Sea levels could predict cholera outbreak

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U.S. researchers have discovered changes in sea surface temperature in the Pacific Ocean are linked to cholera epidemics in Bangladesh.

Cholera expert Mercedes Pascual and her colleagues are studying cholera outbreaks in Bangladesh, where extensive health records stretching back to the late 1800s and biweekly case reports taken during a 1966 surveillance program document disease trends in unique detail.

Pascual discovered that cholera transmission is highest during high rain and flooding, when sanitary conditions tend to break down and people are forced into tight quarters. She speculates that high rain events are linked to warmer ocean conditions in the Pacific during el Nino events.

There is a possibility of using ocean temperatures as an early warning system to predict and prevent disease outbreaks, according to Pascual.

The findings were presented at the American Association for the Advancement of Science in St. Louis.