



**Figure 1.** Number of invasive meningococcal disease cases reported to GERMS-SA surveillance programme by month and year, January 2018 through June 2020, N=255

**Article source:** Centre for Respiratory Diseases and Meningitis, NICD-NHLS; [cherylc@nicd.ac.za](mailto:cherylc@nicd.ac.za)

## BEYOND OUR BORDERS

**The 'Beyond our Borders' column focuses on selected and current international diseases that may affect South Africans travelling abroad. Numbers correspond to Figure 2 on page 7.**

### 1. *Haemophilus influenzae* disease: Alaska, USA

Invasive *Haemophilus influenzae*, serotype a, is increasing in the United States overall, with the greatest burden occurring in American Indian and Alaska Native children, according to findings published in Clinical Infectious Diseases.

A study in 2018 found that *H. influenzae*, serotype a (Hia), incidence has increased by an average of 13% annually from 2002 to 2015.

From 2008 to 2017, an estimated average of 306 invasive Hia disease cases occurred annually in the USA, with the incidence increasing by an average of 11.1% each year. Overall, 42.7% of cases occurred in children aged less than 5 years (incidence 0.64/100 000), with the greatest incidence among children aged less than one year (incidence, 1.60/100 000). The researchers also found that 7.8% of all patients with Hia infection died; 15.1% of adults aged 65 years and older died, representing the highest case fatality rate.

American Indian and Alaska Native children aged younger than 5 years experienced the highest Hia disease burden. These children experienced 8 times more disease than children of all other races combined.

In Alaska, people of all ages experienced an Hia disease incidence nearly 6 times higher than in the rest of the USA overall, and children aged younger than one year experienced a disease incidence nearly 14 times higher than children in the USA overall. The case fatality rate in Alaska was 10.2%, with the vast majority of cases (93.9%) occurring among American Indians and Alaska Natives. In the context of increasing Hia incidence and clinical severity similar to *H. influenzae*, serotype b, new prevention strategies, including the development of an Hia vaccine, could prevent morbidity and mortality among these vulnerable populations.

### 2. Japanese encephalitis: Taiwan

The Taiwan Centers for Disease Control (CDC) reported on 14 July 2020 that four new cases of Japanese encephalitis had been confirmed last week, including in a three-month-old baby, the youngest case ever reported in Taiwan. The total number of cases on 7 July 2020 was 9, bringing the national total for 2020 to 13. The cases all lived or worked near rice paddy fields, ponds, pig pens or pigeon farms, which are ideal breeding sites for mosquitoes.

Of the four new reported cases, in addition to the three-month-old baby in Taiwan's Changhua County, the other

three cases were men in their 40s to 60s. The infant is the youngest case of Japanese encephalitis reported since it was designated a notifiable communicable disease in 1999.

Japanese encephalitis vaccination is recommended for children older than 15 months. Other preventative measures include personal protective measures against mosquito bites when going outdoors, such as insect repellents containing the active ingredient diethyltoluamide (DEET). DEET is recommended only for children above two months old. Parents should choose products with DEET content of no more than 30%. Insect repellents containing picaridin are recommended for children above six months old.

**3. Foodborne illness – *Escherichia coli*: Japan**

On 13 July 2020, the cause of a foodborne outbreak that affected a total of 3 453 students and others at 15 public schools in the city of Yashio, Saitama Prefecture, eastern Japan, was pinpointed as a seaweed salad harbouring *Escherichia coli* bacteria.

Students had developed symptoms such as stomach pains and diarrhoea after eating the school-lunch, which included the seaweed salad. Stool tests, along with other investigations elsewhere, showed the offending dish to have been the seafood salad served on 26 June 2020. The cause of the food poisoning was wakame seaweed and seaweed salad mix ingredients that were not heated up to kill bacteria after being soaked in water. School lunches remain suspended at the city’s schools,

and students are expected to bring their own packed lunches until 4 August 2020. It is unclear whether the *E. coli* here is an enterohaemorrhagic strain such as O157:H7, or one of the other enteropathic strains.

**4. Copper poisoning: Japan**

On 8 July 2020, a total of 13 elderly people in southwestern Japan suffered symptoms of food poisoning, apparently after traces of copper from an old kettle contaminated a sports drink they consumed.

The incident occurred at a care facility in the city of Usuki, Oita Prefecture on the morning of 6 July 2020. The facility boiled water with the kettle then cooled it and added powder to make a sports drink.

The 13 men and women, aged from their 70s to 90s, each drank about half a cup of the sports drink at around 10:20 a.m. on 6 July 2020, and then complained of ill health, such as vomiting and nausea.

Copper, having built up on the inside of the stainless-steel kettle, is believed to have dissolved in the sports drink, which was acidic. Upon investigation, the division detected 200 milligrams of copper per litre in the sports drink. People usually show symptoms of poisoning if they consume 10 milligrams of copper. The victims at the facility are thought to have taken in 30 milligrams of copper each.

The care facility has reportedly used the kettle for about 10 years and part of the inside had turned black.



**Figure 2.** Current outbreaks/events that may have implications for travellers. Numbers correspond to text above. The red dot is the approximate location of the outbreak or event

**Article source:** Promed ([www.promed.org](http://www.promed.org)), World Health Organization ([www.who.int](http://www.who.int))