

# SWINE ORIGIN INFLUENZA VIRUS (SOIV)

## TRANSMISSION

Abbreviations:  
Sx=Symptoms  
Exp=Exposure  
HH=Household

### Source:

Humans mostly  
Respiratory tract secretions

### Transmission:

- Large droplets
- Airborne: limited to few feet
- Direct contact: with nasal or throat secretion.
- Fomites: Article freshly soiled with nasal or throat secretion.

### Attack rate

HH= 25%, moderate

**Incubation Period**  
2-5 (1-7) days

**Respiratory Tract Infection 1 wk**  
fever, cough, sore throat, body aches, headache, chills and fatigue.

### Communicability:

-1 day to End of Symptoms +1 day

### Exclusions:

- Longest of onset to end of S x + 1day or 7 days,
- Exposed : Watch for Sx , then exclude as above
- If contact with high risk (Exp + 1 to +7)

Close contact =  
30 mn within 6 feet of a symptomatic

### Complication:

- Viral or bacterial pneumonia
- Aggravation of chronic pulmonary, cardiac, renal, hepatic, hematologic or metabolic disorder

### High risk of severe illness and complications:

- aged 6 months–4 years;
- chronic pulmonary (including asthma), cardiovascular (except hypertension), renal, hepatic, hematological or metabolic disorders (including diabetes);
- immunosuppressed (immunosuppression caused by meds or by HIV)
- any condition (e.g., cognitive dysfunction, spinal cord injuries, seizure disorders, or other neuromuscular disorders) that compromise respiratory function or handling of respiratory secretions or that increase aspiration risk
- long-term aspirin therapy
- residents of chronic-care facilities;
- individuals 65 and older

## DIAGNOSIS

### Clinical criteria: influenza-like illness =

-fever  $\geq 37.8^{\circ}\text{C}$  [ $100^{\circ}\text{F}$ ] & (cough or sore throat) or acute respiratory illness = recent onset of at least 2 of : rhinorrhea or nasal congestion, sore throat , cough, fever or feverishness  
Hospitalization for acute lower respiratory tract infection and no other cause for this infection

**Rapid Test is useful to identify influenza (90% of SOIV are positive on rapid test. Confirmation of SOIV by PCR not useful for clinical ,therapeutic or preventive decisions ONLY FOR EPIDEMIOLOGIC PURPOSES Test results come too late to be of use for case or contact management**

## TREATMENT, PROPHYLAXIS

**Oseltamivir** Roche Pharmaceuticals (Tamflu®—tablet

**Zanamivir** GlaxoSmithKline (Relenza®—inhaled powder).

**Prophylaxis:** Only contacts that are at high risk of severe illness and complications.

### Treatment:

- Severe disease
- High risk of severe illness and complications.

## PREVENTION OF TRANSMISSION: INFECTION CONTROL

### Prevent emission

#### Respiratory hygiene

#### Cough etiquette

- Cover cough, sneeze
- Use tissues, dispose safely
- Wear mask
- Spatial separation 3 ft
- Early triage to institute Respiratory hygiene

### Usually Modified Droplet\* & Contact Precautions

**Modified Droplet = Personal respirator /N95 instead of surgical mask**

### High risk of airborne transmission:

Aerosol producing procedures:

- bronchoscopy
  - intubation
  - nebulization
  - suction
- USE AIRBORNE PRECAUTIONS**  
Personal Resp N95  
Neg pressure room  
 $\geq 12$  air exchange

### DO

- Use hand sanitizers between each patient contact
- Wear gloves when touching patient and patient area
- Wear mask when closer than 3 ft from patient
- Know what is "clean", what is "contaminated" and keep them apart

### DO NOT

- Touch eyes, nose or mouth with contaminated hands (gloved or ungloved).
- Make adjustments to the PPE during patient care or removal. Careful placement of PPE before patient contact will help avoid the need to and risk self-contamination during use.
- Touch contaminated environmental surfaces that are not directly related to patient care (e.g., door knobs, light switches)
- Touch pen, glasses and other personal items during patient care

### Restrict hospitalization

Hospital is NOT  
-for quarantine  
-for diagnostics  
Hospitals provide care for acutely ill