

Date: 25 September 2017

To: South Zone Physicians with Acute Care Admitting Privileges

From: Medical Officers of Health – South Zone

RE: NOTIFIABLE DISEASE AWARENESS

Although many infections occur primarily in the community, some infectious diseases have unique considerations when associated with hospitalization. Public Health, Infection Prevention and Control (IPC) and acute care physicians often share patients when Notifiable Diseases occur in association with hospitalization. Given our mutual responsibility for protecting the health of patients in our care, we are writing to raise awareness of infectious diseases that may present in hospital and that are reportable under the *Public Health Act* of Alberta. The Medical Officer of Health relies on the awareness of our physician colleagues to diagnose such infections and we are here to support the investigation and mitigation of such concerns to limit further impact in the hospital and community.

Legionellosis

Legionella are gram negative bacilli found in water that can cause human disease when aerosolized.

Clinical Presentation:

Clinical symptoms usually occur after an incubation period of two to ten days after exposure. Legionnaires' disease is characterized by fever, myalgia, cough and pneumonia. Within a day there is usually a rapidly rising fever associated with chills. A non-productive cough, abdominal pain, and diarrhea are also common. Leukocytosis is generally noted on a Complete Blood Count (CBC). A chest x-ray is usually consistent with atypical pneumonia.

Laboratory Tests:

1. Serology - Submit acute serology for Legionella before day 8 (relative to symptom onset) and convalescent serology for Legionella on or after day 22.

2. Urine Antigen - Request Legionella on requisition

If the urinary antigen is positive and the patient has respiratory symptoms, please arrange for sputum culture. If clinically indicated, you may also order cultures of blood, lung tissue, pleural fluid, tracheal aspirate or bronchoscopy specimen in a sterile container. Sputum is not recommended unless the urinary antigen is positive.

Treatment:

Azithromycin is the preferred antibiotic for Legionella coverage. Rifampin and Levofloxacin are alternatives but consult from Infectious Disease is recommended.

Infection Control Recommendations:

Because person-to-person Legionella transmission has not been documented, routine practices should be used in caring for patients who fit definition of Legionnaires' disease. Suspected sources of Legionella infection (e.g. water cooling towers, hot tubs, etc.) will be investigated by IPC and/or Environmental Public Health.

Invasive Group A Streptococcus (iGAS)

Incidence of invasive Group A Streptococcus has been steadily increasing in Alberta since 2000. iGAS infections can present various clinical pictures and may be severe or non-severe. Generally, GAS is cultured from a normally sterile site or there is severe disease present to make the diagnosis.

Clinical Presentation:

iGAS may present as necrotizing fasciitis, bacteremia, pneumonia, meningitis, or Streptococcal Toxic Shock Syndrome or other clinical manifestations.

Infection Control Recommendations:

Patients with iGAS should be on contact and droplet precautions until they have received 24 hours of appropriate antibiotics. Staff can carry the GAS organism in their nares or on their hands and be a source of transmission of iGAS. IPC monitors for clusters of iGAS in hospital and investigates possible hospital acquired iGAS.

Workplace Health and Safety:

Universal Personal Protective Equipment (PPE) is always recommended as people who inadvertently have significant exposure to the respiratory secretions from a patient with iGAS may be at increased risk of developing disease themselves and may be offered prophylaxis. Prevention is the key and, to avoid unnecessary antibiotics and worry, please always wear appropriate PPE (including eye protection) with any patient.

Influenza Outbreaks

Hospitalized influenza cases have the potential to cause influenza outbreaks within the hospital. Hospital outbreaks affect bed utilization and resources and put staff and other patients at risk. If you suspect influenza in your patient, please alert IPC so appropriate contact and droplet precautions can be put in place to prevent spread within the hospital. Precautions generally remain in place for 5 days from the onset of symptoms. N95 masks are *not required* for influenza outbreaks or cases. As always, appropriate hand hygiene is crucial to control the spread of any infection in hospital.

Thank you for your attention to these important health issues.