

# COLIFORM BACTERIA ARE ONE OF THE MOST COMMON WATER CONTAMINATION PROBLEMS

## What are Coliforms?

Coliform bacteria are organisms that are present in the environment and in the feces of all warm-blooded animal and humans. Their presence in drinking water indicates that disease-causing organisms could be in the water system.

## What are effects on the human health of Coliform bacteria?

Fecal contamination and waterborne pathogens can cause a variety of illnesses it depends on the type of microbial contaminant, the concentration in the water, the exposure pathway, and the amount of water a person consumes.

The most common symptoms are gastrointestinal infection and general flu-like symptoms

vomiting

upset stomach

fever

diarrhea

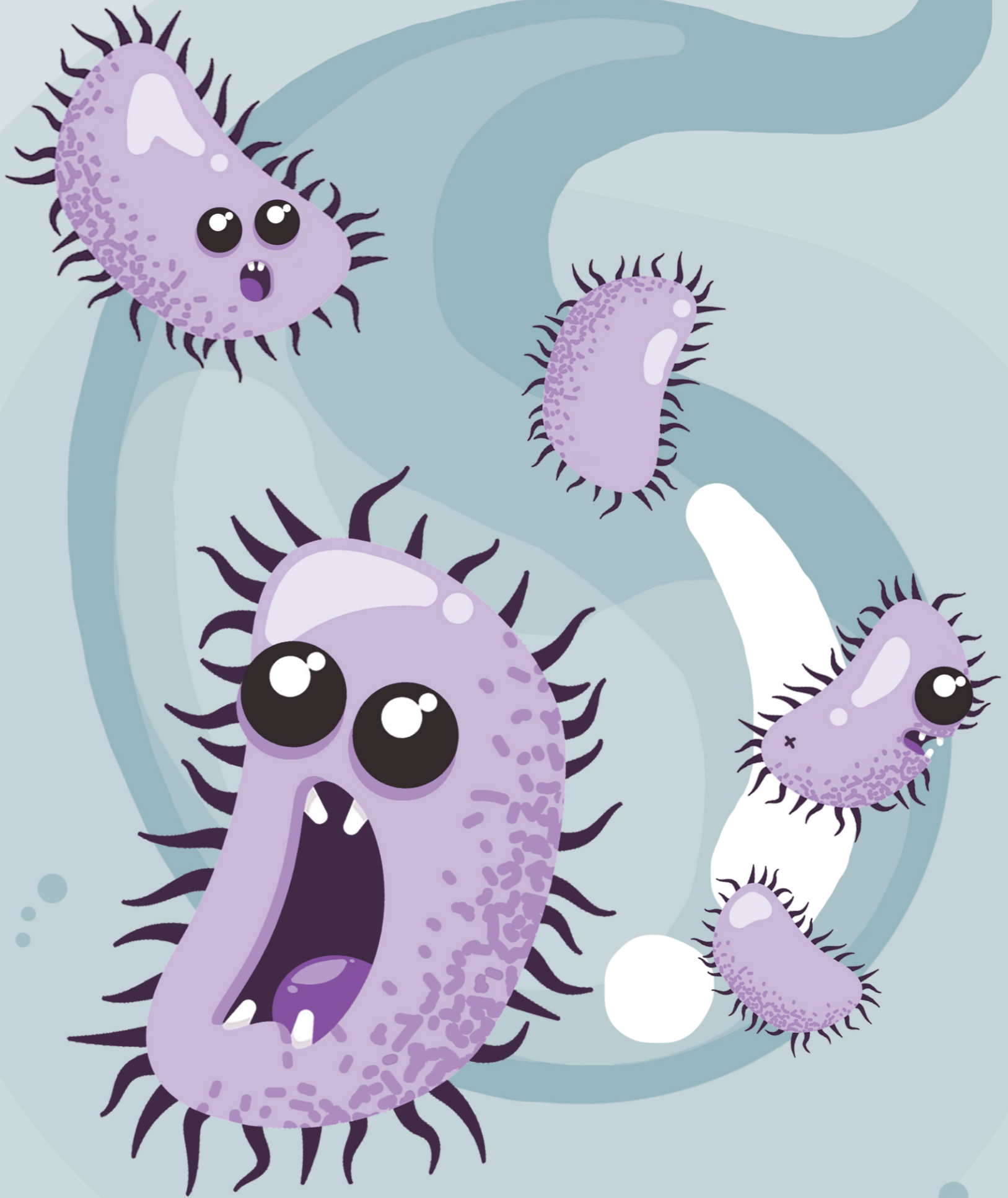
## What are total coliform and *E. coli*?

Total coliform (TC) bacteria are common in the environment. Fecal Coliform and *E. coli* are subgroups within the Total Coliform group which primarily come from the feces of warm-blooded animals.

Coliform as "indicator" organism

The presence of *E. coli* indicates that the water has been exposed to feces and an immediate risk to human health exists.

" In Thailand, *E. coli* contaminants are usually found in ice "



## Total coliform and subgroup of bacteria

### Total Coliform

A group of bacteria containing both of non-fecal coliform (found in soil and water) and fecal coliform

### Fecal Coliform

a subset of coliform that is heat tolerant

### *E. coli*

a type of coliform often found in the intestine of warm-blooded animals

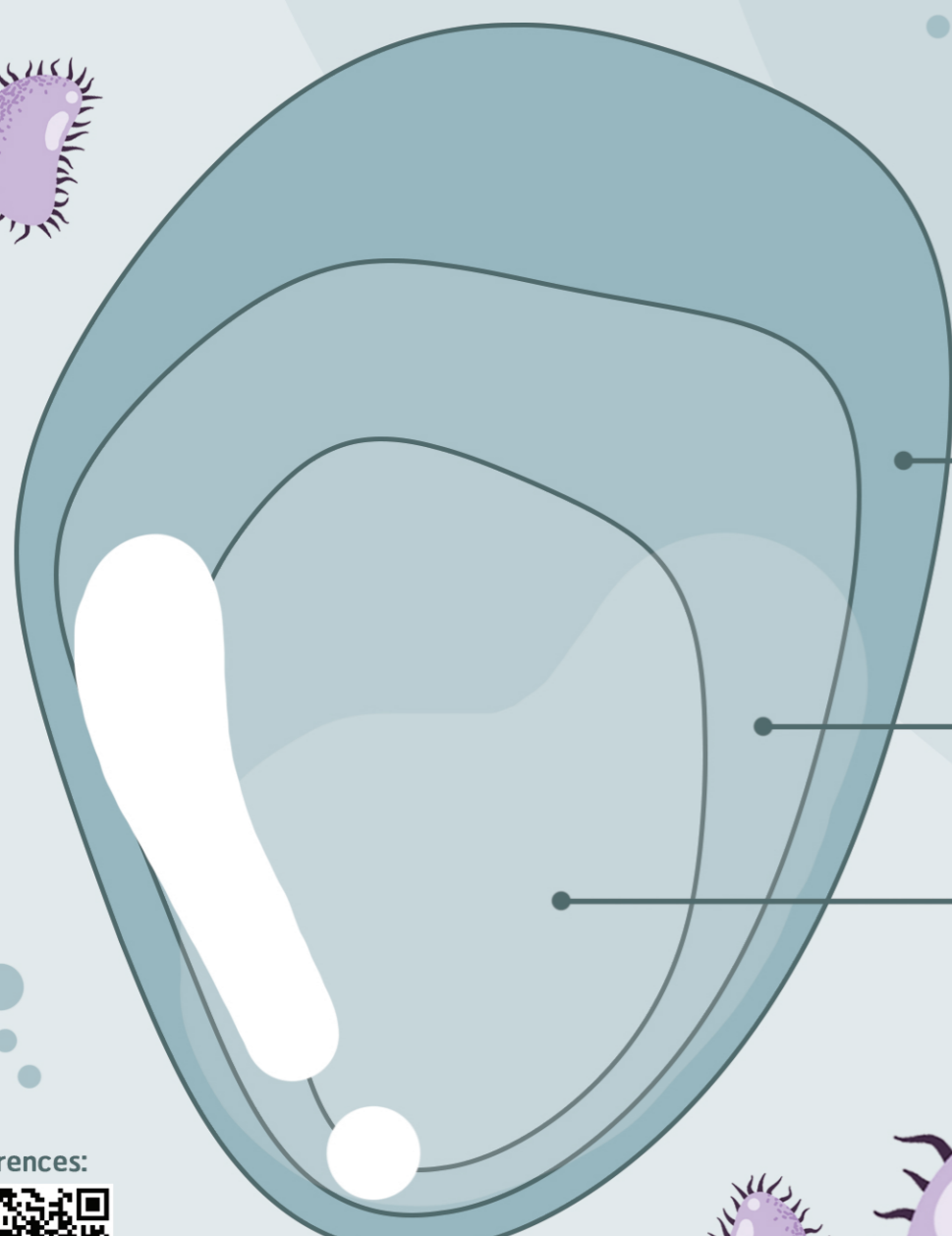
## How do we prevent fecal coliform?

Always wash your hands often by running water and soap



Avoid unpasteurized beverages

Cook and serve your food at the appropriate temperatures



References:

