# Group A Streptococcal Invasive Disease Cases in Clark County

General Streptococcal Disease, group A Information

# Background

*Streptococcus pyogenes* bacteria are found in the throat and on the skin, they're present in many healthy people and they do not present symptoms of illness. Invasive group A streptococcal disease (GAS) is a serious and potentially life-threatening disease that occurs when the bacteria invade parts of the body where bacteria are not usually found such as blood, cerebral spinal fluid, lungs, wounds, deep muscle, and fat tissue. Streptococcal toxic shock syndrome (STSS) may occur within an infection at any body site. This disease is characterized by occurrence of shock and failure of organs such as the kidneys, liver, lungs, and brain.

The CDC estimates 11,000-13,000 cases of invasive GAS disease each year in the United States, resulting in 1,100-1,600 deaths annually. Between 6% and 7% of these cases are comprised of STSS and necrotizing fasciitis.

### **Transmission & Risk**

Anyone is at risk of getting invasive GAS disease or STSS. Those with underlying health problems are at a greater risk. Close contacts of cases may be at an increased risk of infection with GAS due to direct contact with secretions from infected persons.

# **Symptoms & Complications**

Early signs and symptoms of STSS may include fever, dizziness, confusion, low blood pressure, rash, and abdominal pain.

# Testing, Diagnosis, Treatment

*Streptococcus pyogenes* group A can be isolated by culture form a normally sterile site (blood, cerebrospinal fluid). Penicillin is effective for treating most GAS infections. Surgery could be necessary in some cases; IV fluids and supportive measures are used in the management of shock and multi-organ failure. Close contacts of cases should get tested and receive treatment if their culture is positive.

More information can be found here: <u>https://odh.ohio.gov/know-our-programs/infectious-disease-control-manual/section3/section-3-strep-a-invasive</u>

Clark County Related Discussion

The highest reported cases in Clark County was in 2020 (14 cases) and the lowest was in 2017 (6 cases). There is a 133.3% increase in cases between 2017-2020 and an overall 100% increase between 2017-2021. Strep A cases are either suspected (clinically compatible case that is not laboratory confirmed) or confirmed (laboratory confirmed). A majority of the cases are confirmed and Table 1 shows the breakdown of case classification between 2017 and 2021.

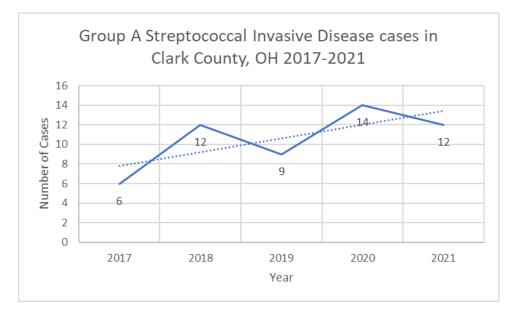


Figure 1 Strep A cases 2017-2021

	Suspected Total	Probable Total	Confirmed Total
2017	0	0	6
2018	1	0	11
2019	0	0	9
2020	0	0	14
2021	1	0	11

Table 1 Strep A Case Classification