



Current Topic - Sapovirus Infection

Acute gastroenteritis associated *Sapovirus* outbreak was first reported in a child disability unit in HA hospital last month. A total of 3 children with history of chronic illnesses were affected in this outbreak.

What is Sapovirus?

Sapovirus is a small non-enveloped RNA virus, which is one of four genera within the Caliciviridae. The other three genera are *Lagovirus*, *Vesivirus* and *Norovirus*. *Sapovirus* and *Norovirus* are the only two genera that cause gastroenteritis (GE) in humans. It was named after first identified from a GE outbreak in an orphanage in Sapporo, Japan in 1977. *Sapovirus* infection can occur year-round and mainly affect children. Comparing with *Norovirus*, outbreak of *Sapovirus* infection is less common and not characterized by high secondary attack rate.

Clinical Features

The signs and symptoms of *Sapovirus* are usually indistinguishable from those caused by other GE pathogens. Symptoms include vomiting, diarrhea, nausea, abdominal cramps, chills, headache, myalgia and malaise. Symptoms are self-limiting but severe complications may cause in persons with chronic illness.

Incubation Period

Ranges from 1 to 4 days.

Transmission Route

Faecal-oral route, by contact with the vomitus, faeces, or contaminated objects or environment. Virus shedding may continue in faeces for weeks after symptoms subside.

Diagnostic Testing

Sapoviruses are highly diverse genetically and antigenically. Currently, reverse transcription-PCR (RT-PCR) assays are used for *Sapovirus* detection from clinical specimens.

Local Situation

Locally, *Sapovirus* was associated with two institutional outbreaks in 2017, involving 8 students and a staff in a kindergarten and 9 students and 8 staff in a special child care center respectively. According to CHP's statistic, the monthly percentage of faecal specimens tested positive for *Sapovirus* was higher during winter period in 2017/2018, ranged from 6.33% in October 2017 to 2.52% in January 2018.

Prevention and Control

Currently, there is no vaccine available to prevent *Sapovirus* infection. Treatment is mainly supportive.

Key Infection Control Measures:

- Implement **Contact Precautions** for a minimum of 48 hours after the resolution of symptoms;
- Adhere to 5 moments **hand hygiene** practice;
- Wear disposable gloves and gown when in close contact with the patients or their environment;
- Put on surgical mask and eye protection if **splashing** is anticipated, particularly during the care of patients who are vomiting.

During outbreak:

- **Cohort** the affected patients to help interrupt transmission;
- Wash hands with soap and water;
- Enhance **environmental cleansing**, such as twice daily with sodium hypochlorite solution 1,000 ppm. Pay particular attention to high touch areas, bathrooms and toilets;
- **Terminal cleansing and disinfection** of patient environment and **change curtain** upon patient discharge.

ICT to Note

Disinfectant / Sterilant Assessment Committee (DSAC) has been established since 2008. The DSAC is responsible to assess newly introduced chemical antiseptic/ disinfectants/ sterilants submitted by hospitals, in terms of indication for use, microbial efficacy, occupational hazards and compatibility etc. The committee also assess and identify any potential risk of the existing disinfectants/ sterilants for reusable medical devices e.g. endoscopes during use.

Communication and Reporting

1. DSAC shall inform the **applicant** and provide an assessment report.
2. DSAC shall report to the **TFIC** with the assessment report and a summary of reviewed products.
3. **Hospital Infection Control Teams** should disseminate the recommendations to hospital management and clinical stakeholders through cluster and **hospital Infection Control Committees (ICC)**.
4. The **DSAC full list** of antiseptic/ disinfectant/ sterilant can be accessed in the [webpage](#).
5. Recommendations would be shared in the **CICO's Biweekly Update**.

Latest Situation of Ebola Virus Disease in Democratic Republic of the Congo

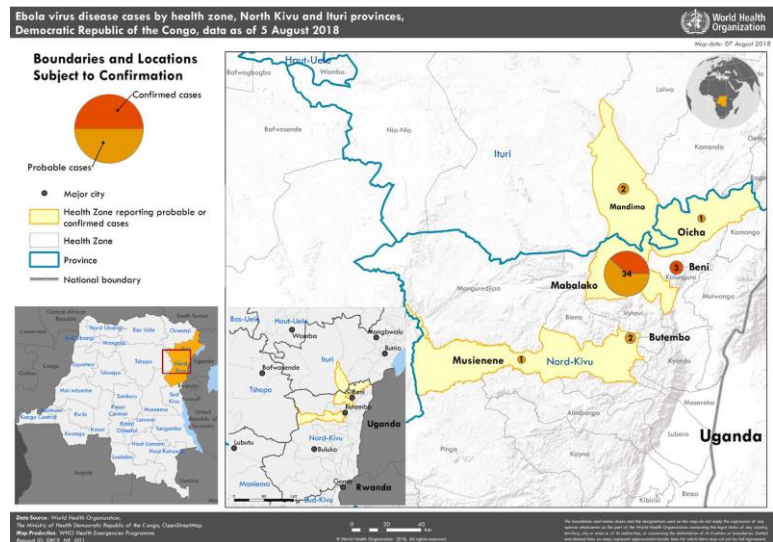
The Ministry of Health of the Democratic Republic of the Congo (DRC) declared a new outbreak of Ebola virus disease (EVD) in North Kivu Province on 1 August 2018, one week after the end of the 9th outbreak of EVD in the country. North Kivu is a province bordering Lake Kivu in the eastern Democratic Republic of the Congo.

As of 5 August 2018, a total of 43 EVD cases (16 confirmed and 27 probable), including 34 deaths, have been reported. 2 healthcare workers have been affected, of whom one has died. The confirmed and probable cases are localized to 5 health zones in North Kivu Province and 1 health zone in Ituri Province.

Genetic sequencing tests showed that the ebolavirus Zaire was associated with the current outbreak and is the same species causing earlier outbreak in Equateur province in DRC. However, genes differences of the viruses suggested they are not linked.

Ebola vaccination in North Kivu has been launched. WHO assessed that the global public health risk is consider low. Please refer to Figure 1 for the affected heath zones in North Kivu and Ituri Provinces.

Figure 1: Ebola virus disease by health zone, North Kivu and Ituri Provinces, Democratic Republic of the Congo, data as of 5 August 2018



Practice Forum

Best Hand Drying Option

Hand hygiene has been proven effective to prevent and reduce transmission of microorganisms to patients and healthcare workers. We wash our hands when visibly dirty. Hand washing involves not only washing our hands, but also drying them thoroughly. Paper towels, cloth towels and warm air dryers are commonly used to dry washed hands. However, reusing or sharing towels should be avoided because of the risk of cross-contamination.

Scientific evidence showed that using warm air or jet air dryers may generate aerosols and disperse bacteria to the environment and provoke cross contamination. Besides, the air dryers may not be practical because longer time needed to achieve dry hands with a possible negative impact on hand hygiene compliance among healthcare workers. Therefore, air dryers are considered not suitable for use in healthcare settings.

Taking into consideration of these factors, it is recommended that disposable paper towel should be used for drying hands after hand washing in wards and patient care areas, with the aim of reducing cross contamination and safeguard the safety of patient and staff. Lastly, HA supports green environment, paper towel for hand drying is recycle product.

Strategies for minimizing hand hygiene-related skin reaction

The WHO formula alcohol-based hand rubs (ABHRs) have been implemented in HA since 2008. According to the WHO, the ABHRs have been shown to be **less irritating** to skin than soap and other skin antiseptics. Allergic contact dermatitis attributable to ABHRs is **very uncommon**.

Staff members with skin reactions related to ABHRs should be referred to **appropriate assessment** such as consultation with a dermatologist, as necessary.

Strategies for minimizing hand hygiene-related irritant contact dermatitis among staff:

- Avoid practices** that increase the risk of skin irritation, e.g. washing hands regularly with soap and water immediately before or after using ABHR, donning gloves while hands are still wet from either washing or applying AHBR.
- Using **moisturizing skin care products** following hand cleansing.
- Hand washing with plain soap** and water.
- Explore **alternative hand antiseptics products** for DSAC's assessment.