Chikungunya – 102 cases reported from the Rome and Lazio Region, Italy

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Isolation of chikungunya virus, CHKV, was performed independently by the National Reference Laboratory for Arboviruses at the Department of Infectious Diseases of the Istituto Superiore di Sanita (ISS, Rome) from both humans and mosquitoes, and by the Virology Laboratory of the National Institute for Infectious Diseases Lazzaro Spallanzani, a regional reference laboratory for human pathogens.

The Lazio Region, with the support of the Ministry of Health and the ISS, conduct epidemiological surveillance of cases, monitoring of mosquitoes and disease prevention activities (fumigation and blockade of blood donations and blood components).

By September 22, 2017, the Regional Monitoring Service for Infectious Diseases (Seresmi) of the Lazio Region reported a total of 102 notifications of cases of chikungunya. In addition to the Lazio Region report, two more cases have been reported: one by the Marche Region and one by the Emilia-Romagna Region, both are linked to the Anzio outbreak.

Comment
The outbreak has also been reported by the ECDC (https://ecdc.europa.eu/en/news-events/epidemiological-update-chikungunya-europe-2017) with a graph of the daily number of reported cases.

Italy experienced an outbreak of chikungunya in the Emilia Romagno region in 2007 with several hundred cases. The outbreak is believed to have been initiated by travelers from the Indian subcontinent and the recent introduction of the vector Aedes albopictus (a highly competent vector). Furthermore, a mutation in the E1 gene in the virus is believed to have made the virus more efficient in infecting the mosquito [1].

As published in Eurosurveillance [2], the virus currently circulating in Italy belongs to the East Central South African (ECSA) lineage and shows 100% similarity to a strain involved in an ongoing epidemic in Pakistan. The isolated virus does not carry the E1-A226V mutation. The outbreak sequence is available in GenBank.

With 102 notified cases, the real case number will be considerable higher. As pointed out in the news release from the ISS, it has immediate implications for the blood supply.

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References