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# Brazil faces worst outbreak of conjunctivitis in 20 years

Nearly a quarter of a million people have been afflicted by serious conjunctivitis epidemic



Carla Finger reporting from São Paulo

Crediting it to luck, Brazil has managed until now to keep the severe acute respiratory syndrome (SARS) epidemic away from its shores. Of 30 suspected SARS cases reported nationwide, only two remain as probable cases of the respiratory virus—a British journalist from Malaysia and a 4-year-old child who had recently travelled to Hong Kong.

But while world health authorities focus their efforts on controlling the epidemic, their counterparts in Brazil had to divert their attention to a more benign ailment—viral conjunctivitis. Instead of masks, in the past 2 months more than 200 000 Brazilians have been using eye drops to alleviate discomfort of their red, watery eyes.

A concurrence of elements seems to have contributed to the exponential growth of the epidemic. Every summer many tourists invade the seaside, overcrowding small towns and multiplying the local population by about four to five times. To that, add poor waste-water treatment and sewage systems that are under great pressure, producing an excess of waste that is emptied daily into waters where thousands of people enjoy bathing.

This year, to stir up the concoction, there came Carnival and packed gatherings favoured people-to-people contact and facilitated virus spread. Most of the infected people were aged 29–49 years but children, newborns, and elderly people were also affected.

Usually mild and self-limiting, viral conjunctivitis is not a disease of mandatory reporting. A rise in the number of cases was only noticed at the end of February when some services registered a growth from the usual cases of conjunctivitis a day to 50 cases per day.

Ana Luisa Hofling, head of the Ophthalmology Department of the Federal University of São Paulo, found their service to be a remarkable

thermometer of the epidemic. On Feb 23, viral conjunctivitis accounted for 20% of all cases seen in the hospital and by March 6 it had reached a peak of 35%.

The southern state of Santa Catarina was initially struck hardest. In Rio Grande do Sul about 30% of the population in the tourism sanctuary Foz do Iguaçu became infected. Next it reached Paraná and São Paulo, where Santos was the worst-hit city. The epidemic then reached Mato Grosso and Mato Grosso do Sul in the midwest. To date, except for Ceará, most northeast states as well as Rio de Janeiro have been spared. The Ministry of Health's National Health Institute (FUNASA) totalled 211 848 conjunctivitis cases in

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seven states by April 25: 82 638 in São Paulo; 58 520 in Santa Catarina; 25 531 in Mato Grosso do Sul; 24 941 in Paraná; 13 685 in Rio Grande do Sul; 3737 in Ceará; and 2796 in Mato Grosso.

The director of the Health Ophthalmology Division of the Centre for Epidemiological Surveillance of the state of São Paulo, Norma Medina, explains that a rise in conjunctivitis is expected during the summer (December, January, and February) but this year there was a shift towards the end of it.

According to FUNASA, this is the most severe epidemic since 1984. The Adolfo Lutz Institute in São Paulo has already identified enterovirus as the causative agent but its subgroup is yet to be determined. Hofling and other virologists are investigating whether

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Still Pictures

## Poor-quality water contributes to the spread of the infection

different virus subtypes could be involved in the various regions.

Public health authorities in São Paulo distributed more than 100 000 leaflets to inform the public and warn them to seek help at the onset of symptoms. As part of a coordinated action, surveillance units in the most affected regions were set to facilitate data collection and case reporting. In some areas—eg, the southern capital Porto Alegre—a special referral service was arranged in the local hospital to treat all suspected cases.

All activities have been affected by the epidemic's side-effects. Companies and businesses had to deal with an unforeseen reduction in their workforce since infected employees have to stay away from work for 7–14 days. Schools instructed parents to keep their children at home if there was any sign of the disease. Four state prisons in São Paulo had to take special measures to avoid further virus spread among their inmates and employees. At Padre Severino Young Offenders' Institute, in Rio de Janeiro, 70 of 240 were infected. Even football players and soap opera stars had to take leave.

By now the epidemic has receded. “People and contacts have already developed immunity against the virus”, says Hofling. But she notes that as winter approaches, a rise in adenovirus conjunctivitis is expected. Health authorities will have to catch their breath and be ready to fight the next wave of infection.