PREVENTING H1N1 VIRUS (SWINE INFLUENZA) IN DENTAL SETTINGS

Overview: Patients with an acute respiratory illness may present for dental treatment at outpatient dental settings. The primary infection control goal is to prevent transmission of disease. Early detection of a suspected or confirmed case of swine influenza and prompt isolation from susceptible persons will reduce the risk of transmission. To prevent the transmission of respiratory infections in healthcare settings, including influenza, respiratory hygiene/cough etiquette infection control measures should be implemented at the first point of contact with a potentially infected person. The Centers for Disease Control (CDC) has prepared the following guidelines for dental health care providers.

Agent Information: Swine Influenza A H1N1: Causative agent is an influenza virus predominantly found in pig populations. People do not normally get Swine Influenza A (H1N1), but this strain has acquired the ability to transmit from pigs to humans, and humans to humans. An outbreak of human cases of Swine Influenza A (H1N1) infection is occurring internationally. While the disease has resulted in deaths, most cases appear to be mild.

Since humans are unlikely to have inherent immunity, there is the potential that this outbreak can become a pandemic. There is no current vaccine. The virus is susceptible to antiviral drugs.

Signs and Symptoms: People with Swine Flu have symptoms similar to regular human flu: fever, cough, sore throat, body aches, headache, chills and fatigue. Some people with Swine Flu report diarrhea and vomiting. Like seasonal flu, Swine Flu may worsen previously existing medical conditions or cause severe illness such as pneumonia, respiratory failure, and deaths. Influenza-like Illness is a fever >37.8°C (100°F), plus cough or sore throat.

CASE DEFINITION – ACUTE RESPIRATORY ILLNESS: Recent onset of at least two of the following: rhinorrhea or nasal congestion, sore throat, cough; and fever or feverishness.

Case Definition for Infection with Swine Influenza A (H1N1) Virus: A confirmed case is defined as a person with an acute respiratory illness with laboratory confirmed Swine Influenza A (H1N1) virus infection at CDC by one or more of the following tests:
1. real-time RT-PCR
2. viral culture
3. four-fold rise in swine influenza A (H1N1) virus specific neutralizing antibodies.

Probable Case Definition of Swine Influenza A (H1N1) virus: A person with an acute respiratory illness with an influenza test that is positive for influenza A, but H1 and H3 negative.
Suspected Case Definition of Swine Influenza A (H1N1) virus:

1. A person with an acute respiratory illness who was a close contact to a confirmed case of Swine Influenza A (H1N1) virus infection while the case was ill OR
2. A person with an acute respiratory illness with a recent history of contact with an animal with confirmed or suspected Swine Influenza A (H1N1) virus infection OR
3. A person with an acute respiratory illness who has traveled to an area where there are confirmed cases of Swine Influenza A (H1N1) within 7 days of suspect case’s illness onset.

Transmission:
This strain has acquired the ability to transmit from pigs to humans, and humans to humans. Type of transmission is unconfirmed but suspected to be via airborne droplets from mucosal passages.

Isolation:
Identify patients with acute respiratory illnesses and place them in single-patient rooms with the door kept closed.

Protective Measures:

INFECTION CONTROL:
• At check-in, identify patients with acute respiratory illnesses and place them in single-patient rooms with the door kept closed.
• For coughing patients, offer disposable surgical masks or provide tissues. Use no-touch receptacles for used tissue disposal. Ill persons should wear surgical masks when outside patient rooms.
• Dental healthcare personnel assessing a patient with influenza-like illness should wear disposable surgical facemask, non-sterile gloves, gown, and eye protection (e.g., goggles) to prevent direct skin and conjunctival exposure. Recommendations may change as additional information becomes available; check the CDC website for updates (http://www.cdc.gov/swineflu/guidelines_infection_control.htm).
• Hand hygiene required by patients and dental healthcare workers (e.g., hand washing with non-antimicrobial soap and water, alcohol-based hand rub, or antiseptic handwash) after contacting respiratory secretions and contaminated objects/materials.
• Apply routine cleaning and disinfection strategies used during influenza seasons to environmental management of swine influenza. (See http://www.cdc.gov/ncidod/dhqp/gl_environinfection.html.)
• Staff experiencing influenza-like-illness (ILI) (fever with either cough or sore throat, muscle aches) should not report to work.
• Staff who experience ILI should report illness to their health care providers by telephone or other remote means before seeking care at a clinic, physician’s office, or hospital.
• Staff who have difficulty breathing or shortness of breath, or are believed to be severely ill, should seek immediate medical attention.

ELECTIVE DENTAL CARE
Dentists suspecting that a patient’s illness is due to swine influenza should defer elective dental treatment and advise the patient to contact their general health care provider.
URGENT DENTAL CARE

If urgent dental care is required and swine flu was confirmed or is suspected, provide dental care in a facility that provides airborne infection isolation, such as a hospital with dental care capabilities. The airborne infection isolation room should have negative pressure air handling with 6-12 air changes per hour.

Personnel providing direct patient care for suspected or confirmed swine influenza A (H1N1) cases should wear a fit-tested disposable N95 respirator when entering the patient room and when performing dental procedures. Respirator use should comply with Occupational Safety and Health Administration (OSHA) regulations. Access additional information on respiratory protection programs and fit test procedures at www.osha.gov/SLTC/etools/respiratory.

Treatment: Staff who were not using appropriate personal protective equipment during close contact with a confirmed, probable or suspect case of swine influenza A (H1N1) virus infection during the case’s infectious period should receive chemoprophylaxis according to CDC guidance (http://www.cdc.gov/swineflu/recommendations.htm).

Contact Information: Delaware Division of Public Health, Bureau of Oral Health and Dental Services: (302) 302-744-4554. For additional information, view the CDC website: www.bt.cdc.gov.

For more Information: Guidance for Professionals posted on Centers for Disease Control and Prevention website: www.cdc.gov.