



VIDRL
Victorian Infectious Diseases
Reference Laboratory

The VIDRL Norovirus Report January 2013

Available at: www.vidrl.org.au

Background

The noroviruses are the most common cause of outbreaks of non-bacterial gastroenteritis as well as being an important cause of sporadic gastroenteritis. Although norovirus-associated gastroenteritis was once referred to as “winter vomiting disease”, it is now known that norovirus-associated gastroenteritis occurs throughout the year. Furthermore, a recent study of norovirus outbreaks in Victoria over the period 2001-2010 showed that there had been a dramatic increase in norovirus outbreaks in the period 2006-2010 compared to 2001-2005.¹

The available evidence indicates this increase was not a function of enhanced surveillance procedures but most probably related to the emergence of more virulent strains of norovirus and also to environmental conditions which facilitated the spread of the virus. This report, based on laboratory detections of norovirus and general practitioner gastroenteritis presentations, is intended to provide an indication of norovirus and gastroenteritis activity in Victoria.

Summary

Routine testing at the Victorian Infectious Diseases Reference Laboratory (VIDRL) includes detections of norovirus from outbreaks and sporadic cases. Because testing tends to focus on gastroenteritis outbreaks in aged-care facilities, detection of norovirus may be biased towards older age groups. The number of norovirus detections increased slightly in January, predominantly in the 50-79 and 80+ age groups (Figure 1). The number of norovirus detections in the 0-19 and 20-49 years age groups remained high relative to historical levels but decreased from December. The consistent number of detections in the last three months suggests norovirus activity is peaking.

The Melbourne Medical Deputising Service (MMDS), an out-of-hours general practitioner locum service, provides data on gastroenteritis-like illness consultations. The rate of gastroenteritis per 1000 consultations peaked in the third week of January 2013 at 115.3 (Figure 2), similar to the peak rates in 2006 (120.3) and 2007 (116.3), following the emergence of the more virulent norovirus strains in 2006. In 2012 the number of gastroenteritis consultations almost doubled in the <5 years age group and increased considerably in the 5-<18 years age group also.

These data suggest that there has been higher than normal gastroenteritis activity in the past three months in Victoria, which may be due to the emergence of the new variant of genotype II.4² similar to the increased activity in the United Kingdom, France and New Zealand.

¹LD Bruggink, K Sturge, J Gaston, J Gregory, MG Catton, JA Marshall *Patterns of norovirus-associated gastroenteritis outbreaks in Victoria 2001–2010* Victorian Infectious Diseases Bulletin Volume 14 Issue 3 September 2011

²van Beek J, Ambert-Balay K, Botteldoorn N, Eden JS, Fonager J, Hewitt J, Iritani N, Kroneman A, Vennema H, Vinjé J, White PA, Koopmans M, on behalf of NoroNet. Indications for worldwide increased norovirus activity associated with emergence of a new variant of genotype II.4, late 2012. *Euro Surveill.* 2013;18(1):pii=20345. Available online: <http://www.eurosurveillance.org/ViewArticle.aspx?ArticleId=20345>



The VIDRL Norovirus Report January 2013

VIDRL
Victorian Infectious Diseases
Reference Laboratory

Available at: www.vidri.org.au

Figure 1: Norovirus detections by age group and year, VIDRL, January 2003 – January 2013

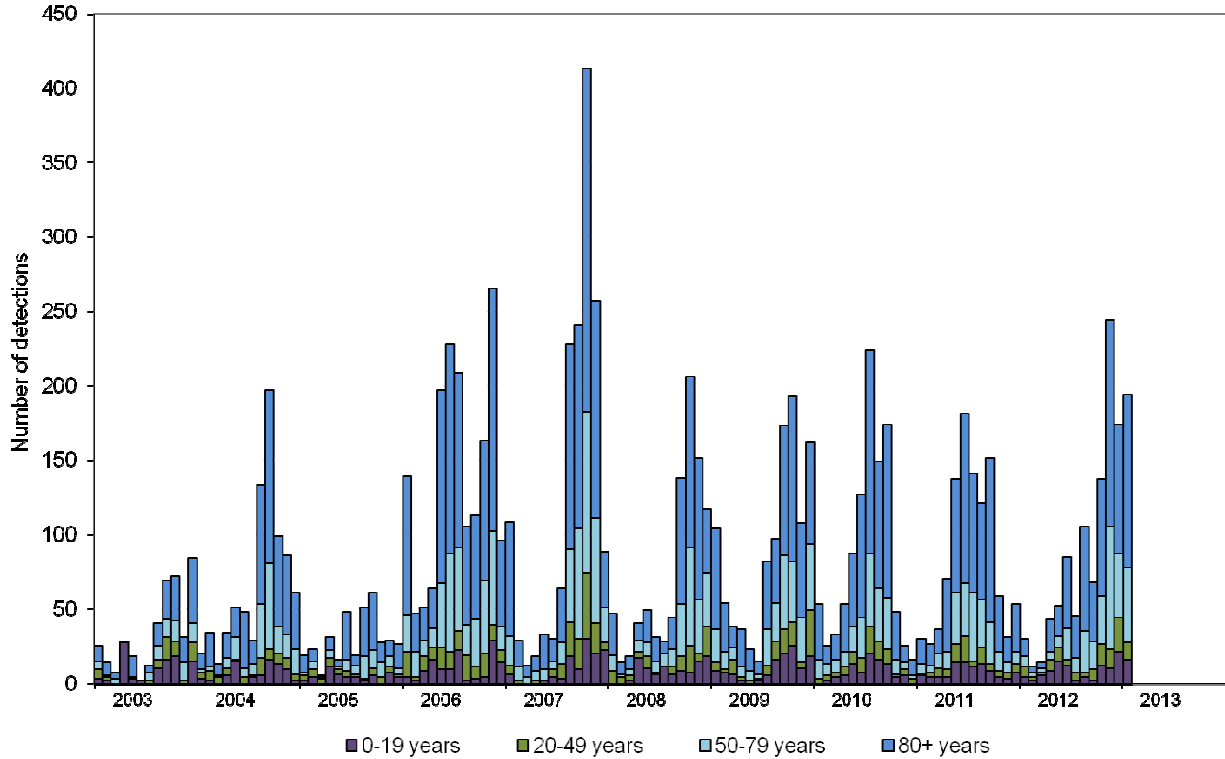


Figure 2: Numbers and rates of gastroenteritis consultations, MMDS, January 2003 – January 2013

