Invasive Group A Streptococcal Infection in New Zealand

Invasive group A streptococcal infection is a notifiable condition in New Zealand, therefore surveillance is laboratory-based where individual laboratories send isolates from invasive disease to ESR for further typing.

Group A Streptococcus can cause:
- Invasive diseases
  - necrotising fasciitis
  - streptococcal toxic shock syndrome
  - cellulitis
  - bacteraemia (bacterial infection in blood)
  - pneumococcal pneumonia
  - puerperal sepsis
- Non-invasive diseases
  - pharyngitis
  - impetigo
  - superficial skin infections
  - scarlet fever

Group A Streptococcus can also cause:
- acute rheumatic fever
- rheumatic heart disease
- post streptococcal glomerulonephritis (kidney disease)

Invasive group A streptococcal infections by year, 2002–2015

Cases and rates by district health board

Key messages:
- NZ HAS HIGH RATES COMPARED to other countries and a DIFFERENT SEASONAL PATTERN
- GROUPS MORE AT RISK Pacific peoples, Māori, very young, elderly and more socio-economically deprived
- The group A streptococcal vaccine under development could have prevented up to 54% of cases in 2014–2015
- Surveillance is important to inform the development of a vaccine

2014 AND 2015

PACIFIC PEOPLES had 8–11x higher risk than European/Other

MĀORI had 3–5x higher risk than European/Other

Invasive group A streptococcal infections are uncommon but serious, with a high fatality rate

8.3% 30-day case fatality rate Rate increased with age
77.5 median age of cases at death

NATIONAL RATES

7.2 cases per 100,000 in 2014
7.5 cases per 100,000 in 2015
2x more than other high income countries

Rate per 100,000

<5
5–10
>10
Rate not shown (<5 cases)

Numbers represent cases in DHB

2014 (326 cases)
2015 (346 cases)

Almost 50% of cases came from the most socio-economically deprived areas

Very young (<1 year) and older (>70 years) people most at risk

Rate not shown (<5 cases)

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