

Invasive Group A Streptococcal infection rate for First Nations in Alberta

Invasive Group A Streptococcal infection rate by First Nations status, both sexes, Alberta, 2003 to 2017

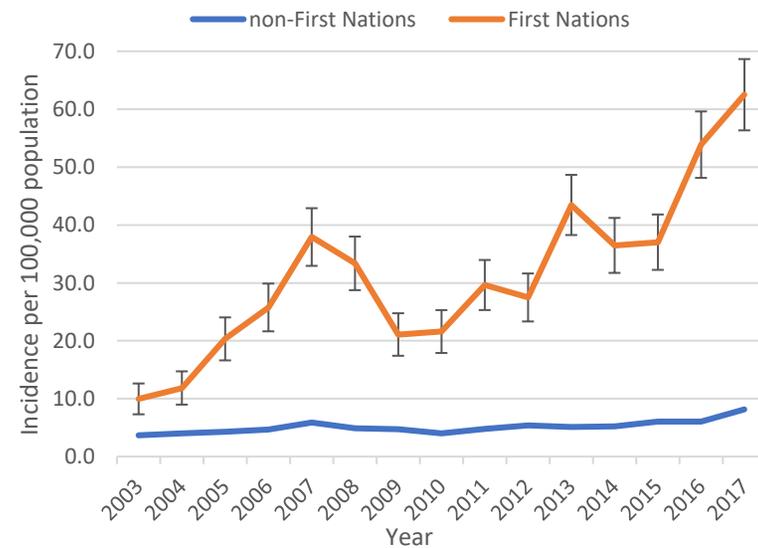
Group A streptococcal (GAS) disease is caused by the bacterium *Streptococcus pyogenes* and is usually transmitted person-to-person by large respiratory droplets or direct contact with patients or carriers. Infection with the bacterium can cause sore throat (strep throat) and skin infections such as impetigo or pyoderma. Though less common, infection may also cause conditions such as scarlet fever, cellulitis, pneumonia, and wound infections.¹ *S. pyogenes* can cause invasive GAS (iGAS) infections, which can lead to necrotizing fasciitis (sometimes called flesh-eating bacteria) or streptococcal toxic shock syndrome (which includes organ failure). In today’s *First Nations – Health Trends Alberta*,² we present iGAS infection rates from 2003 to 2017 in First Nations and non-First Nations separately. All iGAS infections are notifiable to Alberta Health, and rates are presented for both sexes combined.

Invasive Group A Streptococcal (iGAS) infection rates are higher for First Nations compared to non-First Nations

From 2003 to 2017, the average number of iGAS cases each year was 50 among First Nations and 187 among non-First Nations. First Nations cases accounted for 19 per cent of the total iGAS cases reported during this time.

The rate of iGAS infections increased among both First Nations and non-First Nations from 10.0 to 62.5 and from 3.7 to 8.2 cases per 100,000 population, respectively, from 2003 to 2017. Compared to 2003, the rate of iGAS infections was 6 times higher among FN in 2017, whereas the rate among non-FN was only 2.2 times higher.

The underlying reason for the increase in iGAS rates remains unclear; however, risk factors for infection such as diabetes and those associated with marginalized populations and homelessness also increased among people diagnosed with iGAS during this period.³



1 Government of Alberta. Public Health Disease Management Guidelines - Streptococcal Disease Group A Invasive. (2018) <https://open.alberta.ca/publications/streptococcal-disease-group-a-invasive>
 2 This is the 32nd in a series of First Nations-specific Health Trends compiled in collaboration by Alberta Health and the Alberta First Nations Information Governance Centre (AFNIGC). To suggest future topics, please contact the AFNIGC (communications@afnigc.ca; 403-539-5775).
 3 Gregory J Tyrell et al. (2018) <https://academic.oup.com/ofid/article/5/8/ofy177/5056739>