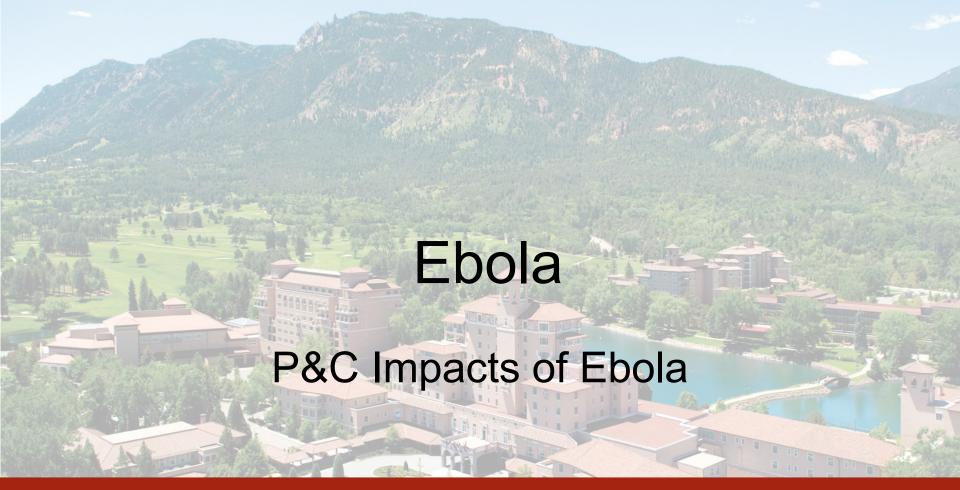
Ebola

P&C Impacts of Ebola



May 17-20, 2015 • The Broadmoor • Colorado Springs, CO

2015 Spring Meeting





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Agenda

- Ebola in Context: Ebola vs. Pandemic Flu
- Economic Consequences of the Ebola Outbreak in Texas
- Potential Insurance Implications of Ebola
 - Property
 - US WC and Liability
 - Professional Liability
 - Environmental
- Other Considerations
- Black Swan: Emerging and Reemerging Infectious Diseases



Presenters

Moderator:

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Pandemic Flu vs. Ebola

Characteristic	Pandemic Flu	Ebola Virus Disease
Symptoms	Fever* or feeling feverish/chills, Cough, Sore throat, Runny or stuffy nose, Muscle or body aches, Headaches, Fatigue, Some people have vomiting and diarrhea (more common in children than adults).	Fever (greater than 38.6C or 101.5F), Severe headache, Muscle pain, Weakness, Diarrhea, Vomiting, Abdominal (stomach) pain, Unexplained hemorrhage (bleeding or bruising).
Method of Transmission	Person to Person; Novel flu viruses are spread mainly by droplets made when people with flu cough, sneeze or talk. Droplets land in mouths or noses of people who are nearby or are possibly inhaled into the lungs. Less often, a person might get flu by touching a surface or object that has flu virus on it and then touching their own mouth or nose.	Prevailing theory is that first patient becomes infected through contact with infected animal. Once infection occurs in humans, the virus is spread through direct contact (through broken skin or mucous membranes in, for example, the eyes, nose, or mouth) with: blood or body fluids (including but not limited to urine, saliva, sweat, feces, vomit, breast mil, and semen) of a person who is sick with Ebola; Objects (like needles and syringes), that are contaminated with the virus; infected animals. Ebola is NOT spread through the air or by water, or in general, by food.**

Source: "Pandemic Flu vs. Ebola – Comparison and Context" published October 17, 2014, by Gisele Norris, DrPH, Aon Risk Solutions, using information compiled from United States Centers for Disease Control sources. http://www.aon.com/ebola-response/default.jsp



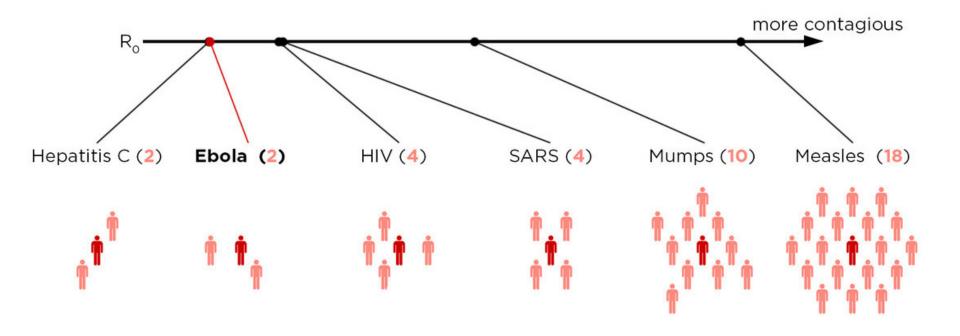
Pandemic Flu vs. Ebola (cont.)

Characteristic	Pandemic Flu	Ebola Virus Disease
When does a person become contagious to others?	Most healthy adults are able to infect other people beginning 1 day BEFORE symptoms develop and 5-7 days after becoming sick. Children may pass the virus for longer than 7 days.	Only AFTER individuals begin exhibiting symptoms (fever, etc.); Patients become more and more infectious as the disease progresses due to the increasing viral load in their bodies and the fact that multiple organs are involved. Ebola may also be communicated through semen for up to 3 months after symptoms subside.
Incubation period	1-4 Days. Symptoms start 1-4 days after the virus enters the body. That means you may be able to pass the flu to someone else before you know you are sick, as well as when you are sick. Some people can be infected with the flu virus but have no symptoms. During this time those persons may still spread the virus to others.	2-12 Days. Symptoms may appear anywhere from 2-21 days after exposure to Ebola, but the average is 8-10 days.
Social implications	May produce a large degree of absenteeism due to illness, caregiving responsibilities and fear.	May produce absenteeism due to fear.
Mortality	Many will be infected. Some proportion of those will die. Total number of deaths significant.	Not many will be infected. Those who are infected have a high mortality rate. Total number of deaths relatively low.
	*Not all flu patients exhibit fever.	**Ebola infections may result due to consumption of wild "bush meat" (e.g. chimpanzees, bats, etc.) in certain parts of Africa.

Source: "Pandemic Flu vs. Ebola – Comparison and Context" published October 17, 2014, by Gisele Norris, DrPH, Aon Risk Solutions, using information compiled from United States Centers for Disease Control sources. http://www.aon.com/ebola-response/default.jsp

How Contagious is Ebola?

The number of **people** that **one sick person** will infect (on average) is called R_0 . Here are the maximum R_0 values for a few viruses.



Sources: Adam Cole/NPR http://www.npr.org/blogs/health/2014/10/02/352983774/no-seriously-how-contagious-is-ebola



2014 Ebola Outbreak: Dallas, TX

- 3 people infected during September October 2014
 - 1 death; 2 infections
- ER visits declined by 2,336
 - Ambulances Diverted from ER
- October patient admissions and revenues declined
 - Daily census -21.1%
 - Operating surgeries -25%
- Revenue declined by \$8.1M (25.6%)

http://bizbeatblog.dallasnews.com/2014/10/revenue-drops-at-presbyterian-dallas-after-ebola-cases.html/http://money.cnn.com/2014/10/1/news/companies/ebola-hospital/index.html http://www.advisenrisknetwork.com/2014/10/30/hospital-recourse-losses-job/



Contrast: SARS, Toronto 2003

- SARS I: March 10-May 17
- SARS II: May 18-June 30
- During the period of March-June Toronto Hospitals experienced a 22% decrease in ER visit volumes (year-over-year)
 - Decreases were highest in the month of June: 31%
- Elective surgeries decreased by an average of 26% during the same period
 - Cost of clearing backlog of elective surgery: \$32.1M
- During Second Wave of SARS: Cases Treated in Four Toronto Hospitals
 - 50% Reduction in June ER Visits



Industries at Highest Risk

- Health Care
- Hospitality
- Aviation
- Education (especially Higher Education)
- Religious Institutions



Property Coverage Considerations

The outbreak of the Ebola virus ("virus") or other infectious disease events may cause significant economic impact for businesses. Authorities could quarantine or close buildings and or specific areas and these closures could give rise to questions as respects business interruption coverage under property policies. Examples of the impacts associated with infectious disease event may include:

- Cost of sanitizing and testing insured property
- Costs of evacuation of an insured property
- Resulting loss of income
- Contingent business interruption or extra expense



Property Coverage Considerations

Physical Damage

 The initial trigger for any property insurance policy and resulting time element coverage is physical damage to insured property by an insured peril.

Time Element

- If the physical damage trigger is not met, that exclusion will also apply to most resulting time element losses.
- Number of occurrences or events for which coverage is available.
- "Civil or Military Authority" clause.



Considerations for US WC and Liability Claims

- Does the entity have employees located in or traveling to areas where there have been documented and diagnosed cases of Ebola?
- Does the entity's industry increase the probability of employee exposure to infected individuals?
- Do employees work in close proximity with vendors or other strategic partners who may have employees who are at greater potential to contract the disease?



WC Claims Considerations

Every jurisdiction has specific laws pertaining to workers' compensation (WC) and communicable disease claims. That being said, please see the following:

- General rule is that the matter would likely not be deemed compensable if the employee was considered at no greater risk than the general public.
- However, a worker who can confirm the exposure through his/her work, has Ebola and it is ultimately proven that the condition was contracted at the hotel or through associated travel, then any subsequent lost time, including the period of absence required during the quarantine/monitoring period, should trigger coverage.

WC Claims Considerations (cont.)

- Absence from work during the quarantine/monitoring period (prior to a positive confirmation of Ebola) should trigger coverage under WC, even if the employee ultimately tests negative for the illness.
 - In some states, "exposure" constitutes the "injury," not the symptoms.
- Employers should consider the quarantine/monitoring period covered under Family and Medical Leave Act (FMLA) and employers should run FMLA concurrent with WC lost time.



WC Claims Considerations (cont.)

- <u>EEOC / ADA Exposure</u> An employer might require that an employee who is considered to be at a greater risk than the general public stay home from work or be screened for Ebola as part of the employer's Ebola response protocol.
- Monitoring the latest updates regarding exposure areas, as well as the location and movement of employees becomes critically important.
- As the situation unfolds, it is possible that the insurance industry may experience negative coverage interpretation trends regarding Ebola or other emerging infectious diseases.

Texas Non-Subscription Claims Considerations

- For Texas employers who are non-subscribers, an employee who contracts Ebola through work or through travel related to work, could reasonably be expected to have coverage triggered.
- However, every case could potentially be treated differently depending on the Employee Benefit Plan that the employer has in place, as well as the excess policy which they have purchased. It is important to review the Employee Benefit Plan and Policy in each case.



Employer's Liability Claims Considerations

- If an employee contracts Ebola through work or through travel related to work and claims that the infection is a result of the employer's negligence, he or she may sue under Employer's Liability.
- If a spouse, child, parent, brother or sister of that employee is infected by the employee, that family member could also make a claim through the Employer's Liability coverage or the General Liability policy.
- As the situation unfolds, it is possible that the insurance industry may experience negative coverage interpretation trends.

Liability Claims Considerations

- Potential liability claim may be alleged negligence from failing to protect customer from being exposed to the virus.
- General liability claims could include those from an employee's family due to his/her WC claim. Claims could arise from exposure due to employer's alleged failure to use reasonable care to protect workers and their families.
- As the situation unfolds, it is possible the insurance industry may experience negative coverage interpretation trends.
 Potential policy exclusions which could be considered:
 - Expected or Intended
 - Pollution
 - Microbe



Professional Liability Considerations for Health Care Organizations

- The emergence of a rare disease in the health care setting may result in allegations of professional negligence, particularly with regard to failure to diagnose, misdiagnosis or errors in treatment
- Professional negligence related to Ebola is likely to be treated as any other disease
- An action involving any part of the chain of care is likely to trigger the PL policy resulting in direct liability for some and vicarious liability for others



Professional Liability Considerations for Health Care Organizations (cont.)

- Potential health care liability related coverage gaps:
 - Failure to admit
 - Gray areas between PL and GL
 - E.g., Provider fails to diagnose, patient goes out into community and infects third party. No affirmative language in either policy with regard to response
- Other concerns
 - Ebola related batch
 - SIR exposure if more than one policy is invoked (clash)



Pollution Claims Considerations for Health Care Organizations

- Handling or disposal of Ebola-infected waste creates potential exposure to a\ pollution liability
- In the case of negligent handling/disposal, coverage depends on specific wording of the policy
 - Broad definition of pollution condition is critical
 - Coverage for disinfection costs is often provided for "facility-borne" viruses or bacteria
 - Certain policies exclude any pollution condition arising out of a communicable disease
 - Coverage during course of transportation for non-owned disposal sites may also be subject to these limitations



Other Considerations

- Privacy
- Business Continuity
- Integrity of Supply Chain
- Reputational Risk



Risk Transfer Approaches

- Endorsements
- Business Interruption Products
- DIC Products
- Captive Solutions
- Capital Markets



Health Officials and Hospitals Set Ebola Strategy

- Active Monitoring:
 - CARE kit (thermometer, temperature log, State Health Dept contacts, wallet card)
- Testing for Ebola (42 labs as of 12/2/14)
- Ebola Treatment Centers
 - 3 national bio containment facilities
 - 35 hospitals with Ebola treatment centers as of 12/2/14

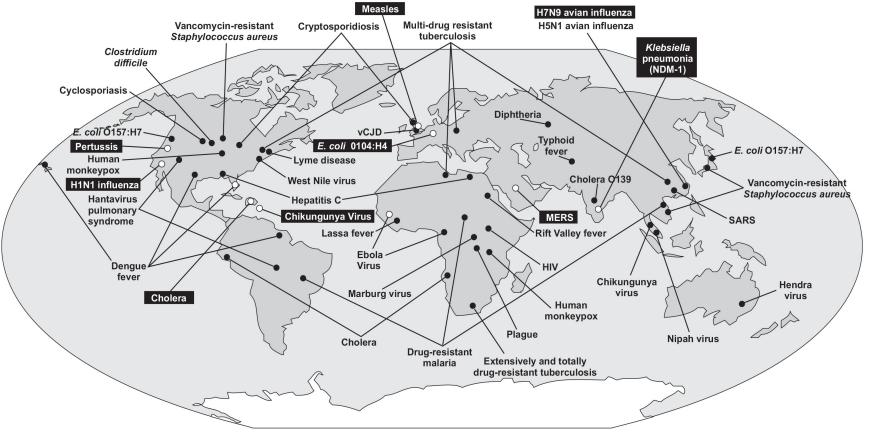


Health Officials and Hospitals Set Ebola Strategy (cont.)

- Assessment Hospitals
 - Capability to:
 - Evaluate and care for someone who is having the first Ebola symptoms for up to 96 hours
 - Initiate and coordinate testing for Ebola and other diseases alternative diagnoses
 - Either rule out Ebola or transfer the individual to an Ebola Treatment Center
- Rapid Response Specialized Expertise
 - CDC Ebola Response Teams (CERT)
 - CDC Rapid Ebola Preparedness (REP) Team
 - CDC has authorized 42 state and local labs to perform rapid Ebola testing



Figure 8.2 Emerging and reemerging infectious diseases/agents, 1990-2013. The diseases/agents in the black boxes with the white dots represent select emergences that have occurred since the first edition of this textbook was published in 2010.



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Modeling Capabilities for Pandemic

- Aon Benfield
- RMS
- Sandia National Labs
- Centers for Disease Control (CDC)
- Congressional Budget Officer
- Modeling Assumptions
 - Number infected
 - Deaths
 - Hospitalizations



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Please see Aon's Ebola Response Site for further details:

http://www.aon.com/ebola-response/default.jsp

