Over 230 people get puzzling neurological disorder in Peru; emergency declared

Enlarge / The Plaza Mayor or Plaza de Armas of Lima in Peru, part of a Unesco world heritage site in Lima.

reader comments

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Over 230 people in Peru have developed a rare paralyzing neurological disorder called Guillain-Barré Syndrome, leading government officials to declare a national emergency and the World Health Organization to send out a disease outbreak alert.

So far, four people have died from the disorder, which involves the immune system attacking peripheral nerves. It often starts with progressive muscle weakness and numbness that can lead to paralysis and, in about a quarter of the cases, the need for mechanical ventilation.

Peru—a country of over 34 million people—typically sees fewer than 20 suspected cases per month of Guillain-Barré Syndrome (pronounced ghee-yan bar-ray or abbreviated GBS). But, between June 10 and July 15, the country tallied 130 cases, including the four deaths, bringing the year's total to 231, the WHO reported Tuesday.

The cases are widely distributed throughout the country, with 20 of the country's 24 governmental regions (departments) reporting at least one case. Seven departments have reported

high numbers—including Lima, at the central coast, to Piura and Lambayeque in the far north, and Cusco, which is southeast of Lima. But no other countries in the Americas report an uptick in GBS cases.

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The cause of the outbreak is puzzling—even though this isn't Peru's first alarming GBS outbreak. In 2019, the country reported an unprecedented surge of nearly 700 cases between May and July, bringing the total to over 900. Before that, a large GBS outbreak was considered between 30 to 50 cases.

Researchers concluded that the culprit behind the extremely unusual 2019 outbreak was the intestinal pathogen, *Campylobacter jejuni.* The gut-dwelling bacteria is well-known as one of the most common causes of food poisoning and diarrheal cases in the world. But, less well-known, it's also one of the leading triggers for GBS.

Unusual suspect

There are hints that *C. jejuni* is again the cause of the GBS outbreak in Peru. Of 22 clinical samples taken from Peruvian patients between June and July, 14 (63 percent) were positive for the gut microbe. But, even if *C. jejuni* is behind the current outbreak, there are still a lot of unanswered questions—including how it's spreading.

In a 2020 report, researchers from the US Centers for Disease Control and Prevention, Peru's CDC, and Peru's national health institute wrote up findings from their investigation of the outbreak. They noted that the *C. jejuni* isolates were highly related, and the cases rapidly increased and then decreased, suggesting a "point-source exposure." But just like in the current outbreak, the cases were spread across geographically disparate regions, making a single source seem unlikely.

"Because of the wide distribution of outbreaks in many

geographically separated regions, we questioned how all areas were exposed to *C. jejuni* within a short time frame," they wrote. And they left the question lingering.

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