

Best Practice Guideline
for Workplace Health & Safety
During Pandemic Influenza

2007 Edition



Best Practice Guideline for the Workplace During Pandemic Influenza

OHS & ES

May/June 2009

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Outline

- Document final – May 2009
- What is pandemic influenza?
- Is H1N1 (Human Swine Flu) next Pandemic Influenza?
- Using the document for Pandemic influenza-OHS questions
- Using the document for Pandemic influenza-ES questions

What is pandemic influenza?

- Pandemic is a worldwide outbreak of a communicable disease that affects a large proportion of the population
- Influenza is an infection of the lungs and airways caused by an influenza virus
- Pandemic influenza occurs when a new influenza A virus spreads easily from human to human
 - no one has any previous immunity

Pandemic Influenza: basics

- Will last 12-18 months
 - 2-3 waves of 6-8 weeks each
- Course of illness (without complications) 5-7 days
- Infectious period
 - Low for 24 hours before start of symptoms
 - Higher for 5-7 days after symptomatic due to cough, etc.
- Work absenteeism (moderate scenario)
 - 25% for 1-2 week peak

Pandemic influenza in this century

Spanish influenza (H1N1) 1918 -1919

Severe pandemic influenza

Asian influenza (H2N2) 1957 – 1958

Moderate pandemic influenza

Hong Kong influenza (H3N2) 1968 - 1969

Mild pandemic influenza

H1N1 – Human Swine Flu

The next pandemic?

First wave?

- Spring 2009 – Novel virus H1N1
- Rapid worldwide spread
- Most cases in children (early findings)
- Mortality in at-risk groups
- Generally mild illness



H1N1 - 2009

- “While we were busy closing windows H5N1: novel strain H1N1 came in the front door”
- H1N1 – 2009 has few known markers for virulence in humans



Pandemic influenza phases (adapted from the WHO global influenza preparedness plan 2009)*

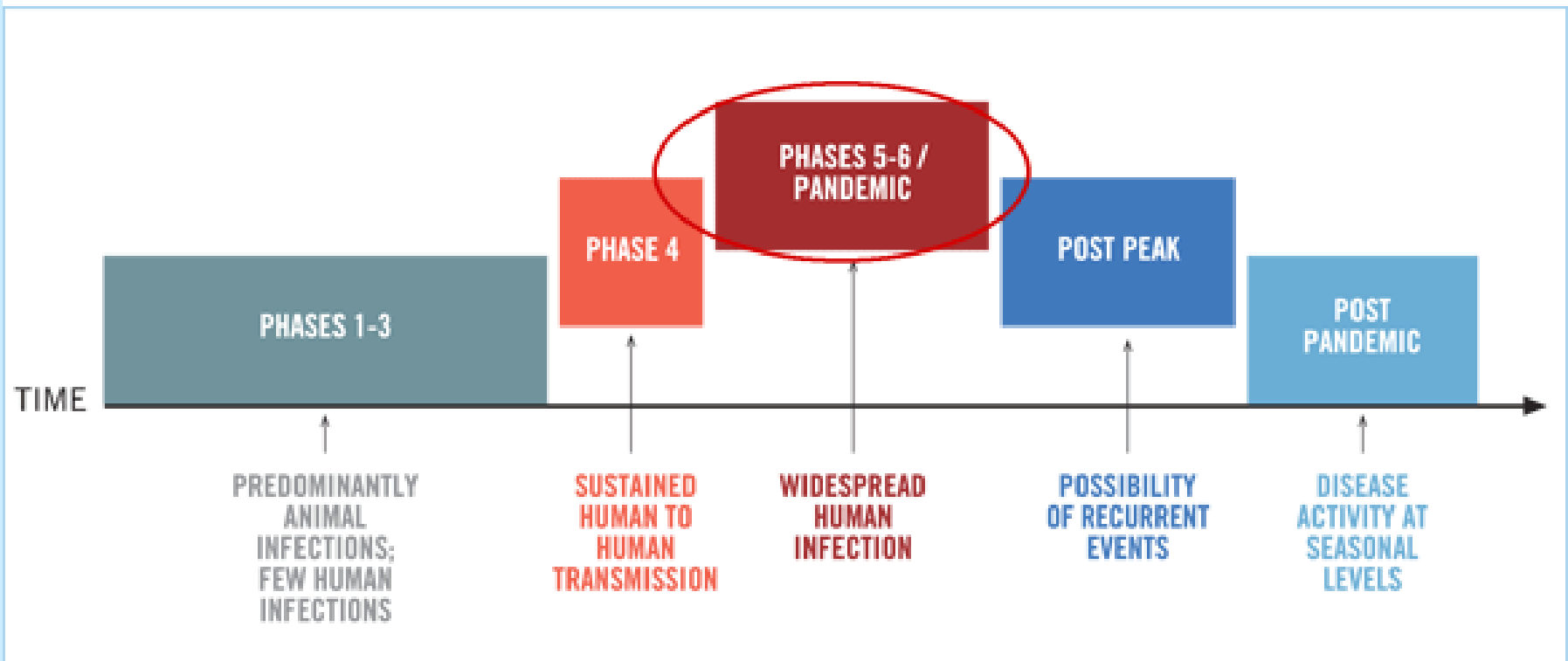
Phase	Characteristics
Phase 1 - Inter-Pandemic	Influenza virus subtype may be present in animals or birds. No new influenza subtypes detected in humans. The risk of human infection or disease is low.
Phase 2 - Inter-Pandemic	A circulating animal or bird influenza poses a substantial risk of disease to humans. No new influenza viruses detected in humans.
Phase 3 - Pandemic Alert	Humans have been infected with a new subtype of influenza originating from animals or birds but there has been no significant human-to-human spread (except in rare instances of close contact).
Phase 4 - Pandemic Alert	Small clusters of sustained human-to-human transmission but the disease is not widespread (still localized at community level).
Phase 5 - Pandemic Alert	Human-to-human transmission of the same new influenza virus with a sustained community level outbreaks in two or more countries in one WHO region.
Phase 6 - Pandemic Influenza	Increased and sustained human transmission of the same new influenza virus within the general population with sustained community level outbreaks in at least one other country in another WHO region.

2004 to
April 27 2009

May 2009

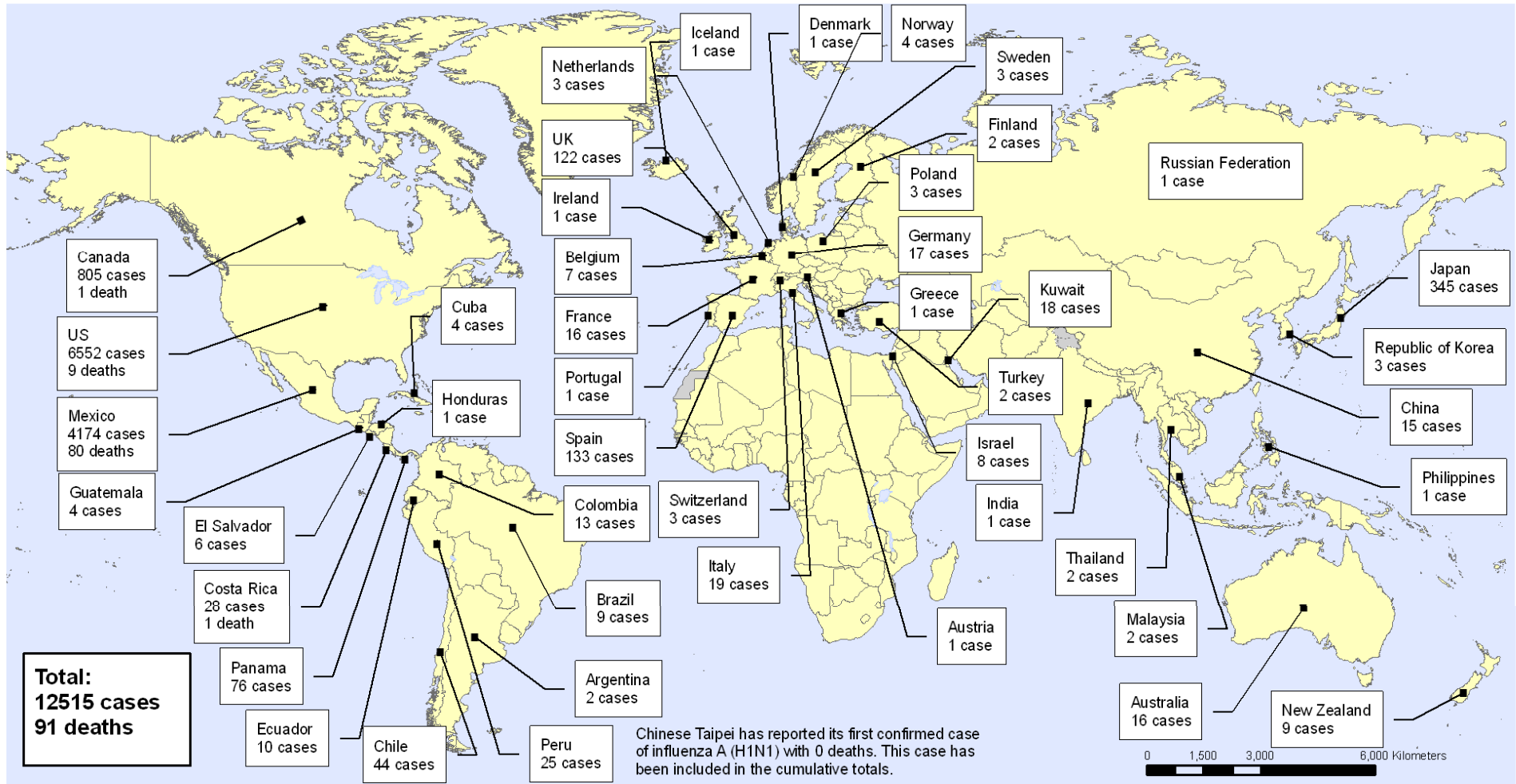
* For more specific information refer to www.who.int/about/regions/en/

PANDEMIC INFLUENZA PHASES



New Influenza A (H1N1), Number of laboratory confirmed cases and deaths as reported to WHO

Status as of 25 May 2009
8:00 GMT



The boundaries and names shown and the designations used on this map do not imply the expression of any opinion whatsoever on the part of the World Health Organization concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries. Dotted lines on maps represent approximate border lines for which there may not yet be full agreement.

Data Source: World Health Organization
Map Production: Public Health Information
and Geographic Information Systems (GIS)
World Health Organization



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Map produced: 25 May 2009 08:20 GMT

H1N1 – Should we be concerned about a “next wave”?

- H1N1 – 2009 followed previous patterns of emerging novel influenza virus (1919, 1957, 1968)
- Previous pandemics started mild in first wave: second or third waves increased severity
- Good chance will emerge in fall
- Severity??

Best Practice Guideline for the Workplace During Pandemic Influenza

- Hazard assessment and control
 - Regular hazard assessment
 - Planning for potential health and safety issues
 - Reassessing during pandemic influenza
 - Responding to actual health and safety issues
- Emergency plan
- Employment Standards
 - Includes some workplace business continuity ideas

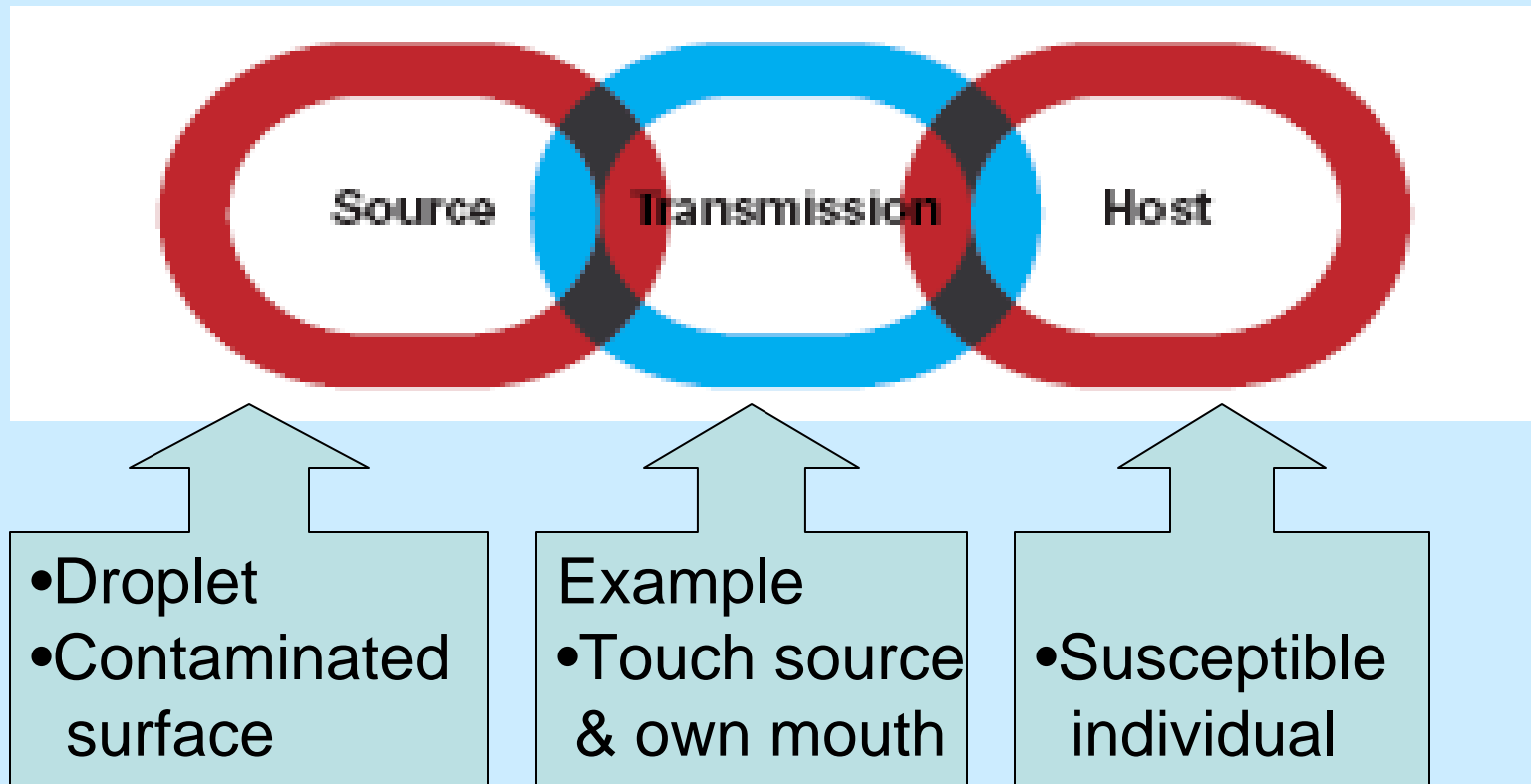
Pandemic Influenza and the Workplace

- Need to continue preparation
- New biological hazard in the workplace
- Workplace hazard assessment/reassessment
 1. Pandemic influenza virus
 2. Shortages in operational and safety critical functions due to anticipated increased absenteeism

Hazard Assessment and Control

for Pandemic Influenza

Transmission of the virus



Appendix 1 Comparison of Terms—Influenza, Cold, Stomach Flu

Is it influenza, a cold, or "stomach flu"?			
Symptoms	Influenza	Common Cold	Stomach Flu
Fever	Usually high	Sometimes	Rare
Chills, aches, pain	Frequent	Slight	Common
Loss of appetite	Sometimes	Sometimes	Common
Cough	Usual	Sometimes	Common
Sore throat	Sometimes	Sometimes	Rare
Sniffles or sneezes	Sometimes	Common	Rare
Involves whole body	Often	Never	Stomach/ bowel only
Symptoms appear quickly	Always	More gradual	Fairly quickly
Extreme tiredness	Common	Rare	Sometimes
Complications	Pneumonia; can be life threatening	Sinus infection Ear infection	Dehydration

DID YOU KNOW?

The virus, contained in droplets, can be propelled approximately 1 metre/3 feet when an individual with pandemic influenza coughs or sneezes. It can live on hard surfaces for one to two days; on cloth, tissue, and paper for 8 to 12 hours; and on hands for five minutes.



Hazard Assessment and Control

- Step 1 – List types of work and work-related activities

Workspace: 1. Where will workers be exposed to pandemic influenza infected persons?	Job Task: 2. Decide on the job tasks and the workers potential ability to limit exposure to pandemic influenza infected persons.
Minimal Exposure Job Tasks	
Workers with no contact to pandemic influenza infected persons in the workplace.	Job tasks that do not require close contact to another individual.
Lower Exposure Job Tasks	
Workers who may be exposed to infected persons from time to time in relatively large well ventilated workspaces. (choose 1 from column 2)	Workplace contact to another individual in job tasks that allow social distancing. Social distancing is keeping a distance of greater than about 2 metres from another individual.
	Job tasks that require close contact with clients or co-workers (within a distance of 2 metres). The individuals are not demonstrating symptoms of pandemic influenza i.e. coughing, fever, etc. at the time of contact.
	Job tasks in potentially contaminated environment ² . Potential exposure can occur in work areas open to public, etc.
	Contact with symptomatic pandemic influenza patients in job tasks that allow social distancing or where the worker has the ability to keep a distance of greater than about 2 metres from patient symptomatic with pandemic influenza (case).
Higher Exposure Job Tasks³	
Workers who may have contact with symptomatic infected persons in small, poorly ventilated workspaces. (choose 1 from column 2)	Job tasks require close contact (two metres) with a patient symptomatic with pandemic influenza (case ⁴).
	Job tasks in the same room as aerosol generating medical procedure being performed on person symptomatic with pandemic influenza (case).

Step 1


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Hazard Assessment and Control

- Step 2 – Identify the hazard
 - Sources of the hazard
 - Potential routes of transmission
 - Routes of entry

What surfaces are most likely to be contaminated in your workplace?

The virus can live:	At your workplace be aware the virus may be on:
<ul style="list-style-type: none">• on hard surfaces for one to two days• on cloth, tissue, and paper for 8 to 12 hours• on hands for five minutes	<ul style="list-style-type: none">• instruments, doorknobs, keyboards, chairs, coffee cups,• towels, reports,• backs of hands, face, arms

An illustration of a person sitting at a desk in a workplace. The person is shown in profile, wearing a blue shirt, and is looking at a computer monitor. The desk has a keyboard and a coffee cup on it. The background is a light blue gradient.



Inhalation is **not** the number one route of entry into the body for the influenza virus. Remember that the influenza virus can enter the body in other ways.

Consider this—

1) Contact with contaminated surfaces

After an infected person coughs, sneezes or talks, the expelled infected droplets travel only approximately one meter or three feet before falling to a surrounding surface. When someone touches an infected surface and then touches their own eyes, nose or mouth, the virus can gain entry into the body.

2) Close contact with an infected individual when they cough, sneeze, or talk

Generally, the influenza virus droplets travels only approximately 1 metre or 3 feet in the air after being expelled from an infected persons cough, sneeze, or talking. An individual positioned within approximately 1 metre from an infected person may contact the virus through their eyes, nose, or mouth.

3) Exposure to the influenza virus during aerosolizing medical procedures

Aerosolization—creating very small droplets of moisture—generally occurs when individuals undergo certain medical procedures (for example, intubation or bronchoscopy). When the influenza virus is aerosolized—broken into very small droplets of moisture (less than five microns in diameter)—the virus is in a small enough form to be inhaled into the lungs if not appropriately protected.

Hazard Assessment and Control

- Step 3 – Assess the hazards
 - Review and identify potential sources of worker exposures
 - Review and identify shortages in operational and safety critical areas due to absenteeism
 - Other potential hazards

Hazard Assessment and Control

- Step 4 – Implement controls

Overview of Best Practices for control of exposure in Minimal Exposure Job Tasks

		<p>Job tasks that do not require close contact to another individual</p> <ul style="list-style-type: none"> • job tasks require minimal contact with other individuals in the workplace within 1 metre or 3 feet • minimal job tasks in areas open to public
ENGINEERING CONTROLS	Ventilation	as appropriate based on hazard assessment
	Physical Barriers	as appropriate based on hazard assessment
ADMINISTRATIVE CONTROLS	Hand Hygiene	yes, <i>critical</i>
	Social Distancing	yes
	Respiratory Etiquette	yes
	Alternate work arrangements (i.e. work from home)	yes
	Training	yes
	Workplace cleaning & environmental decontamination	yes
	Restriction from workplace of workers demonstrating pandemic influenza symptoms	yes
	Prophylactic antiviral medication	not applicable for this level of workplace exposures
	Pandemic influenza vaccine	as available based on Alberta Pandemic Influenza Plan
PERSONAL PROTECTIVE EQUIPMENT (PPE)	NIOSH approved N95 or better	no
	Gloves	no
	Gown	no
	Eye Protection	no
	Surgical Masks	no

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Healthcare workers reference Alberta Pandemic Influenza Plan (2007) for specific infection prevention and control instruction.

Case Definition – Medically diagnosed suspect or confirmed case of highly contagious, febrile, acute respiratory infection of the nose, throat, bronchial tubes, and lungs caused by the pandemic influenza virus.

Hazard Assessment and Control

- Step 5 – Communicate the information to workers and provide training

Hazard Assessment and Control

- Step 6 – Evaluate effectiveness of controls

The Workplace Emergency Response Plan

including Pandemic Influenza

Emergency Response Plan

- Pandemic Influenza should be part of plan – “emergency in slow motion”
 1. Assess risks to workers and organization
 2. Set priorities based on organizational and safety critical functions
 3. Establish plans to control exposures
 4. Build a foundation
 - Establish and communicate policies for absenteeism
 - Plan succession options and cross-train
 - Define and communicate chain of command
 - Plan communication strategies
 - Review policies

Workplace First Aid

during Pandemic Influenza

First Aid

- Minimum – legislative requirements
- In the event of pandemic influenza some workers may come to work ill
 - Process in place – record keeping, sending for medical services
- Availability of medical and emergency services may differ from normal
 - Plan for changes that may be needed to maintain routine first aid requirements

Using the document for OHS questions

- Use risk assessment
- Utilization of document for OHS best practices, hazard assessment for planning and reassessment during pandemic influenza
- Refusals to work - hazard assessment and control appropriate

Employment Standards during Pandemic Influenza

- Impact on Minimum Standards
 - Attendance/absence
 - Paying earnings
 - Layoffs and terminations
- Strategies

Employment Standards during Pandemic Influenza

- *Employment Standards Code*

s. 82(1) An employee may make a written complaint to an officer that

(b) the employment of the employee was suspended or terminated or the employee was laid off

(i.1) contrary to section 52.91 of the Public Health Act

Employment Standards during Pandemic Influenza

- *Public Health Act*

*State of Public Emergency – Termination of
employment prohibited*

- Infected person neglects or refuses treatment
- Detention for treatment
- Conscription to meet an emergency
- Being sick or caring for sick family member

Using the document for ES questions

- Utilization of employment standard best practices will ease employer challenges
- Best practices very important before public health emergency declared in Alberta
- During public health emergency employer must also comply with legislated requirements

Conclusion

- Best Practice Document
- Guideline for Workplace OHS & ES
 - Planning for Pandemic Influenza
 - During Pandemic Influenza
- Aid to assist in answering questions
- Hard copy and electronic version available for distribution