

CDRE - Certified Disaster Recovery Engineer
Chapter 9 - Pandemics


WORKBOOK



Pandemics

Chapter 9

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 **Course Outline**

- Chapter 0 – Introduction
- Chapter 1 – Welcome to Business Continuity & Disaster Recovery Training
- Chapter 2 – Business Impact and Risk Analysis
- Chapter 3 – BCP and DRP Design
- Chapter 4 – IT Recovery Strategies
- Chapter 5 – IT Resiliency
- Chapter 6 – Implementation Phase
- Chapter 7 – Testing and Exercise Phase
- Chapter 8 – Maintenance and Execution
- * Chapter 9 – Pandemics**

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What are we covering?

- What is it?**
- Facts and Frequency**
- Effects on the Business**
- Developing a DR plan to include Pandemics**
- Travel Policies**
- Physical Resources and Contamination**
- Keeping up to Date**

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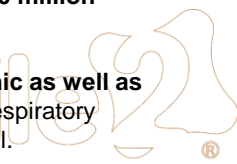
What is a Pandemic?


A pandemic (from Greek πᾶν pan "all" and δῆμος demos "people") is an epidemic of disease that has spread across a large region; for instance multiple continents, or even worldwide.

A widespread endemic disease that is stable in terms of how many people are getting sick from it is not a pandemic. Further, influenza (flu) pandemics generally exclude recurrences of seasonal flu.

Throughout history, there have been a number of pandemics, such as smallpox and tuberculosis. One of the most devastating pandemics was the Black Death, which killed over 20 million people in 1350.


The most recent pandemics include the HIV pandemic as well as the 1918 and 2009 H1N1 pandemics. Severe Acute Respiratory Syndrome (SARS) was a pandemic in early 2000 as well.




 **What is a Pandemic?**

An influenza pandemic occurs when a new influenza or other virus emerges and spreads around the world, and most people do not have immunity. Viruses that have caused past pandemics typically originated from animal influenza viruses.

Source: World Health Organization



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 **Quick Facts**


Seasonal influenza causes most of its deaths among the elderly while other severe cases occur in people with a variety of medical conditions. By contrast, the H1N1 pandemic caused most of its severe or fatal disease in younger people, both those with chronic conditions as well as healthy persons.

The impact or severity tends to be higher in pandemics in part because of the much larger number of people in the population who lack pre-existing immunity to the new virus.

The highest levels of activity would be expected to occur usually in the winter months. But as was seen with the H1N1 pandemic, unusual epidemiological patterns and large outbreaks can occur in the summer months.

Source: World Health Organization


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 **Pandemic Frequency**

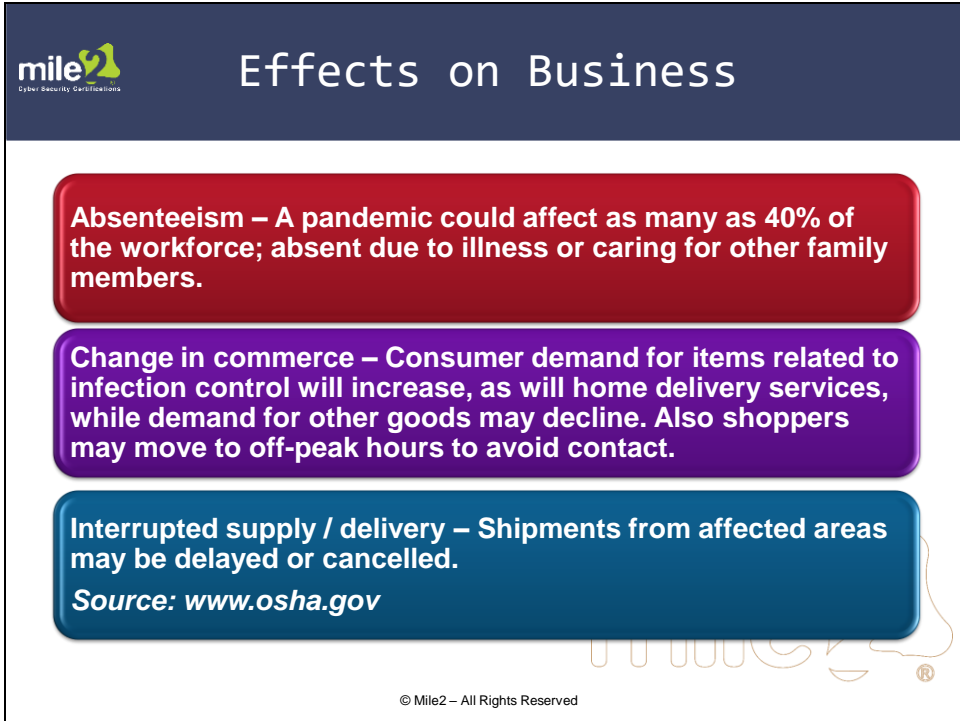
Influenza pandemics are unpredictable but recurring events that can have severe consequences on societies worldwide. Since the 16th century, influenza pandemics have been described at intervals ranging between 10 and 50 years with varying severity and impact.

1918 – 1919 “Spanish Flu” 20 – 50 million dead (est.)
1957 – 1958 “Asian Flu” 1 - 4 million dead (est.)
1968 – 1969 “Hong Kong Flu” 1 – 4 million dead (est.)

Source: World Health Organization



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Effects on Business

- Absenteeism – A pandemic could affect as many as 40% of the workforce; absent due to illness or caring for other family members.**
- Change in commerce – Consumer demand for items related to infection control will increase, as will home delivery services, while demand for other goods may decline. Also shoppers may move to off-peak hours to avoid contact.**
- Interrupted supply / delivery – Shipments from affected areas may be delayed or cancelled.**

Source: www.osha.gov

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Develop a Disaster Plan

- Incorporate federal, state, and local plans into your workplace disaster plan.**
- Work with suppliers to ensure continued operations.**
- Develop a sick leave policy that encourages those with flu systems to stay home.**
- Implement a work-from-home policy**

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Develop a Disaster Plan

- Address employee concerns about sick leave, pay, safety & health.**
- Provide your employees and customers easy access to infection control supplies.**
- Provide employee training and education on proper hygiene practices.**
- Work with your insurance company and local agencies to provide information to employees and customers.**

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The slide features a dark blue header with the Mile2 logo (a green stylized '2' with 'mile' to its left and 'Cyber Security Certifications' below) and the text 'Planning Checklist'. The main content is contained within a white box with a dark red top section. The red section contains the title 'Business Pandemic Influenza Planning Checklist' in white. Below this, a light beige section contains a bullet point with the URL 'http://www.flu.gov/planning-preparedness/business/businesschecklist.pdf'. At the bottom of the slide, there is a faint Mile2 logo and the text '© Mile2 – All Rights Reserved'.

 **Communications**

- Company office and business status, open or closed**
- Status of local, regional, or key business partners**
- Border closings and other government actions**
- Initiate crisis communication plan**
- Ongoing communication to employees, partners**



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Physical Resources

- Stockpile infection control supplies at all locations
- Require employees to disinfect their own work areas
- Enhance work-from-home infrastructure (remote access, capacity, VPNs, security, etc)
- Determine feasibility of stockpiling Tamiflu, food, at select locations
- Contract evacuation services from foreign countries
- Determine the feasibility to contract an infectious disease physician or support services to help make critical decisions

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Contamination

If an employee becomes ill, identify an easily cleaned containment area until EMS arrives. Give them a N-95 mask (respirator) and discard as medical waste after use
EMS -- Emergency medical services.

Cleaning crews should be properly protected and given cleaning instructions on all common non-porous surfaces such as door handles/knobs, light switches, keyboards, mice, elevator buttons, phones, hand rails public phones, wash rooms, etc. Should use hospital grade disinfectant spray and chlorine wipes.

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 N-95 mask (respirator)



Or equivalent... 

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mile2 Cyber Security Certifications **Pandemics – Work From Home**

The simplest plan to minimize spread of infection is to encourage employees to stay home.

- Work-from-home / telecommute support is required.

Must be able to scale up to meet increased utilization.

- Prioritize usage – key employees first

Employee laptops – take home every night

- Appropriate home internet connectivity essential

Consider business process requirements – e.g.: printing, faxing, document access, (identified in the BCP)

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The slide features a dark blue header with the 'mile2 Cyber Security Certifications' logo on the left and the word 'Pandemics' in white text on the right. Below the header, a red rounded rectangle contains the text 'Keep up-to-date on Pandemics at:'. Underneath this, a larger blue rounded rectangle contains the following text: 'USA : - [Http://www.flu.gov](http://www.flu.gov)', 'CANADA: - <https://www.canada.ca/en/public-health/services/flu-influenza/pandemic-plans.html>'. In the bottom right corner of the slide, there is a faint orange watermark of a person's profile and the text '© Mile2 – All Rights Reserved'.

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End of Chapter 9

**Time for Review and Study
And then:
Take the Exam**

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Questions and Answers

Review Questions:

1. The Emergency Operations Center (EOC) responsibilities include:
 - A. Conducts tactical operations to carry out the plan
 - B. Directs all resources
 - C. Sets objectives
 - D. Has overall responsibility of incident
 - E. All of the above

2. Which is not an essential component for activating the plan by the Emergency Operations Center (EOC)?
 - A. Identify a disaster
 - B. Develop dress code policy for the organization
 - C. Communicate nature of disaster to recovery team members
 - D. Manage information
 - E. Return to business as usual

3. Viruses that have caused past pandemics have typically originated from:
 - A. Other humans
 - B. Animals
 - C. Cold weather
 - D. Aliens

4. The most devastating pandemic on record in terms of human deaths, was the:
 - A. Spanish Flu - 1918 - 1919
 - B. Asian Flu - 1957 - 1958
 - C. Hong Kong Flu – 1968 - 1969

5. True or False: The H1N1 pandemic caused deaths of mostly the elderly, while a typical seasonal flu generally impacts younger people.
 - A. True
 - B. False

Answer Key:

1. E
All of these options are included in the Emergency Operations Center (EOC) responsibilities.
2. B
Developing a dress code policy for the organization is not an essential component for activating the plan by the Emergency Operations Center (EOC).
3. B
Viruses that have caused past pandemics have typically originated from animals.
4. A
The most devastating pandemic on record in terms of human deaths, was the Spanish Flu - 1918 - 1919.
5. B
The statement is false.