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The first local cases of Zika virus in Europe

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In October, 2019, the first mosquito-transmitted, locally acquired cases of Zika virus were reported in Europe.1 This outbreak event has implications far beyond the three people affected and represents a new phase in the global Zika threat.

When Zika virus first emerged in the Pacific in 2007, then spread to the Americas and the Caribbean in 2015–17, the global community treated Zika virus as an epidemic disease. The Zika virus was expected to spread to Asia,2 but when surveillance began, not only were outbreaks in Asia found to be due to indigenous strains of Zika virus, but the virus was found to have been circulating silently for decades.3 The source of this latest European outbreak is unknown at present, but the world is clearly moving into an era of more unpredictable circulation of the Zika virus.4

The arrival of Zika virus in Europe is part of a wider pattern of accelerating arboviral risk on the continent (figure). The arrival also confirms the mosquito species Aedes albopictus as capable of supporting Zika virus transmission. This expands considerably the number of countries and territories where this unpredictable disease can occur to 177, putting 4.6 billion people potentially at risk.5 Although the European Centre for Disease Prevention and Control describes the individual risk of infection in many of these areas as very low,1 advice for pregnant women living in or visiting these areas is wanting. These introductions also challenge the view that Zika is a tropical disease best dealt with by reactive outbreak response and containment. Zika is an increasingly cosmopolitan and more unpredictable threat than ever before. The Zika virus and other arboviruses continue their global expansion.4



Figure. The distribution of previously reported locally transmitted arbovirus cases in Europe and the predicted current and future distribution of their mosquito vector

The current Zika virus cases in the French city of Hyères and the nearby cities of Marseille and Nice are also shown for reference.5

The arrival of Zika virus in Europe should signal a re-evaluation of the broader field of arboviral diseases. In an increasingly globalised world, Europeans need to care as much about outbreaks in Manila, Manaus, or Majuro as they do about outbreaks in Marseille. Investments in arbovirus research and surveillance systems worldwide are needed to monitor the new and emerging threats posed by this increasingly high-profile group of viruses. The global emergence of dengue virus, chikungunya virus, and Zika virus should be a wake-up call to shift the strategy from emergency response to increased vigilance and prevention measures. We should not have to wait for the next global arbovirus to arrive on the shores of Europe or the USA before we act on this.

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