

H1N1 Flu Infection: IMPLICATIONS FOR HOME CARE AND HOSPICE

Presented By:
Barbara B. Citarella RN, MSN, CHCE, CHS-V
(Certified in Homeland Security)

1

RBC LIMITED

Healthcare & Management Consultants
Staatsburg, NY 12580
(845) 889-8128
rbc@netstep.net
www.rbclimited.com

2

WHO Pandemic Alert Level 5

- Human to human spread in at least 2 WHO countries and is a declaration and/or a strong signal that a pandemic is imminent

3



QUARANTINE

- Quarantine refers to the separation and restriction of movement of persons who, while not yet ill, have been exposed to an infectious agent and therefore may become infectious.

Copyright 2009 RBC Limited

4



ISOLATION

- Isolation refers to the separation of persons who have a specific infectious illness from those who are healthy and the restriction of their movement to stop the spread of that illness.

Copyright 2009 RBC Limited

5



What are we seeing here in US

- School closings
- Impact on staffing
- Impact on patient care
- Run on supplies

Copyright 2009 RBC Limited

6



Need to be Prudent

- Not to panic
- Exercise common sense
- Pay attention to the information from variety of sources
- Look at our pandemic flu plans

Copyright 2009 RBC Limited

7



NATIONAL STRATEGY FOR PANDEMIC FLU

Three Components:

- Preparedness & Communication
- Surveillance & Detection
- Response & Containment

Copyright 2009 RBC Limited

8



RESPONSE & CONTAINMENT

- Containing geographic areas
- Limiting local movement
- Providing security to health care workers
- Protecting necessary goods and supplies
- Safety of food supply

Copyright 2009 RBC Limited

9

PLAN TO HANDLE THE PANDEMIC

- Use of antiviral medications
- Dependent on syndromic surveillance and restriction of movement
- Currently not enough medication for everyone

Copyright 2009 RBC Limited

10



Copyright 2009 RBC Limited

11



Copyright 2009 RBC Limited

12



S-OIV Outbreak

- Not from pigs
- Not from eating pork
- New virus

Copyright 2009 RBC Limited

13



HOW?

- ANT1GENIC DRIFT
- ANTIGENIC SHIFT
- REASSORTMENT

Copyright 2009 RBC Limited

14



Current Statistics

- 30 states
- AL, AZ, Ca, Colorado, Conn, Del, Florida, Ill, In, Iowa, Kansas, Ky, Mass, MI, Missouri, NE, Nev, NH, NM, NY, OH, RI, SC, Tenn, TX, Utah, VA, WI

Copyright 2009 RBC Limited

15



Current Statistics

9 countries Canada, US, Mexico, New Zealand, UK, Israel, Spain, Austria, Germany

Copyright 2009 RBC Limited

16



Numbers

226 cases in the United States

- One death

Copyright 2009 RBC Limited

17



World Numbers

- 898 cases in 18 countries
- Germany, New Zealand 3
- UK 5
- Spain 4
- Canada 13
- Israel 2
- Remainder Mexico

Copyright 2009 RBC Limited

18



What is it?

- New virus
- No immunity
- Most recent swine flu H1N1
- Can be direct from pigs endemic in pigs

Copyright 2009 RBC Limited

19



Symptoms

- Fever greater than 100 degrees
- Aches
- Headache
- Nausea
- vomiting

Copyright 2009 RBC Limited

20





How Does It Spread

- Currently person to person such as sneezing and coughing
- Touching items with the virus and then touching their nose, eyes and/or mouth

Copyright 2009 RBC Limited

22



Viral Shedding

- Maybe 7 days
- Can change as virus evolves and we get more information

Copyright 2009 RBC Limited

23



Antivirals

- Amantadine (Symmetrel)
- Rimantadine (Flumadine)
- Tamiflu
- Relenza

Copyright 2009 RBC Limited

24



Antiviral Chemoprophylaxis

- Household close contacts at high-risk for complications of flu of a confirmed or probable case
- HCWs/PHWs who were not using appropriate PPE during close contact with a confirmed, probable or suspected case during the infectious period

Copyright 2009 RBC Limited

25



Confirmed Case

- Person with acute febrile respiratory illness confirmed by
- Viral culture, RT-PCR

Copyright 2009 RBC Limited

26



Probable Case

- Person with acute febrile respiratory illness positive for influenza A but negative for H1 and H3

Copyright 2009 RBC Limited

27



Suspected Case

- Person with acute febrile respiratory illness with onset within 7 days of close contact with someone who is confirmed
- Has onset within 7 days of travel to a community where there are confirmed cases
- Resides in a community with confirmed cases

Copyright 2009 RBC Limited

28



Who is at Risk?

- Same as for seasonal flu
- COPD
- Cardiac, DM, renal or hepatic
- HIV
- Immunosuppressed
- pregnant

Copyright 2009 RBC Limited

29




Who is at Risk?

- Children under 5
- People over 50 yrs of age
- Compromised respiratory conditions


Copyright 2009 RBC Limited

30



What to do NOW!


31



Look at Pandemic Plan

- Staffing
- Prioritizing patients
- Protecting patients
- Education
- Protecting staff

Copyright 2009 RBC Limited 32



Reviewing your plan

- More than just a policy.
- Human resource issues
- education

Copyright 2009 RBC Limited 33



INFECTION CONTROL PLAN

- Surveillance/Recognition
- Identification/Reporting
- Response/Prevention of
Transmission & Spread
- Evaluation

Copyright 2009 RBC Limited

34



BASIC EPIDEMIOLOGY

CHAIN OF INFECTION

1. Pathogen (Infectious Agent)
2. Reservoir
3. Portal of Exit
4. Mode of Transmission
5. Portal of Entry
6. Susceptible Host

Copyright 2009 RBC Limited

35



HANDWASHING

1st line of Defense against any infectious organisms (germs)

- Before and after patient care or contact
- Before handling any equipment or supplies
- Before meal preparation;
- Before and after applying gloves

Copyright 2009 RBC Limited

36



HANDWASHING

- Soap (liquid)& paper towels (PPE Personal Protective Equipment)
- Waterless Hand Cleanser Solutions
Follow specific manufacturer's instructions for use

Copyright 2009 RBC Limited

37



INFECTION CONTROL PLAN

Standard Precautions apply to blood, all body fluids, secretions, and excretions, *except sweat*, regardless of whether or not they contain visible blood; non-intact skin; and mucous membranes

Copyright 2009 RBC Limited

38



STANDARD PRECAUTIONS

The use of gloves, gowns and other personal protective equipment to prevent any exposure to blood or other potentially infectious body fluids. Standard precautions apply to blood: all body fluids, secretions, and excretions, *except sweat*, regardless of whether or not they contain visible blood; non-intact skin; and mucous membranes.

Copyright 2009 RBC Limited

39



STANDARD PRECAUTIONS

Transmission-Based Precautions

- Contact Precautions
- Droplet Precautions
- Airborne Precautions

Copyright 2009 RBC Limited

40



INFECTION CONTROL PRECAUTIONS

CONTACT PRECAUTIONS: The use of gloves when coming in contact with epidemiologically important microorganisms. Gowns may be used in addition to the gloves if excessive soiling is anticipated.

Contact Precautions are designed to reduce the transmission of microorganisms by direct or indirect contact.

Copyright 2009 RBC Limited

41



INFECTION CONTROL PRECAUTIONS

DROPLET PRECAUTIONS: The use of a surgical mask (with or without shield) when the transmission of microorganisms involves contact of the conjunctivae or the mucous membranes of the nose or mouth.

Droplet Precautions are designed to reduce the risk of droplet transmission of infectious agents.

Copyright 2009 RBC Limited

42



INFECTION CONTROL PRECAUTIONS

AIRBORNE PRECAUTIONS: Use of an N-95 respirator mask to prevent the inhalation of airborne droplet nuclei (of evaporated droplets that may remain suspended in the air for long periods of time) or dust particles containing the infectious agent.

Special air handling and ventilation are required to prevent airborne transmission.

Copyright 2009 RBC Limited

43



Infection Control

- gloves, face shield, goggles and gowns
- N95 respirator mask
- Hand hygiene upon removing PPE

Copyright 2009 RBC Limited

44



Household Care

- Eating utensils dishwasher or soap and water
- Linens can be washed with others on hot setting
- Don't shake or hug laundry

Copyright 2009 RBC Limited

45



SYNDROMIC SURVEILLANCE

Syndromic surveillance systems monitor disease trends by grouping cases into syndromes rather than specific diagnoses.

Copyright 2009 RBC Limited

46



SURVEILLANCE/RECOGNITION

- Increase awareness among first responders
 - *** includes home care personnel
- Can potential issues be rapidly identified?
 - unusual infections
 - clustering in time/space of infections
- Education of staff at all levels is essential

Copyright 2009 RBC Limited

47



SURVEILLANCE/RECOGNITION

Syndrome Clustering: Ill persons with similar group of symptoms (syndrome)

1. occurring near the same time
2. in a similar proximity at about same time
3. large numbers of people ill

Ex: Sudden onset of unexplained flu-like illnesses, with respiratory symptoms, in otherwise healthy persons

Copyright 2009 RBC Limited

48



IMPACT ON HOME CARE

Areas of Change in Home Care Practice

1. Protection: Family / Staff / Patients
2. Proactive/Emergency Preparedness
3. Clinician Assessment Skills
4. Comprehensive Infection Control Plan
 - Surveillance
 - Identification/Reporting

Copyright 2009 RBC Limited

49



IMPACT ON HOME CARE

- Communication
- Need a business recovery plan
- Clear line of leadership
- Contract and policy review
- Mental health needs

Copyright 2009 RBC Limited

50



IMPACT ON HOME CARE

- Surveillance and Monitoring of Healthcare Workers
- Education and training program development
- An occupational health plan
- Vaccine/ antiviral use plan
- Surge capacity

Copyright 2009 RBC Limited

51



PPE

- Masks
- Gowns
- gloves

Copyright 2009 RBC Limited

52



USE OF PPE

Guidance on Proper Application of PPE & Barriers for Protection

- Proper fit
- Integrity of barrier
- Disposable vs. reusable barriers/PPE
- Potential for cross-contamination
- Implications of over & under-utilization of barriers/PPE

Copyright 2009 RBC Limited

53



H1N1 FLU

Surveillance & Monitoring of Healthcare Workers

- Healthcare workers who become ill should seek medical care and, prior to arrival, notify their health-care provider that they may have been exposed to avian influenza. In addition, employees should notify supervisor/DPS
- Health-care workers who become ill should be advised to stay home until 24 hours after resolution of fever, unless an alternative diagnosis is established or diagnostic tests are negative for influenza A virus.

Copyright 2009 RBC Limited

54



H1N1 FLU

Surveillance and Monitoring of Healthcare Workers

- Instruct health-care workers to be vigilant for the development of fever, respiratory symptoms, for 1 week after last exposure to influenza-infected patients.

Copyright 2009 RBC Limited

55



SURGE CAPACITY

Maximum Capacity/Capability to Provide Care & Services with Available Resources

- Human
- Medical
- Physical
- Financial

Copyright 2009 RBC Limited

56



SURGE CAPACITY: KEY FACTORS

- Patient Census
- Patient Classification
- Staffing/Human Resources

Copyright 2009 RBC Limited

57



Patient Care in the Home

- Frequent handwashing
- Use of disposable gloves
- Use of masks by patient/ contacts
- No sharing of personal items – silverware, etc.
- Follow precautions for 10 days after symptoms abate



“Chance favors the prepared mind”

- Louis Pasteur
1822-1895



RBC Limited

- Check our website for our next webcasts on the Swine Flu

- www.rbclimited.com



This program was brought to you by:



Produced by: **RBC Management Group**

Copyright 2009 RBC Limited

61
