

Selected Emerging Themes in Public Health

Dr Ada Bennett,

Deputy Medical Officer of Health

Office of the Chief Medical Officer of Health, Alberta Health

2014 Stakeholder Summit

AEMA/Office of the Fire Commissioner

November 25th, 2014, Edmonton, Alberta

Objectives

- **To provide an overview of three diseases and what they means to Albertans**
 - Pandemic Influenza
 - MERS-CoV
 - Ebola Viral Disease
- **To provide information on how Alberta is working to prepare for these diseases**
- **To make people aware about what they can do to prepare for these diseases**

"The commander must decide how he will fight the battle before it begins. He must then decide who he will use the military effort at his disposal to force the battle to swing the way he wishes it to go; he must make the enemy dance to his tune from the beginning and not vice versa."

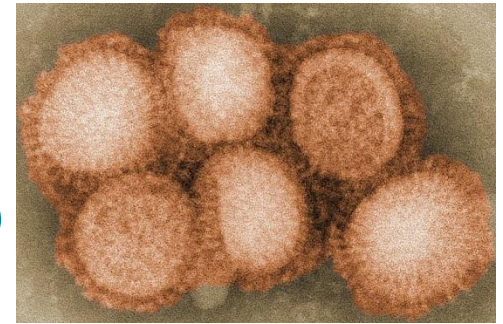
— Viscount Montgomery of Alamein (Renowned British World War II leader)

Pandemic Influenza (not Seasonal Influenza)

- **Seasonal Influenza is all around us and “visits” Canada in the winter time**
- **Symptoms**
 - fever or feeling feverish
 - cough;
 - a sore throat;
 - muscle aches and fatigue;
 - loss of appetite;
 - runny or stuffy nose
- **Alberta offers a Seasonal Influenza Vaccine from October each year to help with that**
- **Please, Please, Get your Seasonal Influenza Vaccine!**

So what is Pandemic Influenza?

- An unusual type of influenza that occurs when the regular human influenza viruses mutate (change) or mix with other types of influenza viruses such as avian influenza, etc. leading to a change in the way it behaves
- How do we experience this change?
 - The wrong time – for example in our summer
 - More severe symptoms (including more deaths)
 - More people affected
 - Different people affected – more young and working-age people
 - Faster spread
 - There is usually a lag period before a vaccine is developed



How bad has Pandemic Influenza been in the past?

| Name | Dates | (Estimated) number of deaths |
|------------------------|-------------|------------------------------|
| Asiatic or Russian Flu | 1889 – 1890 | 1 million |
| Spanish Flu | 1918 - 1920 | 20 to 100 million |
| Asian Flu | 1957 – 1958 | 1 to 1.5 million |
| Hong Kong Flu | 1968 – 1969 | 0.75 to 1 million |
| Russian Flu | 1977 – 1978 | No accurate account |
| 2009 Flu Pandemic | 2009 – 2010 | 18,000 to 284,500 |

What are the (potential) effects of Pandemic Influenza

- Increased numbers of illness and death
- Working age people becoming unwell
- Disruption to regular services – hospitals, banks, stores, childcare facilities, transportation services

So what is Alberta Health doing about it?

- **Alberta Health (AH) is part of the national planning process**
- **Work very closely with AEMA and other partners such as Alberta Health Services to ensure we are prepared**

What can Albertans do?

- **Get the Seasonal Influenza Vaccine** – it has been shown to improve protection from Pandemic Influenza
- **Ensure adequate (hand) hygiene**
 - Wash hands frequently and when soiled
 - Use alcohol sanitizers, especially when far from a tap
 - Ensure you are aware of what is going on
- **Use good sources of information** - <http://www.phac-aspc.gc.ca/influenza/fam-fluinform-eng.php>
- **Get the Pandemic Influenza Vaccine once it becomes available**

Have a family contingency plan

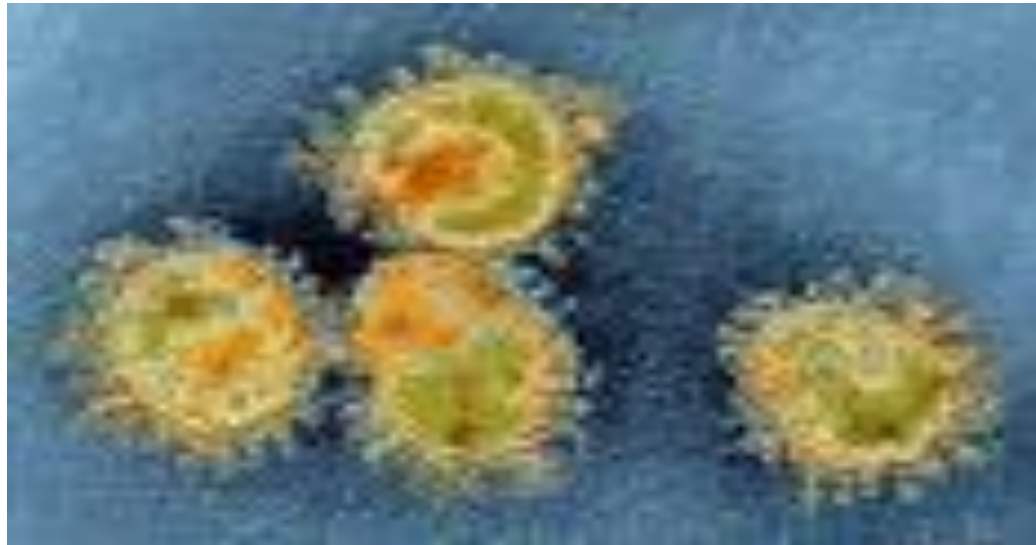
- **Keep a list of useful telephone numbers**
- **Ensure your prescriptions are filled**
- **Keep some cash at home for emergencies**
- **Have a range of options for childcare if schools/daycares close**
- **Have a plan for how you might get to work if transportation is disrupted**

Have a work contingency plan

- Find out if your workplace has a Business Contingency Plan (BCP) – which should address the question of how your organization would function in a crisis
- Ensure you (and the people who answer to you) are aware of and comfortable with your assigned role in an emergency situation

Middle East Respiratory Syndrome Coronavirus (MERS-CoV)

- **What is MERS-CoV?**
 - It is an infection caused by a virus
 - This virus is similar to the one that causes SARS
 - Most viruses in this group simply cause the “common cold”



MERS-CoV

- **Why is this one important?**

- It can cause quite a severe disease including pneumonia and death
- There have been several cases imported to a whole host of countries
- Symptoms are worse in people who have chronic medical conditions – diabetes, heart disease, respiratory disease, renal disease, etc.
- We are not yet sure whether it will spread widely or not
- There is no vaccine for it

- **How does one catch it?**

- Generally linked to travel to the Middle East
- A bit like the influenza or common cold
- Not easily spread from person to person
- A lot of the time there is thought to be an animal link (?camels)

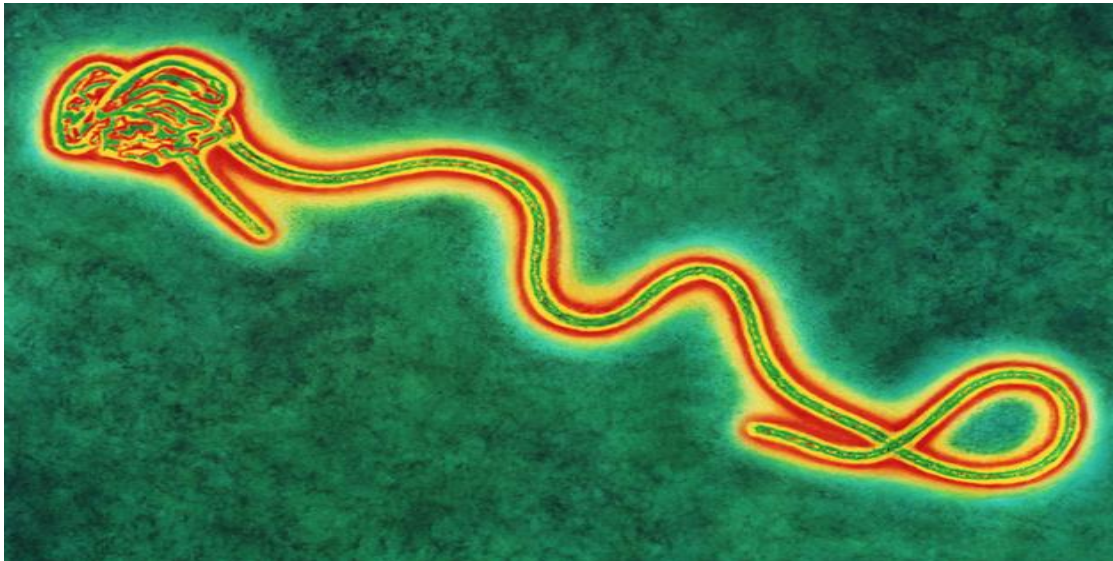


What is Alberta doing about MERS-CoV?

- The risks to Canadians from MERS-CoV remain low
- **Government**
 - Reviewed our guidelines
 - Clinicians and labs are up to date
- **What you can do**
 - It is all about hygiene
 - Wash your hands
 - Use alcohol-based sanitizers
 - Stay away from people if you are unwell

Ebola Viral Disease (EVD)

- **What is EVD?**
 - An infectious disease caused by a (RNA) virus
 - Known since about 1976
 - It can be difficult to diagnose as the early stages resembles a lot of common (less deadly) diseases
 - Symptoms – fever, vomiting, diarrhea, bleeding



Ebola Viral Disease (EVD)

- **Why is it important?**

- The number of cases continue to increase
- Between 20% and 90% of people who get it will die.
- To date there is no real “cure” or effective vaccines for it.
- People caring for those with the disease, e.g. healthcare workers and family members, are at the greatest risk.
- The outbreak in West Africa is the largest outbreak ever.
- For the first time, it has affected big cities and not just remote communities.

- **How does one catch it?**

- By handling infected animals (no clear consensus of which ones).
- By coming to contact with the bodily fluids (vomit, diarrhea, spit, urine, etc.) of someone or an animal that has active (symptomatic) disease.

Where is EVD currently present?

(current as of November 14th)

- **Some West African Countries – Sierra Leone, Liberia, Guinea**
- **Currently active sporadic travel related single case and clusters – Spain** (waiting for 42 days “Ebola-free” on December 2nd), **and Mali** (both linked to the West African outbreak)
- **Dormant (resolved) sporadic travel related cases – Nigeria, Senegal and USA** (all linked to the West African outbreak)
- **Dormant (resolved) Democratic Republic of Congo** (not linked to West Africa)

Dispelling myths about EVD

- **It is spread in the air**
 - Wrong. You cannot catch it by being in the same room with someone who has it (unlike measles or influenza where this is possible).
- **People who are incubating (very early stages when one is still “brewing it” but has no symptoms) it can infect others.**
 - Wrong. Only people who have symptoms – fever AND vomiting, diarrhea, etc., can spread it.
- **It is a disease that is occurring very far away**
 - Wrong. It takes only 22 hours to travel from one of the affected countries in West Africa to Edmonton.
 - Think about USA

What is Alberta doing about EVD?

- The risk to Canadians remains low
- Health has been preparing over the last 3 months
- Working with Public Health Agency of Canada
- Other work with Border Agencies, airports, etc.
- Plans in place
- Plans exercised
- Frontline staff such as ER, EMS, frontline physicians are in the loop
- Personal Protective Equipment (PPE) are in place

What healthcare professionals can do

- **Ensure that you are up to date with your employers policies on the use of Personal Protective Equipment (PPE).**
- **Ensure you have the right equipment for the job you are doing.**
- **Ask questions if your employer has not provided you with the right PPE or if you do not understand how to use it.**
- **Ask clients about their travel history.**
- **If you hear any relevant history (including travel) ensure that it gets passed on to your colleagues who need to know.**

What can we all do?

- **Ensure you practice strict hand hygiene**
 - Wash your hands with soap and water as frequently as needed
 - Use alcohol sanitizer frequently, especially if you cannot get to a tap
- **Be aware of what is going on around you – follow the news, know which countries currently have EVD**
- **Check trusted information sources regularly**
 - Public Health Agency of Canada (PHAC) <http://phac-aspc.gc.ca/id-mi/vhf-fvh/ebola-eng.php>
- **Make sure you check the website or speak to your health care provider if you are planning to travel to the affected areas**

Comments or Questions?

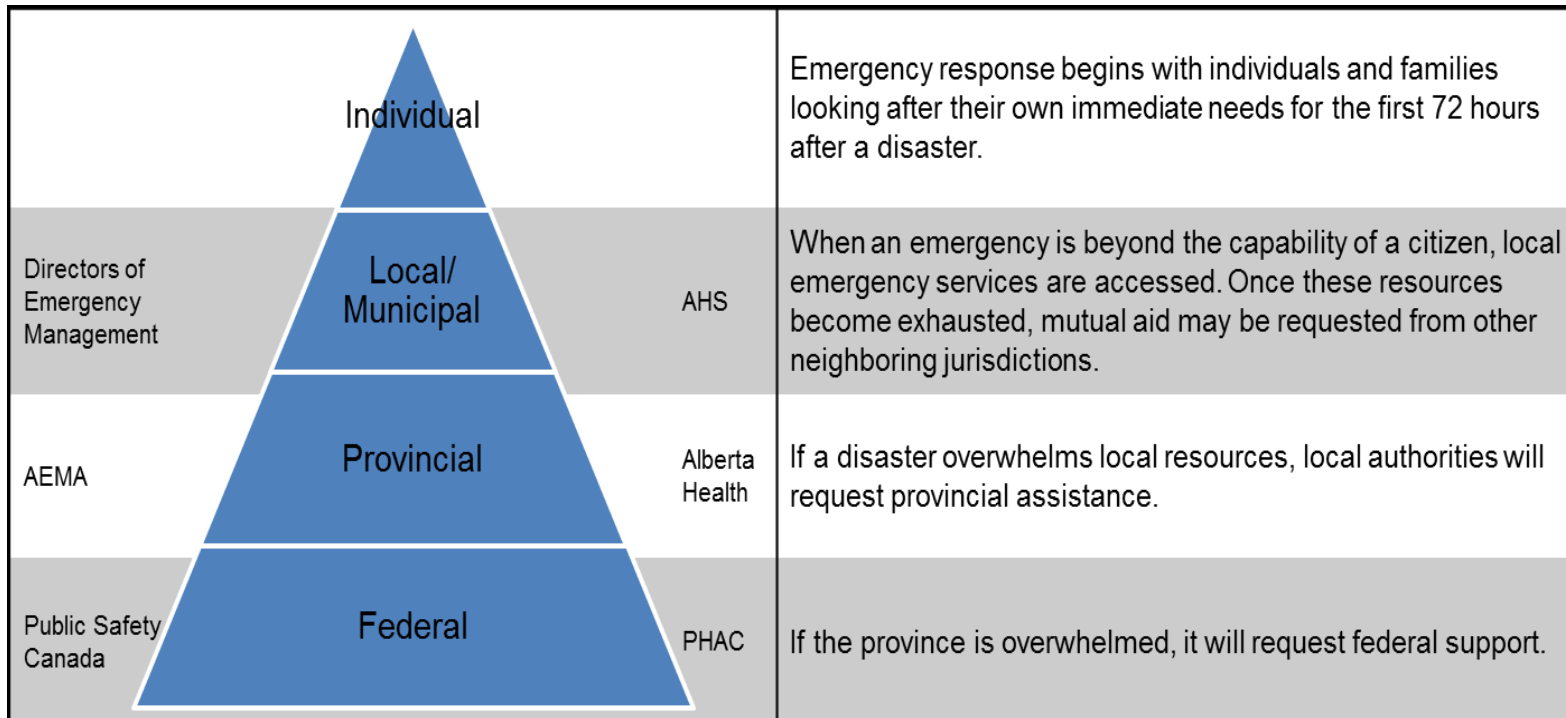
Alberta's Pandemic Influenza Plan (APIP) 2014

Alberta Stakeholders Summit
Nov 24-25, 2014

- **A high-level, provincial strategic plan jointly developed by AH, AHS and AEMA to guide response and recovery during a pandemic influenza.**
 - Builds on lessons learned from pH1N1 (2009)
 - Plan has a main body and objective/triggers tables
 - Aligns with the national direction and supports coordination between the GoA and AHS.
 - Serves as a reference for, *but NOT a replacement of*, local authorities, business and industry and other stakeholder operational emergency plans.

What's the same?

- **Pandemic influenza response is aligned with the all-hazards approach to emergencies.**
 - Handled at the local level first.
 - Regular processes and communications will be used wherever possible.



What's different?

- **The adoption of an overarching governance model (Public Safety Governance).**
 - In 2012, AEMA and other GoA partners developed a paper, Strengthening the Government of Alberta's Public Safety System.
- **A focus has been placed on response and recovery**

What's different? (cont'd)

- **The inclusion of multiple planning scenarios to illustrate varying impacts on the population and the health system.**
 - Adopted from the national pandemic plan (CPIP).
 - Describes the impact on the population rather than the severity of the disease in individuals.
 - Planning scenarios are not predictions and will be replaced with evidence when a pandemic occurs.

What's different? (cont'd)

- **Development of “triggers for action”/ considerations when activating components of the response.**
 - These questions should be asked multiple times during an event to assess current and anticipated needs.
 - These are a starting point; organizations can use these tables to help develop their own considerations.

| EXAMPLE: EMERGENCY MANAGEMENT RESPONSE | | |
|--|---|--|
| Objective | Triggers for Action/ Considerations | Actions |
| Assess the impacts to Alberta | <ul style="list-style-type: none"> • Is Surveillance reporting anything out of the ordinary? • Is the number of inquiries (public, media, stakeholders) starting to increase? • Are other organizations activating their emergency response plans? • Are agencies/program areas reporting problems maintaining critical services? | <ul style="list-style-type: none"> • AH will liaise with AHS to monitor health system impacts. • AHS will report on health system impacts • AEMA to liaise with GoA Ministries, Local Authorities and other stakeholders as appropriate to determine impacts. • AH will determine severity impact based on collected knowledge of the situation. |

Municipalities

- **The challenges during a pandemic will be many and varied. Including:**
 - Maintaining continuity of government;
 - Maintaining essential municipal services; and
 - Responding to emergencies.
- **A template has been developed (by members of municipal governments and AEMA) to help you develop your own continuity plans**

Business and Industry

- **Staff may be sick or may need to stay home to care for family members who are ill.**
- **Depending on the services or products offered, the demand may increase dramatically.**
 - Alternatively, a business could suffer a negative economic impact due to the reduced number of customers.
- **Businesses need to consider the impact of a pandemic on their staff and customers and make appropriate plans.**

Questions?



"I've called this meeting to discuss absenteeism."

FOR MORE INFORMATION

<http://www.health.alberta.ca/health-info/pandemic-influenza.html>

www.aema.alberta.ca