



Epidemiology of hepatitis A in Ireland

Provisional – 2023 data validation ongoing

Niamh Murphy, December 2023

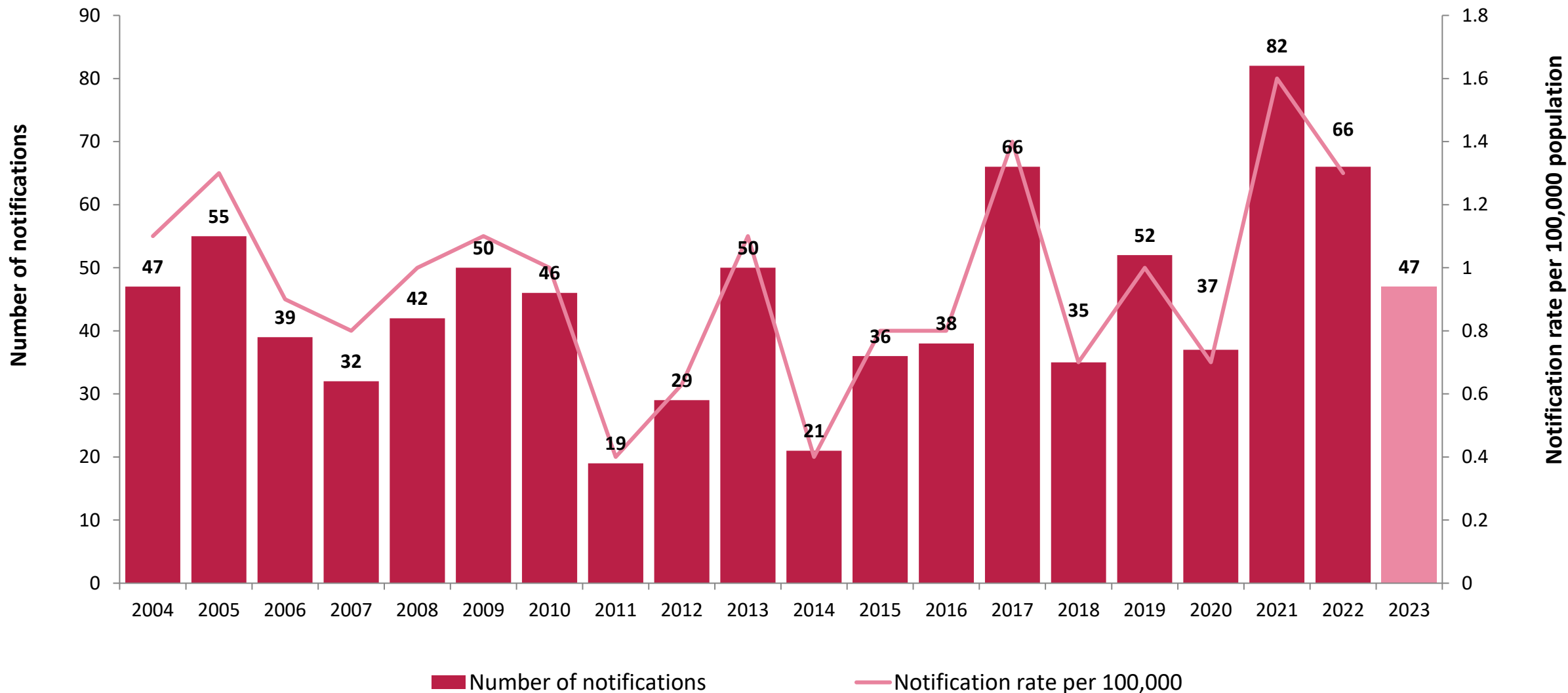
Hepatitis A virus

- Associated with poor hygiene and sanitation
- Virus shed in faeces and primarily transmitted from person-to-person via the faecal-oral route
- Common source outbreaks due to contaminated food or water also occur
- Incubation period (time from infection to symptoms) commonly 28-30 days (range 15-50)
- Typically infectious from 2 weeks before until 1 week after onset of symptoms
- Acute disease – does not have a chronic form
- Lifelong or long duration immunity following infection or immunisation with hepatitis A vaccine
- Clinical severity tends to increase with age. Adults can experience severe illness lasting several months, whereas young children are frequently asymptomatic
- The most common symptoms are fever, loss of appetite, nausea, fatigue and abdominal pain, followed within a few days by jaundice
- In developed countries, hepatitis A is most commonly seen in travellers to endemic countries, household and sexual contacts of known cases, people who inject drugs (PWID) and gay and bisexual men, and other men who have sex with men (gbMSM)

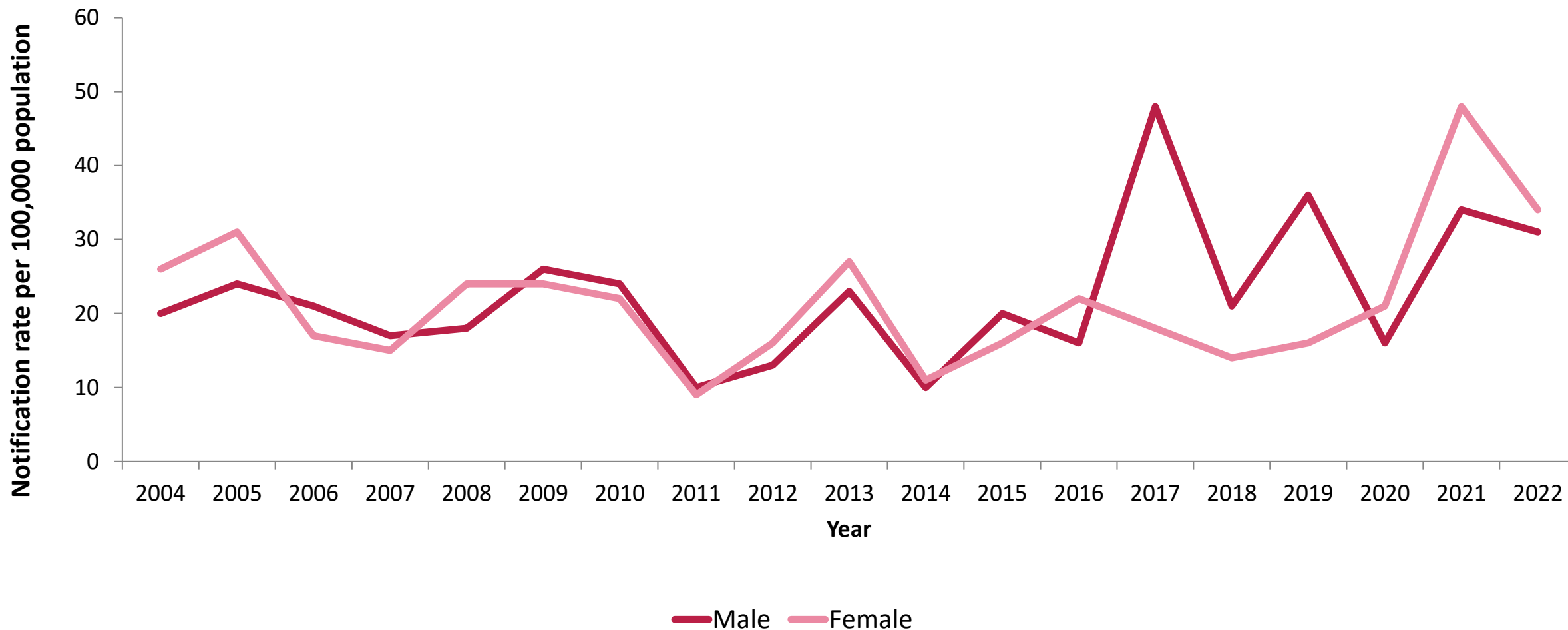
Hepatitis A immunisation

- Safe and effective vaccine
 - Hepatitis A vaccine alone
 - Combined hepatitis A and B vaccine or combined hepatitis A and typhoid vaccine
- Provides long-term or lifelong protection
- Irish Immunisation Guidelines
 - Immunisation recommended for travellers to endemic countries, people with chronic liver disease, PWID, gbMSM and household or close contacts of cases, among others
 - <https://www.hse.ie/eng/health/immunisation/hcpinfo/guidelines/ch8-hepatitis-a.pdf>
- Free in sexual health clinics <http://man2man.ie/stis/hepatitis-abc/>
- Student health services - may be a fee in some
- GP – vaccine is free, fee for administration
- If exposed, vaccination within 2 weeks is protective
- For sexually acquired cases of hepatitis A – STI testing and partner notification important

Number of notifications of hepatitis A in Ireland, and notification rate per 100,000 population, 2004 – Dec 3rd 2023

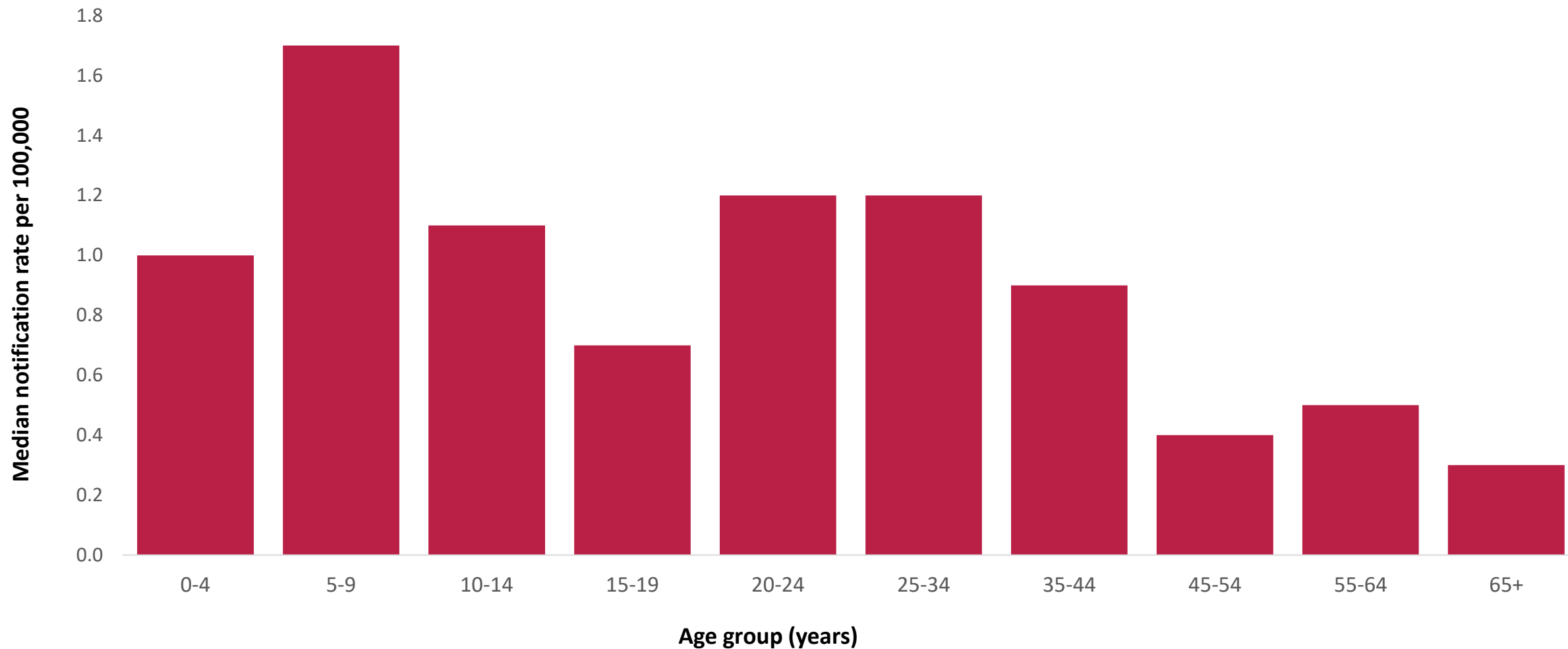


Hepatitis A notification rates per 100,000 population in Ireland, by sex, 2004-2022



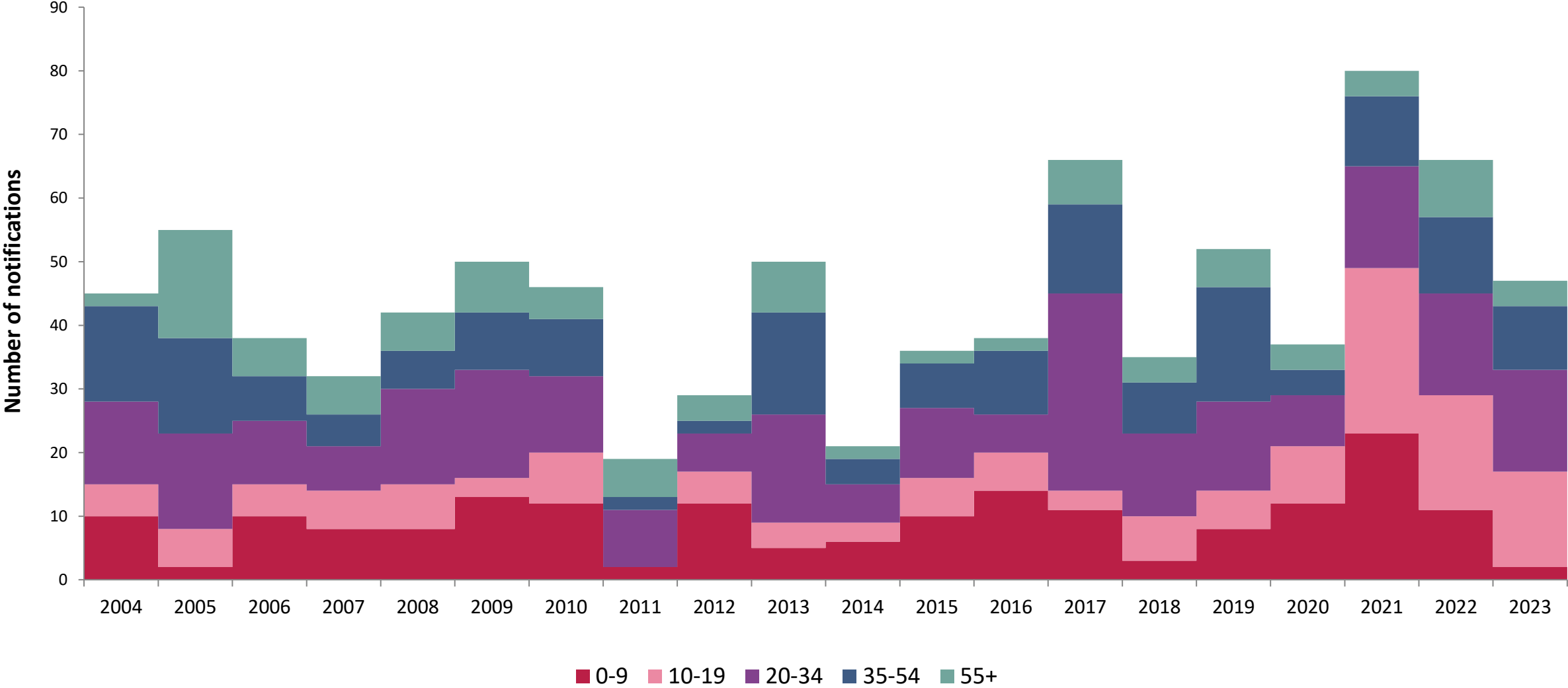
Key point: Rates generally similar for males and females, except 2017 when there was a large outbreak in gbMSM, higher than usual numbers of cases were also identified in gbMSM in 2018 and 2019.

Median hepatitis A notification rates per 100,000 population in Ireland, by age group, 2004-2022

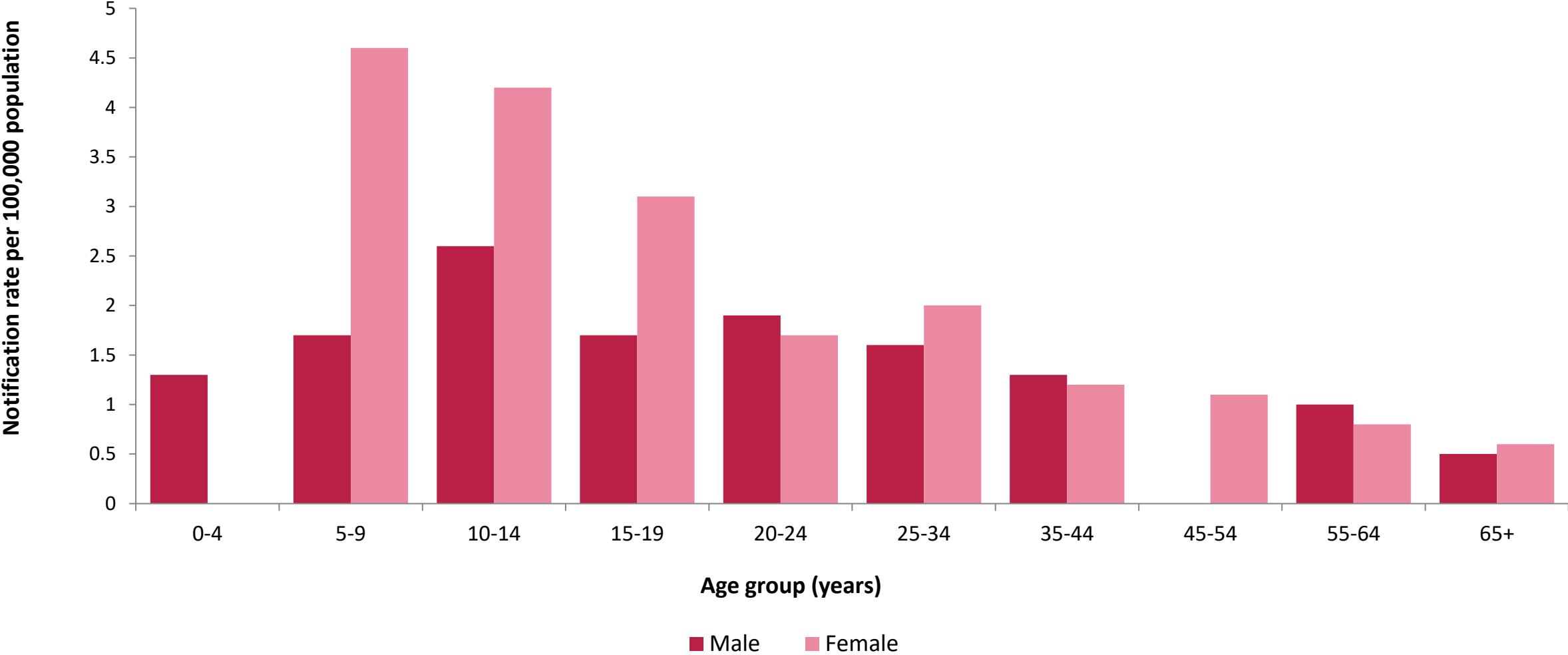


Key point: Rates generally highest in children and young to middle-aged adults, reflecting lack of immunity and travel

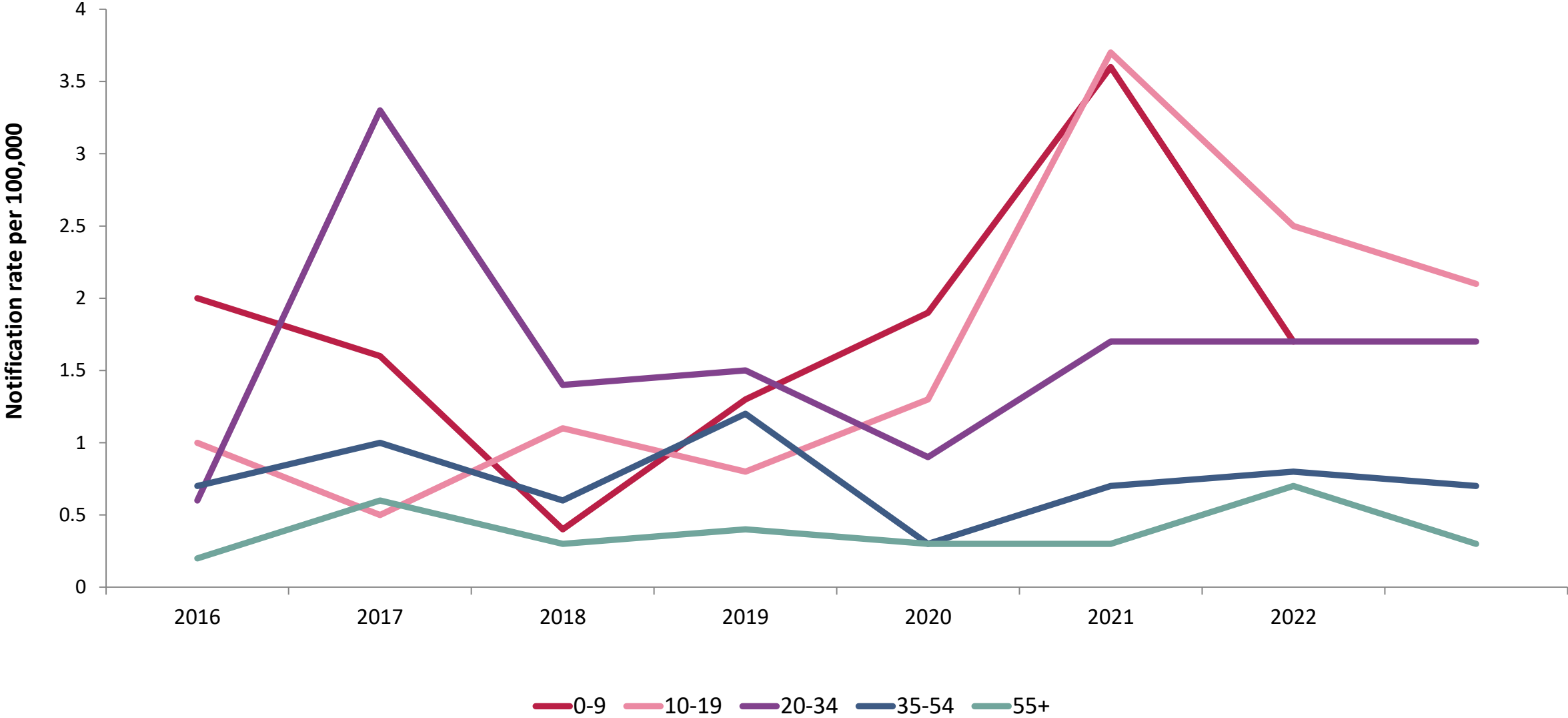
Number of hepatitis A notifications in Ireland, by age group, 2004 - Dec 3rd 2023



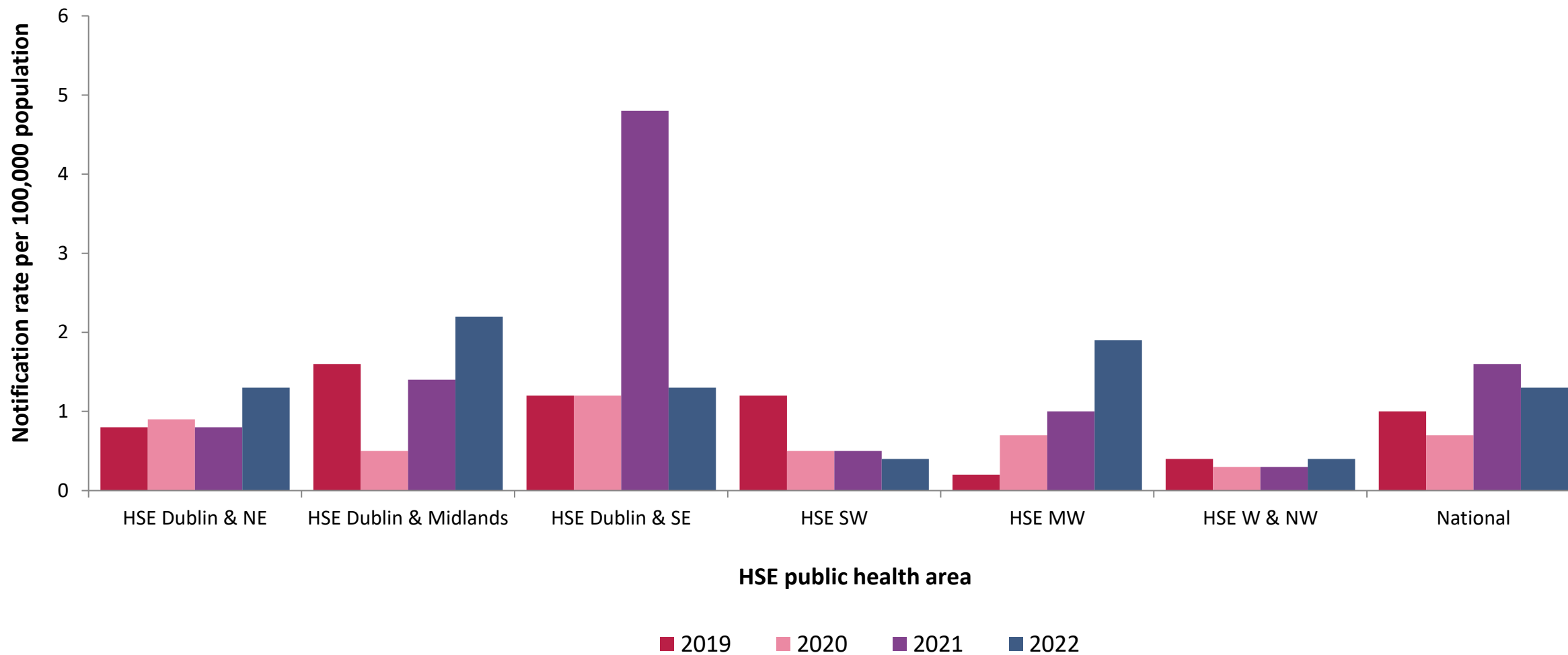
Hepatitis A notification rates per 100,000 population, by age and sex, in Ireland, 2022



Hepatitis A notification rate in Ireland, by age group, 2016-2022



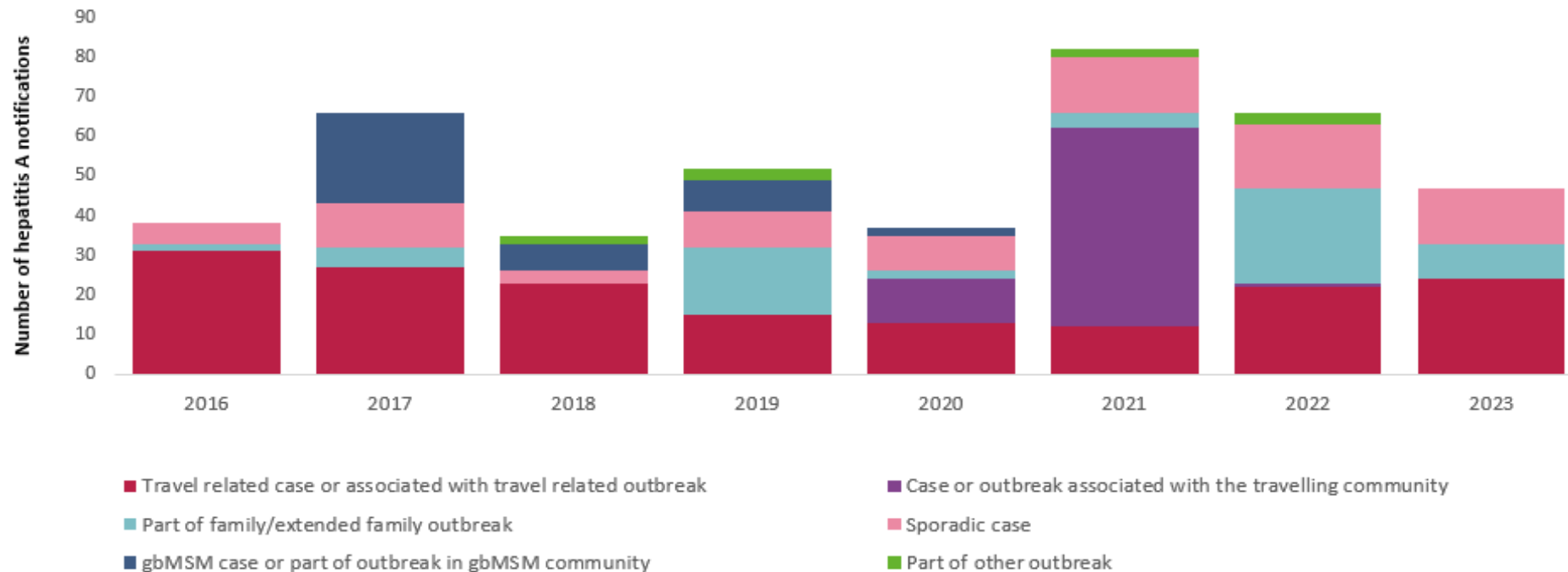
Hepatitis A notification rate per 100,000 population in Ireland, by HSE public health area, 2019-2022



Overview of cases and outbreaks, 2016 to 3rd Dec 2023



Description	2016	2017	2018	2019	2020	2021	2022	2023	All 2016- Dec 3rd 2023
Travel related case or associated with travel related outbreak	31	27	23	15	13	12	22	24	167
Sporadic case	5	11	3	9	9	14	16	14	81
Case in, or part of outbreak associated with, the travelling community					11	50	1		62
Part of family/extended family outbreak	2	5	0	17	2	4	24	9	63
gbMSM case or part of outbreak in gbMSM community		23	7	8	2				40
Part of other outbreak			2	3		2	3		12
Total	38	66	35	52	37	82	66	47	423



Increase in hepatitis A notifications, 2021

- The mean number of hepatitis A cases notified annually, 2004-2020, was 41
- The number of hepatitis A notifications > doubled in 2021 (n=82) compared to 2020 (n=37)
- This increase was largely driven by two significant outbreaks associated with the Irish travelling community

Outbreak 1:

- **43 cases** reported from September 2020 to November 2021
- Reported as travel related as index case had travelled outside Ireland
- Extended family, social contacts
- Carlow and Wexford
- Ethnicity; Irish traveller n=34, white Irish n=3, not reported n=6

Outbreak 2:

- **19 cases** reported from November 2020 to January 2022
- Reported as community outbreak, all cases in Dublin
- Some cases linked to a halting site, some transmission in the community
- Ethnicity; Irish traveller n=9, white Irish n=2, white other n=1, not reported n=7

Summary of Hepatitis A notifications, 2022



- 66 cases of hepatitis A notified in 2022, 1.3/100,000 population
- 52% female, 48% male
- Highest rates in children aged 5-19 years (41% cases) and adults aged 20-34 years (24% cases)
- 56% (n=37) reported as infected in Ireland, but 5 of these linked to travel associated outbreaks
- 23% (n=15) reported as infected outside Ireland, 5 in Pakistan
- Country of infection was not reported for 21% (n=14), 2 were contacts of a travel associated case (Pakistan)
- 34 cases were associated with 10 outbreaks
 - 1 outbreak associated with the travelling community – 2021 outbreak, 1 linked case notified in 2022 (19 cases in total)
 - 5 travel related outbreaks – 12 linked cases
 - 4 family/extended family outbreaks – 24 linked cases,
 - 1 large extended family/community outbreak with 11 linked cases in 2022 and 1 linked case in 2023. Two further cases infected with same strain but with no epi links to other cases, 7 other cases tentatively linked (3 in 2022, 4 in 2023)
- 32 sporadic cases reported
 - 6 suspected to be part of an outbreak but not linked to an outbreak on HPSC's CIDR system
 - 9 associated with travel
 - No risk factor identified for 16 cases, likely risk factor identified for 1 case