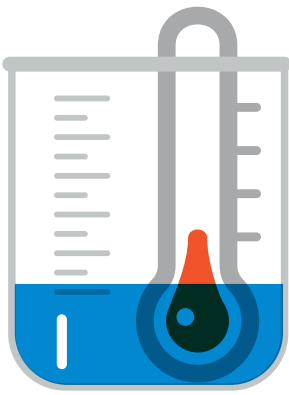




# Check Before you Disinfect

## Temperature

### Temperature



- Water temperature affects the rate of the chemical reactions involved in chlorination and therefore also affects the time it takes for chlorine to effectively disinfect the water.
- When water is cold, reactions are slower because the chemicals and particles in the water do not move as quickly and therefore the chlorine reacts with pathogens more slowly.
- In general, disinfection is improved with increased temperature. At 25°C or higher, a contact time of 30 minutes is usually sufficient for disinfection.



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The contents are the responsibility of CAWST (Centre for Affordable Water and Sanitation Technology) and do not necessarily reflect the views of USAID or the United States Government.

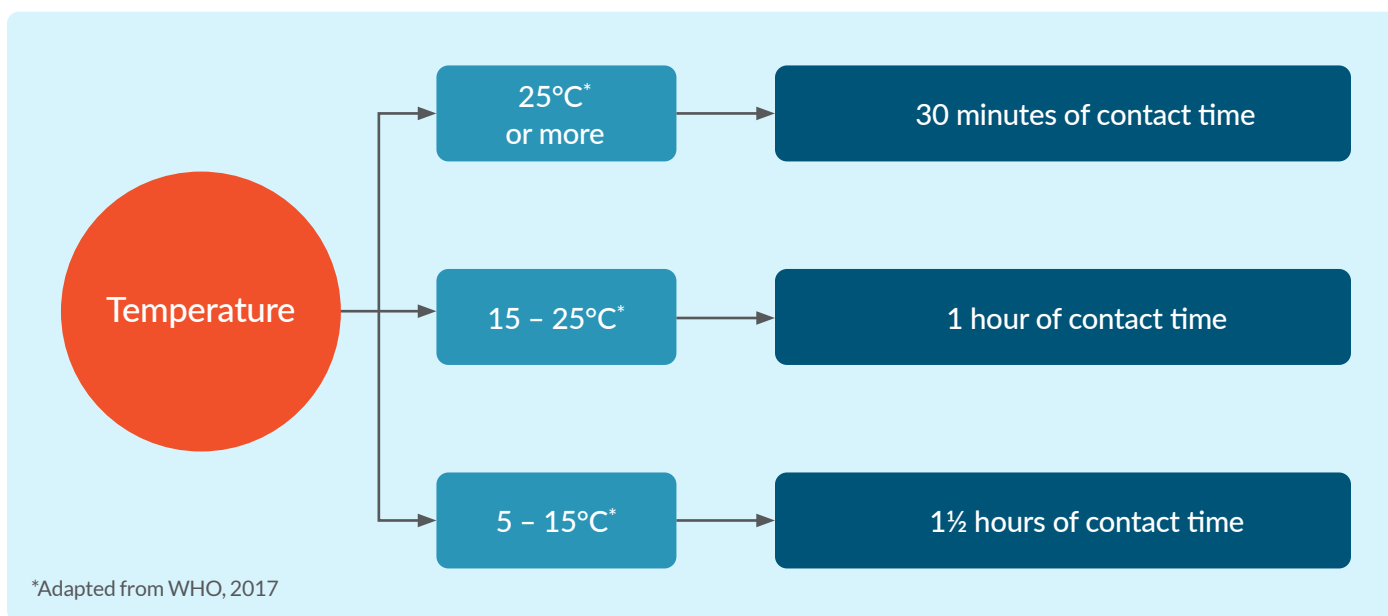


# Check Before you Disinfect

## Temperature

### Temperature

- When the water temperature is below 25°C, contact time should be increased.

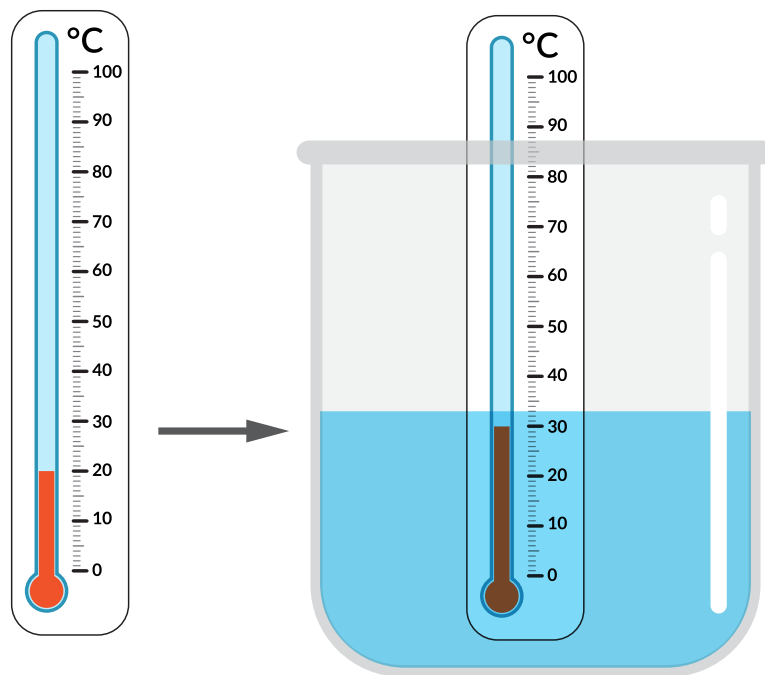




# Check Before you Disinfect

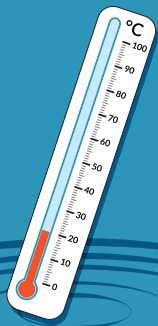
## Temperature

### How to measure...



No fancy testing kit required.  
You only need a simple thermometer.





# Check Before you Disinfect

## Temperature

### Types of thermometers



Liquid thermometers



Digital thermometers



Needle thermometers



K-type thermocouple thermometers





# Check Before you Disinfect

## Temperature

### How to tell if the thermometer is accurate



Source: <https://www.yourbestdigs.com/>



Source: [coffeecabsandbartabs.com](http://coffeecabsandbartabs.com)

- Put some water and ice in a glass (0 degrees Celsius), and then put your thermometer in the water.
- Compare your reading.
- If it does not display 0 degrees Celsius, adjust the digital or needle thermometer accordingly.



Be very careful when doing the test; you could get frostbite.

