Invasive Streptococcal Disease, Group A (GAS)

Group A streptococci are bacteria commonly found in the throat and on the skin. The vast majority of GAS infections are relatively mild illnesses, such as strep throat and impetigo. Occasionally, however, these bacteria can cause much more severe and even life threatening diseases such as necrotizing fasciitis and streptococcal toxic shock syndrome (STSS). In addition, people may carry group A streptococci in the throat or on the skin and have no symptoms of disease. Invasive GAS disease is a severe and sometimes life-threatening infection in which the bacteria have invaded parts of the body, such as the blood, deep muscle and fat tissue or the lungs. To learn more about Invasive GAS disease, please visit our website.

Incidence of invasive GAS remained relatively stable in the metropolitan area and central NY regions. In 2014 all regions experienced increases in incidence rates with the largest increase reported in Central Region that was associated with an outbreak in Onondaga County.

Of the 1,842 invasive GAS cases:
- 90.4% were hospitalized,
- 10.5% of invasive GAS cases resulted in death.

### Incidence Rate per 100,000 population

**Streptococcal Group A**
- 2.72 - Metropolitan Area (MARO)
- 3.61 - Central New York (CNYRO)
- 3.73 - Western (WRO)
- 4.04 - Capital District (CDRO)

Note: New York City data not included
Invasive GAS 5-Year Cumulative Frequency by Age Group and Gender, NYS (excluding NYC), 2011-2015

The highest burden of invasive GAS infection occurred among those greater than 50 years of age, which could be correlated with the presence of comorbidities, placing this age group at greater risk for invasive disease. Additionally, nosocomial transmission to residents in long term care facilities has been associated with clusters of invasive GAS.

Invasive GAS 5-Year Average Incidence Rate by Age Group and Gender, NYS (excluding NYC), 2011-2015

The highest rates of invasive disease occurred in the very young (<1 year) and those over 50 years of age. Male patients have higher incidence rate than females in all ages except between the age of 18-39 years.

The incidence of invasive GAS can be influenced by the presence of noninvasive streptococcal disease (i.e., GAS pharyngitis) circulating in the community. Noninvasive disease (not reportable) occurs primarily in children (especially elementary school age), which can lead to invasive disease among close contacts.