Thirty-four people have died of cholera-related causes and more than 2,000 have been taken ill in Yemen, as humanitarian organisations warned Tuesday that the outbreak could spiral out of control.

This is the second wave of cholera-associated deaths in a year in Yemen, where deadly conflict has destroyed hospitals and left millions of people struggling to access food and clean water.

"There have been 34 cholera-associated deaths and 2,022 cases of acute watery diarrhoea in nine governorates, including Sanaa, during the period of April 27 to May 7," a World Health Organization official told AFP.

Doctors Without Borders (MSF) also said on Tuesday it had independently treated more than 780 cases of cholera and acute watery diarrhoea since March 30 in Yemen, calling the hike in numbers an "outbreak".

"We are very concerned that the disease will continue to spread and become out of control," said Shinjiro Murata, MSF's head of mission in Yemen.

"Humanitarian assistance... needs to be urgently scaled up to limit the spread of the outbreak and anticipate potential other ones."

MSF said patients were travelling dozens of kilometres (miles), in difficult conditions, to reach treatment centres.

Yemen's public health ministry has reported 310 cases of suspected cholera in Sanaa.

Sanitation workers are also on strike in the capital over weeks of unpaid wages, leaving the streets lined with garbage and sewage pipes clogged.

Sewer water flooded the streets Tuesday as the city was hit by heavy rain.

The WHO now classifies Yemen as one of the worst humanitarian emergencies in the world alongside Syria, South Sudan, Nigeria and Iraq.

Conflict in Yemen has escalated in the past two years, as the Saudi-supported government fights Iran-backed Huthi rebels for control of the impoverished country.

Many of the country's ports are blockaded, with basic food imports at an all-time low.

The United Nations, which has called Yemen "the largest humanitarian crisis in the world", estimates more than 7,000 people have been killed since 2015 and three million displaced.

Some 17 million also lack adequate food, with one third of the country's provinces on the brink of famine.

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