## 3.4 Hepatitis A

## **Summary**

Number of cases, 2013: 50 Crude notification rate, 2013: 1.1/100,000 population Number of cases, 2012: 30

Hepatitis A virus causes an acute, usually self-limiting disease of the liver. It is primarily transmitted from person to person via the faecal-oral route and is associated with poor hygiene and sanitation. Common source outbreaks due to contaminated food or water also occur. The incidence of hepatitis A in Ireland has been low in recent years and remained low in 2013, with 50 cases notified (figure 1). This corresponds to a crude notification rate of 1.1/100,000 population. Although this rate was higher than in 2012, when 30 cases were notified, the increase was due to two large outbreaks, which accounted for two thirds of the 2013 cases. Case classification was reported for all cases. Forty seven were laboratory confirmed and three were classified as probable. The notification rates for each HSE area are shown in figure 2.









Fifty four percent of cases were female (n=27) and 46% were male (n=23). The highest notifications rates were in adults, with 76% of cases aged between 25 and 64 years (figure 3).

Thirty five cases were reported as infected in Ireland. Nine cases were linked to travel outside of Ireland and a further five had a history of recent travel outside of Ireland but could also have been infected in Ireland. Country of infection was not known for the remaining case.

Six hepatitis A outbreaks were reported in 2013. The largest involved 23 adult cases (15 confirmed primary, 4 confirmed secondary, 3 possible primary and 1 possible secondary) in multiple HSE areas. A case control study was undertaken and the outbreak was found to be associated with the consumption of frozen berries. The hepatitis A genotype (1A) and sequence were identical to that in a large multi-national European outbreak, which was also associated with frozen berries. In September 2014, the Food Safety Authority of Ireland reiterated earlier advice to boil all imported frozen berries for at least a minute prior to consumption (http://www.fsai.ie/news\_centre/press\_releases/hepatitis\_a\_frozen\_berries\_advice\_08092014.html).

A further outbreak involving two adult cases was associated with frozen berries consumed in Italy. The genotype and sequence were also identical to that in the multi-national European outbreak described above.

An outbreak in HSE NE affected six adults and four children. The index case had travelled to Asia and was likely to have been infected there. The remaining cases were contacts infected through person-to-person transmission in Ireland.

A smaller outbreak in HSE NW affected two adults and one teenager. The index case had travelled to the United Kingdom within the exposure period but could also have been infected in Ireland. Another outbreak in HSE E involved one adult and one child. The country of infection was Ireland, but no source of infection was identified. The remaining outbreak involved two adults who had travelled to Egypt and was linked to an outbreak affecting people from several European countries.

In recent years, large hepatitis A outbreaks due to agricultural produce such as frozen berries<sup>1</sup>, pomegranate seeds<sup>2</sup>, and semi-dried tomatoes<sup>3</sup> have been reported internationally. This illustrates the importance of compliance with good hygiene, agricultural and manufacturing practices in all countries exporting agricultural products, particularly those that are usually consumed raw.

The figures presented in this summary are based on data extracted from the Computerised Infectious Disease Reporting (CIDR) System on 15<sup>th</sup> September 2014. These figures may differ from those published previously due to ongoing updating of notification data on CIDR.

1. European Centre for Disease Control and Prevention, Stockholm, 2013. Rapid Outbreak Assessment -Update: Outbreak of hepatitis A virus infection in Italy and Ireland, 9 July 2013. Available at: http://ecdc.europa.eu/en/publications/Publications/ROA-update\_ HAV\_Italy\_Ireland-final.pdf

2. Collier MG, Khudyakov YE, Selvage D3, Adams-Cameron M, Epson E, Cronquist A et al. Outbreak of hepatitis A in the USA associated with frozen pomegranate arils imported from Turkey: an epidemiological case study. Lancet Infect Dis. 2014 Oct;14(10):976-81.

3. Donnan EJ, Fielding JE, Gregory JE, Lalor K, Rowe S, Goldsmith P et al. A multistate outbreak of hepatitis A associated with semidried tomatoes in Australia, 2009. Clin Infect Dis. 2012 Mar;54(6):775-81.



Figure 3. Hepatitis A age and sex-specific notification rates/100,000 population, 2013