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# New Microbes and New Infections





# Letter to the Editor

## Tularemia resurgence in Sweden 2023: A call to arms for health

#### Dear Editor,

The recent spike in cases of tularemia in Sweden has caused significant concern among the general public and the medical community about the threat of a possible future outbreak. An alarming resurgence of this bacterial illness, caused by Francisella tularensis, has been observed throughout the nation. In this editorial, we examine the origins of the outbreak, its effects, and the immediate steps that must be taken to stop it from spreading. Tularemia has reemerged in Sweden after experiencing its largest outbreak in 2019, with seasonal peaks around August and September [1]. Concerned authorities are perplexed by this resurgence because it has destroyed their perception that the disease is largely under control. According to the most recent reports, cases of tularemia have been identified in a number of Sweden's northern and central regions, including Stockholm, Gothenburg, Uppsala, and Malmö [2]. The growing number of confirmed cases is placing a strain on the resources and healthcare infrastructure. The rapid spread of this disease raises immediate concerns because it could signal a public health emergency.

Tularemia is a zoonotic disease that targets various organs in the body. Tularemia typically has an incubation period of 3–4 days, after which the symptoms, which can include fever, skin ulcers, swollen lymph nodes near the infection site, sore throat, pneumonia, and even death in severe cases, start to manifest. Tularemia is highly contagious, so there is a significant risk of transmission within communities, but it cannot spread from person to person. The bacterium can enter the body through a number of different routes, including the mouth, the eyes, or the skin, and depending on the point of invasion, the symptoms will vary [3].

Although the cause of this outbreak is still uncertain, it serves as a reminder of the value of effective early detection, surveillance, and response systems. The resurgence may be caused by elements such as environmental modifications, increased exposure to contaminated water or animals, or potential bacterial mutations.

To contain this outbreak, swift action is essential. The Swedish government, in coordination with healthcare authorities, needs to give priority to the following important measures: Enhanced surveillance to comprehend the dynamics of the outbreak; careful tracking of tularemia cases and their geographic distribution is necessary. This measure will guarantee and improve a targeted approach. Public education is essential to inform the general public about tularemia, its symptoms, and available treatments. This entails encouraging good hygiene, steering clear of sick animals, and spreading knowledge about the dangers of engaging in outdoor activities. Healthcare preparation must be ensured in order to handle an influx of tularemia patients. Hospitals and other healthcare facilities need to be sufficiently prepared. This includes having enough antibiotics on hand, which, when used promptly, are effective in treating the illness. Precautions must be taken against the control of vectors like ticks and deer flies that spread tularemia. This might entail taking environmental precautions or applying insect repellents. To comprehend tularemia's transmission, treatment, and potential vaccine development, research institutions and pharmaceutical firms should give the disease top priority. Studies must be done to understand the epidemiology and ecology of this infectious disease in order to comprehend the factors influencing the increased incidence of the disease.

In accordance with the Swedish Communicable Disease and Prevention Act, tularemia has also been a mandatory reportable disease since 1968 [2]. While the Swedish government has taken steps to contain the outbreak, additional international assistance may be required to prevent and control the spread of tularemia. This might entail exchanging data on outbreaks and ideal techniques for prevention and control, as well as offering assistance and resources to nations dealing with outbreaks.

In conclusion, the tularemia outbreak in Sweden necessitates immediate attention and a comprehensive strategy to contain it. Our best defense against this reemerging threat is swift, decisive action, public cooperation, and international collaboration. The efficient and highquality Swedish healthcare system must step up to the plate and guarantee the citizens' safety and wellbeing in the face of this unanticipated crisis.

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## Declaration of competing interest

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