedes** species, which can breed in a pool of water as small as a bottle cap and usually bite during the day.

Does Zika Need to be in your Plan?

- For most companies, the answer is “no.”
However:
 - If you are sending employees into areas of possible infection, you need to communicate risks and protective measures.
 - Zika virus is mainly mosquito-borne, **but** non-vector transmission (maternal–fetal, sexual, and blood transfusion) is possible.
- Do you need to pay attention to this threat?
 - Yes!



Zika Prevention

- Wear long-sleeved shirts and long pants.
- Stay in places with air conditioning and screens (window and door) to keep mosquitoes outside.
- Take steps to control mosquitos inside and outside your home.
- Sleep under a mosquito bed net if you are overseas, or outside and not able to protect yourself from mosquito bites.
- Use insect repellents with one of the following active ingredients: DEET, picaridin, IR3535, oil of lemon eucalyptus, or para-menthane-diol.
- Treat clothing and gear with permethrin or purchase permethrin-treated items.
- Have protected sexual relations for six months (check guidance, may change any day).
- **Note that no Zika vaccine currently exists.**

Disease Plans are Different

They're Different Because...

- They are written without specific information about what should be done for each possible illness. This is because:
 - Diseases can shift and change; what works or is done today may not be appropriate when an outbreak occurs.
 - Medical treatments and preventive measures change.
 - In a serious disease outbreak, you do not control your destiny. The local Department of Public Health is the controlling authority.
 - They can invoke Public Health Law, which allows them to control your response.
 - They will issue instructions, orders, and dictates (as necessary) based on the illness.

Infectious Disease Plan Components

Components of your Plan

- Goals.
- Objectives.
- Authority.
- Scope.
- Planning Assumptions:
 - Include both infectious disease and pandemic assumptions.
- Decision flow.
- List of reportable diseases.
- Infectious disease planning guidelines.
- Appendices.

Goals and Objectives

- Goals:
 - To indicate the action required to *overcome or minimize* an infectious disease incident.
 - To *delineate responsibilities and procedures* to address an infectious disease incident.
- Objectives:
 - If possible, to *eliminate* the transmission of an infectious agent at the workplace, or, if elimination is not possible, reduce the transmission of the infectious agent.
 - *Decrease* illness among employees, contractors, and visitors.
 - *Maintain* mission-critical business activities.
 - *Reduce* the economic impact of an infectious disease outbreak.

Authority and Scope

- Authority:
 - Approved by the Business Continuity Steering Committee.
 - The Incident Management Team (IMT), in consultation with medical assistance from the Department of Public Health (DPH) and other medical professionals as necessary, is responsible for directing, coordinating, and implementing an emergency health response to any infectious disease.
- Scope:
 - The Infectious Disease and Pandemic Planning Guide (IDPPG) provides the basic structure and guidance to plan and coordinate, monitor and assess, prevent and control the companies response, communication, and employee education in response to a infectious disease outbreak.

General Planning Assumptions

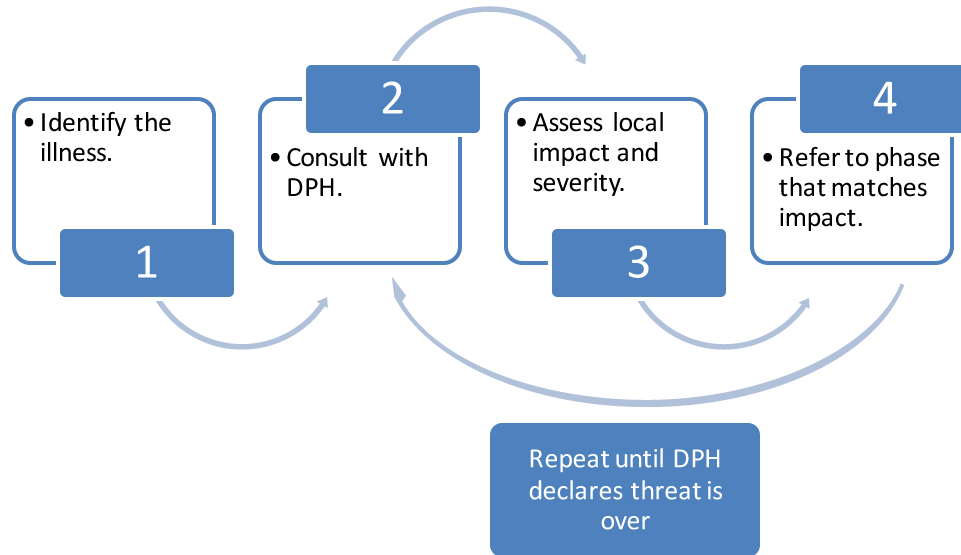
- These outbreaks will be managed using the “routine” Incident Management Team processes.
- Advice and counsel from the Department of Public Health and other medical professionals will be available.
 - Remember, the DPH is in charge of all health emergencies.
- The company’s usual emergency response procedures and Emergency Response Teams will function as long as it is safe for them to do so.
- The company will remain open as long as it safe to do so.

List of Reportable Diseases

- “Reportable diseases” are diseases considered to be of great public health importance.
- A requirement to report certain diseases and conditions is present in all 50 states in the United States; however, the specific diseases might vary slightly from state-to-state.
 - List the diseases mandated by your state in your plan.
 - Note that you will need multiple lists if your plan covers multiple states/countries.
- Some diseases must be also reported to the Centers for Disease Control (CDC).

Decision-Making Flowchart

When an infectious disease or pandemic has been declared, follow this assessment process. Repeat steps 2 – 4 as necessary.

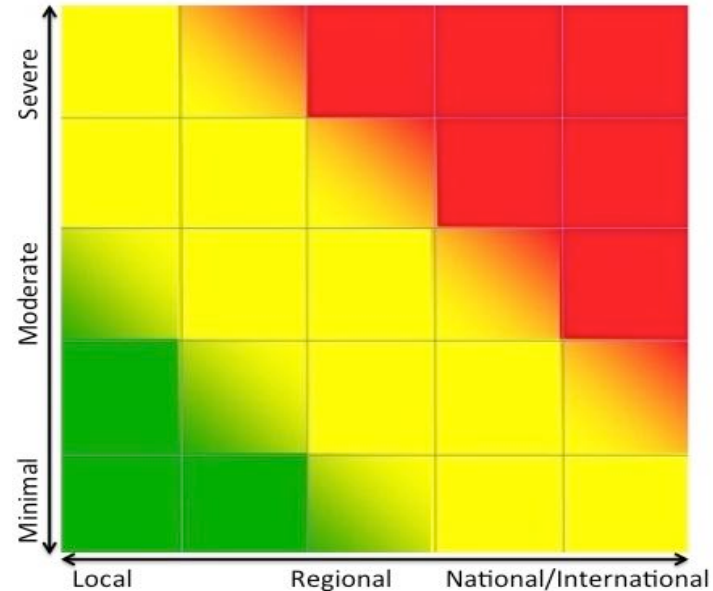


Infectious Disease Planning Scenario

- It is **HIGHLY** possible to have a localized disease outbreak that does **not** rise to the level of a global pandemic, yet can still cause a severe or catastrophic impact to the company.
- A highly contagious illness (like measles or Norovirus) directly in the company workplace could mean that the company might go through all or most of the local phases steps in a very short period of time. (Your plan should outline the local phases; see next slide.)
- Your assessment is not so much a fine science as it is good judgment and consultation with the local Department of Public Health, along with a healthy dose of good common sense.

Pandemic Planning Scenarios

- **Scenario One:** Limited localized outbreak.
- **Scenario Two:** Regional outbreak.
- **Scenario Three:** National and/or international outbreak.



WHO Pandemic Levels

- Phase 2: Influenza virus circulating in animals that has caused human infections.
- Phase 3: A reassortant virus has caused sporadic cases or small clusters of disease in people (not sustained).
- Phase 4: Verified human-to-human transmission of a influenza reassortant virus able to cause “community-level outbreaks.”
- Phase 5: Human-to-human spread of the virus into at least two countries in one WHO region.
- Phase 6: Community-level outbreaks in at least one other country in a different WHO region **in addition to** the criteria defined in Phase 5.

Infectious Disease Planning Guidelines

- Organize infectious disease planning guidelines by department (facilities, security, HR, etc.)
- Outline what you plan to do for:
 - Pre-outbreak preparation and planning: When there is no current risk.
 - Assessment: If a threat is detected.
 - Plan activation: When a threat is confirmed. Identify local phased response activations based on impact **and** severity.

Plan Globally, Act Locally

Local Phases Based on Impact and Severity	Suggested Company Actions (in consultation with local DPH)
Yellow: Minimal human transmission	Note your actions for each phase.
Orange: Moderate human transmission	
Red: Severe human transmission	
Gray: Uncontrolled and uncontrollable human transmission	

Plan Appendices

- The plan appendices should hold specific details as they apply to each responding department:
 - Business continuity:
 - BIA assessment.
 - Employee categorization.
 - Facilities:
 - HVAC guidelines.
 - PPE.

Plan Appendices

- Human Resources:
 - Employee education.
 - Monitoring.
 - Compensation and benefits.
- Incident Management Team:
 - Leadership continuity.
 - Virtual command centers.
- Maintenance and janitorial:
 - Cleaning.
 - Isolation.
- Respiratory Hygiene:
 - Policies.
 - Guidelines.
- Safety and Security:
 - Visitors.
 - Lobby policies.
 - ERT procedures.
- Travel:
 - Policies.

**It's only
a matter of**

time.



It's Only a Matter of Time Before...

- ...an employee comes into your office advising you of their symptoms after returning from a trip abroad.
- ...the DPH calls you to notify you that you have an employee in your call center with drug-resistant TB.
- ...the Avian flu in the U.S. turns into a deadly pandemic strain.



It's Time to Get Started

Thank you

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