

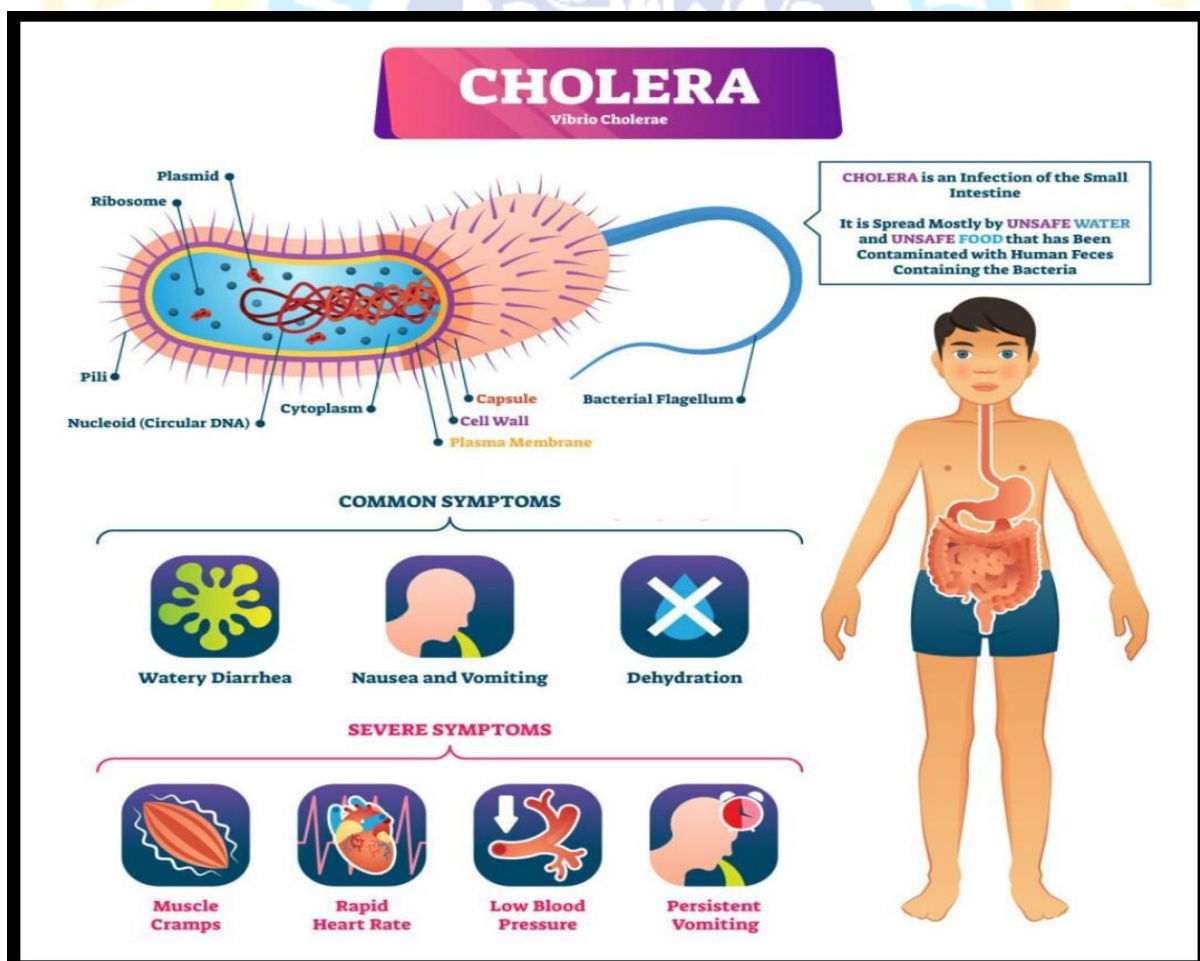


## CHOLERA - DISEASE

Recently, Cholera, a preventable and treatable disease, has experienced a resurgence, leading to approximately 4,000 deaths in 2023, according to the World Health Organization (WHO).

### What is cholera?

- Cholera is caused by a bacteria called *Vibrio cholera* and is usually spread through contaminated drinking water or food. It causes severe diarrhoea and dehydration.
- If left untreated, cholera can be fatal, even in healthy people.
- The deadly effects of the disease are due to the toxin produced in the small intestine which causes the body to secrete enormous amounts of water which results in diarrhea and a rapid loss of fluids and salts or electrolytes.
- Cholera bacteria might not cause illness in all the people who are exposed to them, but they still pass the bacteria in their stool, which can contaminate food and water sources.
- While modern sewage systems have been known to have eliminated cholera in most countries, there is a potential risk in situations of inadequate sanitation and unnatural circumstances like war and poverty.





## Symptoms

- While most people exposed to the cholera bacterium might not know they have been infected, they can still infect others through contaminated water as they shed cholera bacteria in their stool for seven to 14 days.
- Some of the symptoms are diarrhoea, nausea and vomiting and dehydration. Signs of cholera include fatigue, sunken eyes, dry mouth, extreme thirst, dry skin, little or no urination, low blood pressure and electrolyte imbalance which can cause muscle cramps and lead to rapid loss of salts such as chloride, sodium and potassium.

## Global Distribution and Burden of Cholera

The **Global Distribution and Burden of Cholera** has worsened significantly between 2022 and 2024, with a notable increase in cases and deaths. The World Health Organization (WHO) reported that **22 countries** experienced ongoing cholera outbreaks, and as of **August 2024, 2,400 deaths** had been recorded globally. Cholera's impact primarily affects **Africa** and **Asia**, though **imported cases** have been seen in Europe. By **2023**, global cholera cases increased by **13%**, and deaths rose by **17%**, totaling **4,000 fatalities**. The geographic spread of cholera has shifted, with a decline in Asia but a **doubling** of cases in Africa, primarily due to healthcare inequities. India reported **3,805 cholera cases** by **August 2024** in a multi-country outbreak that affected neighboring countries like Myanmar, Bangladesh, and Nepal.

## Factors Leading to Cholera Resurgence:

**Impact on Water Quality:** **Floods, monsoonal rains**, and extreme weather events cause sewage overflows into water sources, while **droughts** and **heatwaves** concentrate cholera bacteria, leading to outbreaks.

**Water and Sanitation:** According to **UNICEF (2019)**, **2 billion** people lack access to safely managed drinking water, and **3.6 billion** have inadequate sanitation facilities, creating conditions ripe for cholera spread.

**Microplastic Adaptation:** Research from **2023** shows **Vibrio pathogens** (cholera-causing bacteria) can attach to **microplastics**, potentially adapting to thrive in ocean environments.

**Conflict Zones:** Areas impacted by conflict face major disruptions in health and sanitation services, increasing vulnerability to cholera outbreaks.

**Displaced Populations:** Overcrowded conditions among displaced individuals without access to clean water increase cholera risks.

**Vaccine Shortages:** In **2023**, only **36 million doses** of cholera vaccines were produced—far less than the demand. A **single-dose** regimen was introduced due to this shortage, replacing the usual two-dose standard.

**Limited Health Infrastructure:** The lack of robust health services in the most affected regions severely limits effective outbreak response and containment measures. Currently, there is only **one**



# PL RAJ IAS & IPS ACADEMY

MAKING YOU SERVE THE NATION

manufacturer producing Oral Cholera Vaccines (OCVs), resulting in a 40-million dose shortage annually.



**P.L. RAJ IAS & IPS ACADEMY | 1447/C, 3rd floor, 15th Main Road,  
Anna Nagar West, Chennai-40. Ph.No.044-42323192, 9445032221  
Email: plrajmemorial@gmail.com Website: www.plrajiacademy.com  
Telegram link: <https://t.me/plraji2006> YouTube: P L RAJ IAS & IPS ACADEMY**