

## FACT SHEET: DIARRHOEAL DISEASE

Last Update: 8 June 2018

### DISEASE SITUATION

Diarrhoeal disease is a notifiable disease under the National Disease Surveillance System in Thailand. There are five categories of diarrhoeal disease: acute diarrhoea, food poisoning, dysentery, enteric fever, and cholera.

During 1 January to 4 June 2018, the National Disease Surveillance System revealed 585,494 acute diarrhoea cases (5 deaths) from all provinces (77) in Thailand. The overall morbidity rate was 894.88 cases per 100,000 population. The incidence was highest in the Central, followed by the Northeastern, the Northern, and the Southern regions, respectively. Provinces with the top five highest incidence rates were Prachinburi (2,668.93), Samutsongkhram (1,957.45), Chanthaburi (1,732.07), Maehongson (1,602.86), and Rayong (1,412.95).

During 1 January to 31 March 2018, the sentinel surveillance system showed that among the 346 specimens tested from 13 hospitals across the country, viruses were found to be the causative agents of acute diarrhoea in 288 (83.2%) specimens. Most of them were rotaviruses (66.6%) and noroviruses (21.3%). The remaining were sapovirus (5.8%), astrovirus (3.7%) and adenovirus (2.6%).

There were 55,598 food poisoning patients reported from all provinces (77) with a morbidity rate of 84.98 cases per 100,000 population. The common bacterial causative agents included *Staphylococcus aureus*, *Salmonella* species, and *Vibrio parahaemolyticus*. The sporadic pathogens detected were *Clostridium perfringens* and *Clostridium botulinum*. The other categories of diarrhoeal disease occurred in some provinces. There were 1,014 Amoebic Dysentery cases and 658 Bacillary Dysentery (Shigellosis) cases. Enteric fever comprised 364 Typhoid cases and 49 Paratyphoid infections. Cholera was very rare with 2 reported cases in one province. There were no deaths attributable to these groups of diarrhoeal disease.

Food-borne zoonotic diseases caused by consumption of undercooked meat or animal products have been well-controlled. There have been no cases of anthrax during the past few decades. Trichinosis has been very rare in the country. However, this year 4 cases (no deaths) of trichinosis occurred in a border province in the eastern region. Four brucellosis cases (no deaths) were caused by consumption of raw animal milk or direct contact with infected animals. The most concerning infection is *Streptococcus suis* which has caused 106 cases (7 deaths). The disease, caused by the tradition of consuming raw pork dishes, is common in some northern provinces.

### PREVENTIVE MEASURES

Thailand Ministry of Public Health (MOPH) has implemented prevention and control measures for food- and water-borne diseases in all provinces, including tourist sites. A summary of the measures is as follows:

- The Provincial Communicable Disease Control Committees closely monitor diarrhoeal disease prevention and control according to the Communicable Disease Act B.E. 2558 (2015);
- Inspect and test food and water for consumption. Ensure chlorination of water at water and ice production plants;
- Ensure good sanitation and routine cleaning of wet markets, food vendors, and restaurants;
- Increase access to safe drinking-water and toilet sanitation;

- Train health workers as well as village health volunteers (VHVs) across the country, especially at the community- level;
- Educate and provide knowledge to the public concerning the selection and buying of foods that are safe for consumption. Information for tourists is routinely distributed to tour operators.

## **SURVEILLANCE AND RESPONSE**

The Communicable Disease Control Units across the country actively perform these following actions:

- Regularly analyze data for early detection of abnormal increase of diarrheal disease in every sub-district including tourist areas;
- Promptly detect, investigate, and contain outbreak(s) when the number of cases is over the threshold;
- Actively control outbreak by searching for new cases in affected community, identify pathogen(s) that cause disease outbreak, identify contacts and populations at risk of infection, improve sanitation, disinfect affected areas, ensure good hygiene of food handlers, suspend and recall implicated food items (if any remain), and closely monitor the situation until outbreak is contained.

## **ADVICE TO TRAVELLERS**

The Department of Disease Control (DDC) advises travelers to protect themselves from diarrheal disease as follows:

- Drink bottled water or boiled water. Avoid ice cubes and tap water;
- Eat freshly-cooked and clean food. Avoid risky foods such as fresh oysters and food from street vendors that are not thoroughly cooked and/or steaming hot prior to serving;
- Practice proper hand hygiene, i.e. wash hands often with soap and water or use alcohol hand sanitizer.

## **SELF-CARE AND MEDICAL TREATMENT**

For most, diarrhoeal disease is mild and self-limited. The best first aid for the illness is drinking Oral Rehydration Salts (ORS) solution to prevent dehydration. The low-cost ORS is available in all drug stores and convenient stores.

Case management of diarrhoea is available at all hospitals. Medical care at the hospital should be sought immediately in case of severe illness such as severe belly pain, fever, bloody diarrhea, prolonged vomiting or signs of dehydration (dry mouth, decreased urination, dizziness, fatigue, or increased heart rate or breathing rate).

## **FURTHER INFORMATION**

More information on diarrhoeal disease and other communicable diseases is available at travel medicine clinics and the DDC's websites and call center as follows:

- ❖ **Information on disease surveillance:** Please visit the Bureau of Epidemiology website at <http://www.boe.moph.go.th/>
- ❖ **Information on the DDC Weekly Disease Forecast:** Please visit the DDC website at <http://www.ddc.moph.go.th/eng/>
- ❖ **For queries or additional information:** Please call DDC hotline 1422