**Trends and age profile of 0–24 year olds hospitalised with gastroenteritis**

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**BACKGROUND**

Hospitalisations for gastroenteritis have been increasing internationally. New Zealand rates were 6.0 per 1,000 0–14 year olds in 2006–2010. Yet hospitalisation for gastroenteritis is potentially avoidable. For example, rotavirus is one of the main causes of gastroenteritis hospitalisation of under 5 year olds. In New Zealand, rotavirus accounts for an estimated 1 in 52 (6.34 per 1,000) children being hospitalised before they were three years old. A free three-dose vaccine was introduced in July 2014 for under 15 weeks olds. In the US, vaccine introduction resulted in reduced rates of children hospitalised with rotavirus.

This study aimed to determine overall and age-specific rates of gastroenteritis hospitalisation of 0–24 year olds in New Zealand and identify the ages at greater risk.

**METHODS**

A retrospective analysis, for the period 2000–2014, of acute and arranged in-patient hospitalisations of 0–24 years with a primary diagnosis of gastroenteritis extracted from the National Minimum Dataset.

**RESULTS**

- Gastroenteritis hospitalisation rate increased from 3.6 per 1,000 0–24 year olds (n=5,028) in 2000 to 5.3 per 1,000 (n=8,151) in 2014 (Figure 1).
- The highest rates were for 0–4 year olds (Figure 1).
- Predominant forms of gastroenteritis documented as the reason for hospitalisation were: (Figure 2)
  - Non-specific gastroenteritis (45.7%),
  - viral enteritis (32.9%), and
  - nausea and vomiting (presumed non-infectious; 15.5%).
- Highest hospitalisation rates for the various forms of gastroenteritis were for under one year olds, with the exception of rotavirus where one year olds were highest (Figure 3).

**CONCLUSION**

Hospitalisation rates for gastroenteritis have been increasing in New Zealand since 2000. The high rates for those under two years is consistent with other research. The highest hospitalisation rates were associated with non-specific diagnoses, particularly notable within viral diagnoses, where ‘other viral enteritis’ increased while the rotavirus and norovirus rates appeared stable.

**REFERENCES**