

Current major event

Increased incidence of iGAS infection: Multiple countries

As of early 8 December 2022, at least five Member States in Europe have been reporting a recent increased incidence of scarlet fever and invasive Group A Streptococcus infection (iGAS) among children. WHO recommends that countries in the European Region to be vigilant for a similar rise in cases, particularly in light of the increase in respiratory virus circulation that is now occurring across Europe.

Editorial note

Streptococcus pyogenes, also known as Group A Streptococcus (GAS), is a Gram-positive pathogen that causes more than 500 000 deaths annually worldwide. GAS infection commonly causes mild illnesses such as pharyngitis, impetigo, cellulitis and scarlet fever. However, GAS infection can lead to invasive GAS (iGAS), which can cause life-threatening conditions, such as necrotizing fasciitis, streptococcal toxic shock syndrome and post-immune mediated diseases, such as poststreptococcal glomerulonephritis, acute rheumatic fever and rheumatic heart disease.

Transmission occurs by close contact with an infected person and can be passed on through coughs, sneezes or contact with a wound.

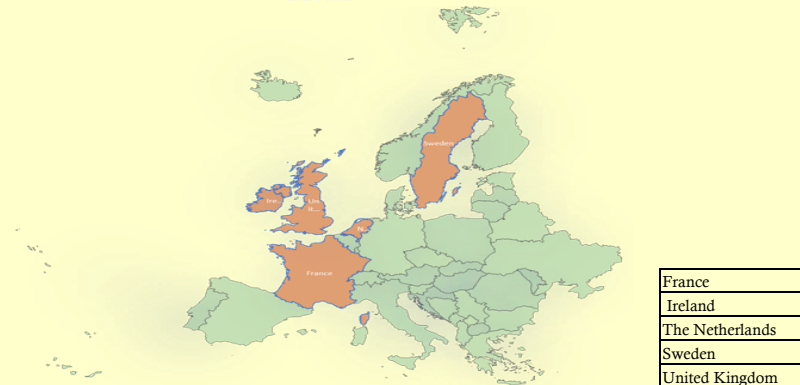
GAS is considered a common cause of bacterial pharyngitis in school-aged children and may also affect younger children. The incidence of GAS pharyngitis usually peaks during winter and early spring. Outbreaks in kindergartens and schools are common. GAS pharyngitis is diagnosed by rapid antigen tests (Rapid Strep) or bacterial culture and is treated with antibiotics and supportive care. Good hand hygiene and general personal hygiene can help control transmission.

As of 8 December 2022, at least five Member States in the European Region reported to WHO an increase in cases of invasive group A streptococcus (iGAS) disease, and in some cases, also scarlet fever. An increase in iGAS-related deaths has also been reported in some of these countries. Children under 10 years of age represent the most affected age group. The event has been reported from France, Ireland, the Netherlands, Sweden, the United Kingdom of Great Britain and Northern Ireland. The observed increase may reflect an early start to the GAS infection season coinciding with an increase in the circulation of respiratory viruses and possible viral coinfection, which may increase the risk of invasive GAS disease. This is in the context of increased population mixing following a period of reduced circulation of GAS during the COVID-19 pandemic.

In light of the moderate increase in cases of iGAS, GAS endemicity, no new emm gene sequence type was identified and there are no reports of increased antibiotic resistance. WHO assesses that the risk for the general population posed by iGAS infections is currently low.

Health authorities in the affected countries are currently undertaking investigations to better understand reasons for the rise in iGAS cases and to better understand the clinical presentations and the range of associated sequelae among current

Increased iGAS infection by country, Europe 2022



Rapid risk assessment of the event

Risk for the general population posed by the reported increase in iGAS infections in some European countries is low.

Risk assessment criteria:

- moderate rise in iGAS cases
- GAS endemicity
- no identified newly emerging emm gene sequence types
- no observed increases in antibiotic resistance.

cases, including factors related to increased severity and poorer outcomes.

WHO recommends continued enhanced surveillance activities and close analysis of the epidemiological situation in countries throughout the European Region. Other countries should be vigilant for a similar rise in cases. Clusters of cases of iGAS should be reported to local, regional or national health authorities to prompt further investigation. In addition, laboratories should be encouraged to submit invasive disease isolates and non-invasive isolates from suspected clusters or outbreaks to national reference laboratories for further characterization. Countries should report any unexpected increased national or regional incidence of iGAS infections to WHO through IHR.

Public health communication activities and messaging are encouraged to healthcare providers to ensure proper clinical assessment and diagnostic testing of patients with symptoms consistent with GAS infection, and prompt treatment of patients with GAS. In addition, providers should be reminded that for iGAS infection, early recognition and prompt initiation of specific and supportive therapy for patients can be life-saving. Healthcare providers should maintain a high degree of clinical suspicion for GAS infection when assessing patients, particularly those with preceding viral infection (including chickenpox) and those who are in close contact with scarlet fever patients. In case of hospital admission, droplet precautions should be implemented. Health workers should always follow standard precautions [5] (link is external) and perform a risk assessment to evaluate the need of additional precautions. WHO does not recommend any restrictions on travel and trade for the UK or other countries based on available information about this event.

Update on outbreaks

in the Eastern Mediterranean Region

COVID-19 in 22 EMR countries

Current public health events of concern

[cumulative N° of cases (deaths), CFR %]

Coronavirus disease 2019 (COVID-19): 2019-2022

Afghanistan	[207 037 (7845), 3.8%]
Bahrain	[696 614 (1536), 0.2%]
Djibouti	[15 690 (189), 1.2%]
Egypt	[515 493 (24 801), 4.8%]
Iran (Islamic Republic of)	[7 560 389 (144 661) 1.9%]
Iraq	[2 465 095 (25 373), 1%]
Jordan	[1 746 997 (14 122), 0.8%]
Kuwait	[662 858 (2570), 0.4%]
Lebanon	[1 221 640 (10 742), 0.9%]
Libya	[507 121 (6437), 1.3%]
Morocco	[1 270 782 (16 294), 1.3%]
occupied Palestinian territory (oPt)	[703 228 (5708), 0.8%]
Oman	[399 154 (4628), 1.2%]
Pakistan	[1 575 486 (30 635), 1.9%]
Qatar	[486 227 (685), 0.1%]
Saudi Arabia	[826 478 (9494) 1.1%]
Somalia	[27 286 (1361), 5%]
Sudan	[63 677 (4992), 7.8%]
Syrian Arab Republic	[57 423 (3163), 5.5%]
Tunisia	[1 147 477 (29 279), 2.6%]
United Arab Emirates	[1 046 086 (2348), 0.2%]
Yemen	[11 945 (2159), 18.1%]