The IPAC Link Letter
A monthly review of highlights and linked updates from the ever-changing world of Infection Prevention and Control to help you stay current and informed.

June 2021

Highlights from the World of Infection Control

- The impact of the COVID-19 pandemic on healthcare acquired infections with multidrug resistant organisms.
- Health care personnel: Interim estimates show effectiveness of COVID-19 vaccines among this group, while a survey demonstrates acceptance, hesitancy, and refusal.
- Disposable or Reusable? The Medical gowns debate.
- Video-based hand hygiene audits, the next gold standard?
- Prolonged PPE use and impact on healthcare workers.
- What do yogurt and beer have in common? Microbes! 5 Second Rule reminds us of the important role microorganisms play in our day-to-day lives.
- April 2021 issue of CCDR reflects on COVID-19 and a year into the pandemic.
- Cookie dough, anyone?... review from a multistate outbreak of E.coli.
- Planning a post-pandemic get away? Think twice before getting into an untreated hot spring.
- Deja vu? Is Vaccine history repeating itself?
- COVID recovered and out of the woods? Another threat looming for India’s COVID survivors…
- A Centenarian COVID survivor’s courage and advice for the wary unvaccinated.
- Puzzle Pieces? A COVID variant explanation? I’m in!
- Preserving and expanding the IP&C workforce; commentaries discuss possible challenges ahead. [United States] National supports needed for ICP retention strategies.
- Studies review COVID-19 and link to poor maternal, neonatal outcomes, while experts weigh in on vaccination in pregnant and nursing women.
- A case of misdiagnosed severe itching.
- COVID-19 vaccines vs variants—determining how much immunity is enough.
- Contaminated Hospital Water?! And the subsequent outbreak investigation.
- Medieval elites used handwashing as a shrewd ‘power play’.
- Canadian COVID-19 vaccine makers’ next challenge: testing their product.
Guess the Pathogen

Figure. Adapted from Mayo Clinic.

Hints:
1. Infectious agent:
   - Arbovirus (portmaunteau for Arthropod-borne virus).
   - Member of the genus Flavivirus, and Flaviviridae family.
   - Icosahedral, enveloped virus, 40 to 50 nm in diameter.
   - Singled-stranded, positive-sense RNA genome.
2. Epidemiology:
   - 1937 – Discovered in a region of Uganda.
   - 1999 – First detected in North America.
   - 2002 – First known human case in Saskatchewan.
   - In temperate regions, most human infections occur in summer and early fall.
3. Surveillance:
   - Activities to determine risk/presence may include:
     - Mosquito collection and testing.
     - Avian and equine morbidity/mortality surveillance.
   - Reportable communicable disease in Saskatchewan.
4. Transmission:
   - Culex mosquitoes; in Saskatchewan, the primary vector is the C. tarsalis mosquito.
   - Birds are a primary reservoir. Humans are generally considered a dead-end host.
   - Human-to-human transmission has occurred via breast milk, organ transplantation, blood transfusion.
5. Incubation:
   - Typically 2-6 days, but may extend to 14 days (or longer in immunocompromised).
6. Presentation:
   - Estimated 70-80% of human cases are subclinical or asymptomatic.
   - Typically mild illness lasting 3 to 6 days.
     - Symptoms may include fever with chills, rash, headache, myalgia, malaise.
     - Non-specific symptoms can include nausea, vomiting, diarrhea, sore throat, cough.
   - Neurologic illness can occur, including meningitis, encephalitis, and flaccid paralysis.
7. Clinical assessment and management:
   - Serum or cerebrospinal fluid testing to detect specific IgM antibodies.
     - IgM antibodies usually detectable 3 to 8 days after onset of illness, and persist for 30 to 90 days.
   - Supportive care.
8. Prevention:
   - Routine Practices.
   - Vector reduction.
   - Personal protection using mosquito repellants.
   - Donor screening (i.e., blood, cell, tissue, organ) per regulatory requirements.

For the answer and topic related articles, please visit our website here: https://saskpic.ipac-canada.org/picns-link.

If you have any interesting articles you would like to see in the IPAC Link Letter, please feel free to send them to Rhianna.Matschke-Neufeld@saskhealthauthority.ca or Fatima.Ahmad@saskhealthauthority.ca