



# Health Protection Surveillance Centre

## Sexually Transmitted Infections (STIs) in Ireland: Trends to the end of 2020

November 2021

# Acknowledgements

The Health Protection Surveillance Centre (HPSC) would like to thank all those who provided the data for this report, particularly the STI clinics, GPs, laboratories and personnel within the Departments of Public Health.

STI data were extracted from CIDR in October and November 2021, and may differ from those previously published due to ongoing updating of notification data in CIDR.

These slides may be copied and reproduced, provided HPSC is acknowledged. Suggested citation: HSE-Health Protection Surveillance Centre. STI slideset 2019 and 2020. Dublin: HPSC; 2021.

# STIs in Ireland, 2019 and 2020

These slides present data on STIs notified to HPSC during 2019 and 2020 and trends to the end of 2020.

HIV, hepatitis B and sexually transmitted enteric infections (STEI), such as shigellosis, are notified via CIDR and are **reported separately**.

Weekly reports on HIV and STIs in Ireland are available on the HPSC website.

<https://www.hpsc.ie/a-z/sexuallytransmittedinfections/>

<https://www.hpsc.ie/abouthpsc/annualreports/>

<https://www.hpsc.ie/a-z/sexuallytransmittedinfections/publications/stireports/stiweeklyreports/>

# The impact of the COVID-19 pandemic on STI data in Ireland, 2019 and 2020



These slides present provisional data on STIs notified to HPSC during 2019 and 2020, via the Computerised Infectious Disease Reporting system (CIDR).

Due to the impact of the COVID-19 pandemic, there was a reduction in the number of notifications of all STIs during 2020. This is likely to be due to a number of factors including long periods of national lockdown, social and physical distancing measures, reduced sexual health and GP services and reduced testing opportunities.

The COVID-19 pandemic also affected the collection and reporting of enhanced data variables, such as mode of transmission, for STI notifications during 2019 and 2020. Initiatives to improve data quality are underway in 2021 but all enhanced data for this time period should be interpreted with caution.

STI data were extracted from CIDR on 27<sup>th</sup> October and 4<sup>th</sup> November 2021, and were correct at the time of publication. Data may change following validation, and as more enhanced data are received.

# Summary of STIs in Ireland, 2019



Increasing trend in STIs continued in 2019

STI*	Number	Notification rate / 100,000 population	Highest age-specific rate	Percentage change from 2018
Chlamydia	9,173	192.4	20-24 years	+15.7%
Gonorrhoea	2,812	59.1	20-24 years	+17.1%
Herpes simplex (genital)	1,689	35.5	20-24 years	+6.2%
Lymphogranuloma venereum (LGV)	39	0.8	30-34 years	+39.3%
Early infectious syphilis (EIS)	787	16.5	25-29 years	+62.6%
Trichomoniasis	64	1.3	25-29 years	0.0%
<b>Total**</b>	<b>14,564</b>			

\* There were no notifications of chancroid or granuloma inguinale in 2019

\*\* Total STI data are underestimated as data on AGW and NSU were not available for 2019 (please see slide 34 for further information)

# Summary of STIs in Ireland, 2020



Number of STI notifications decreased in 2020 likely due to the impact of the COVID-19 pandemic

STI*	Number	Notification rate / 100,000 population	Highest age-specific rate	Percentage change from 2019
Chlamydia	6,937	145.2	20-24 years	-24.4%
Gonorrhoea	2,070	43.5	20-24 years	-26.4%
Herpes simplex (genital)	1,133	23.8	20-24 years	-33.0%
Lymphogranuloma venereum (LGV)	12	0.3	25-29 years	-69.2%
Early infectious syphilis (EIS)	611	12.8	30-34 years	-22.4%
Trichomoniasis	39	0.8	20-24 years	-39.1%
<b>Total**</b>	<b>10,802</b>			

\* There were no notifications of chancroid or granuloma inguinale in 2020

\*\* Total STI data are underestimated as data on AGW and NSU were not available for 2020 (please see slide 34 for further information)

# Sex distribution summary, 2019



More men than women



Please note that data on sex in this report refers to a person's assigned sex at birth and may not reflect their gender identity, or internal sense of themselves, as being male, female, transgender or otherwise.

# Sex distribution summary, 2020



More men than women

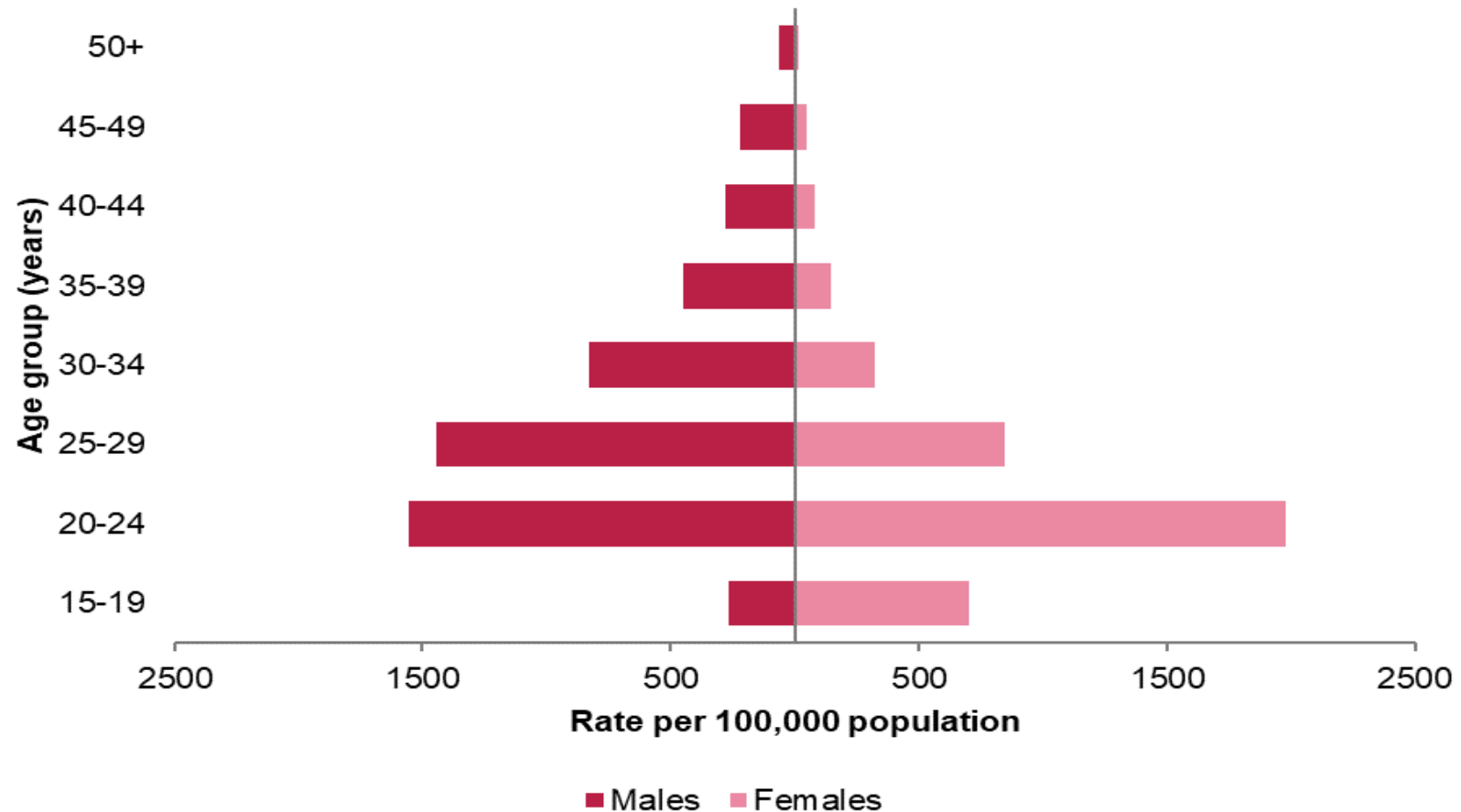


Please note that data on sex in this report refers to a person's assigned sex at birth and may not reflect their gender identity, or internal sense of themselves, as being male, female, transgender or otherwise.



# Age distribution summary, 2019

Younger people are more affected

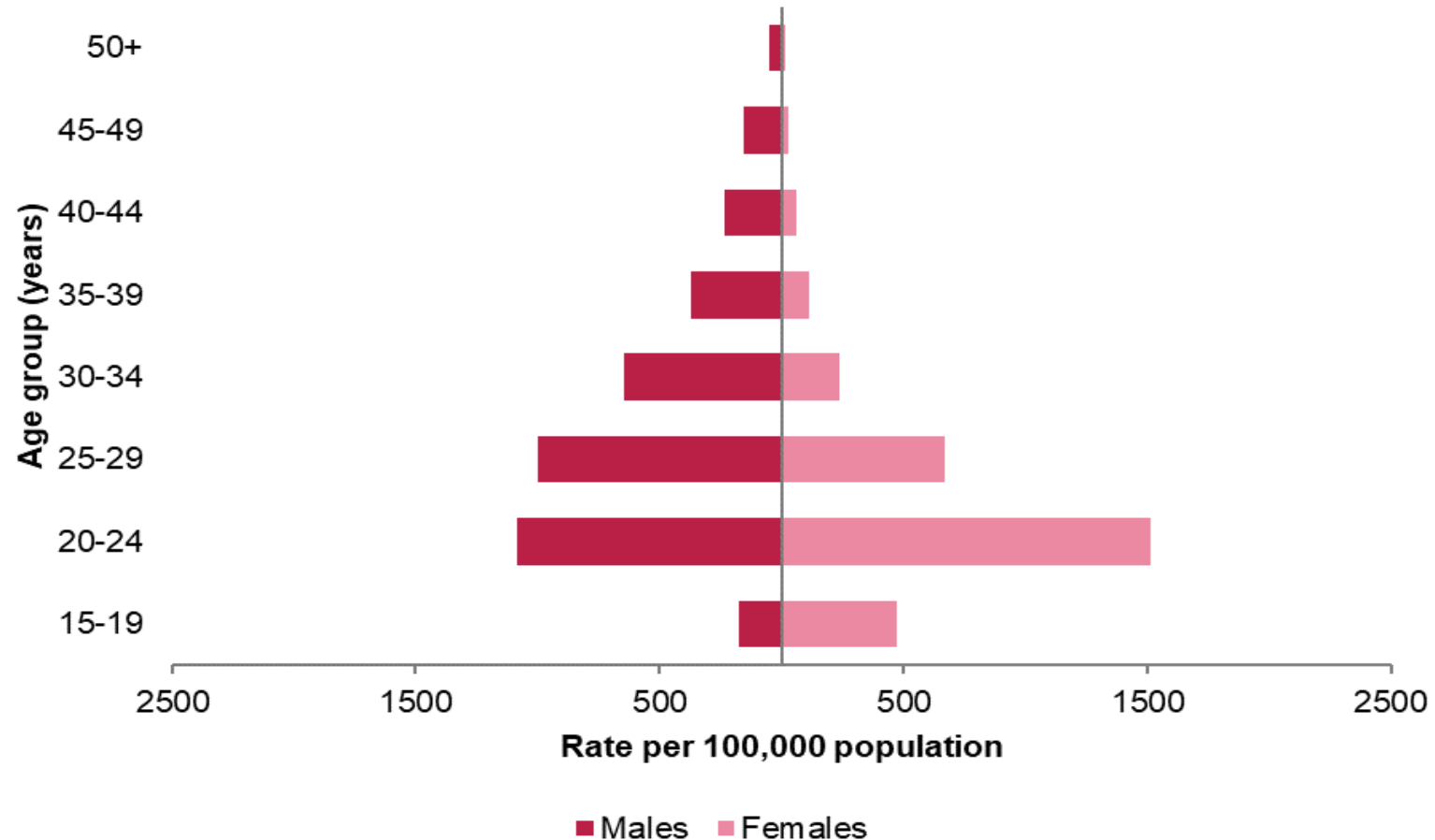


This graph excludes individuals whose age was less than 15 years and cases where age/sex was unknown

This graph shows the age/sex breakdown for cases of chlamydia, gonorrhoea, syphilis, herpes simplex (genital), LGV and trichomoniasis in 2019

# Age distribution summary, 2020

Younger people are more affected

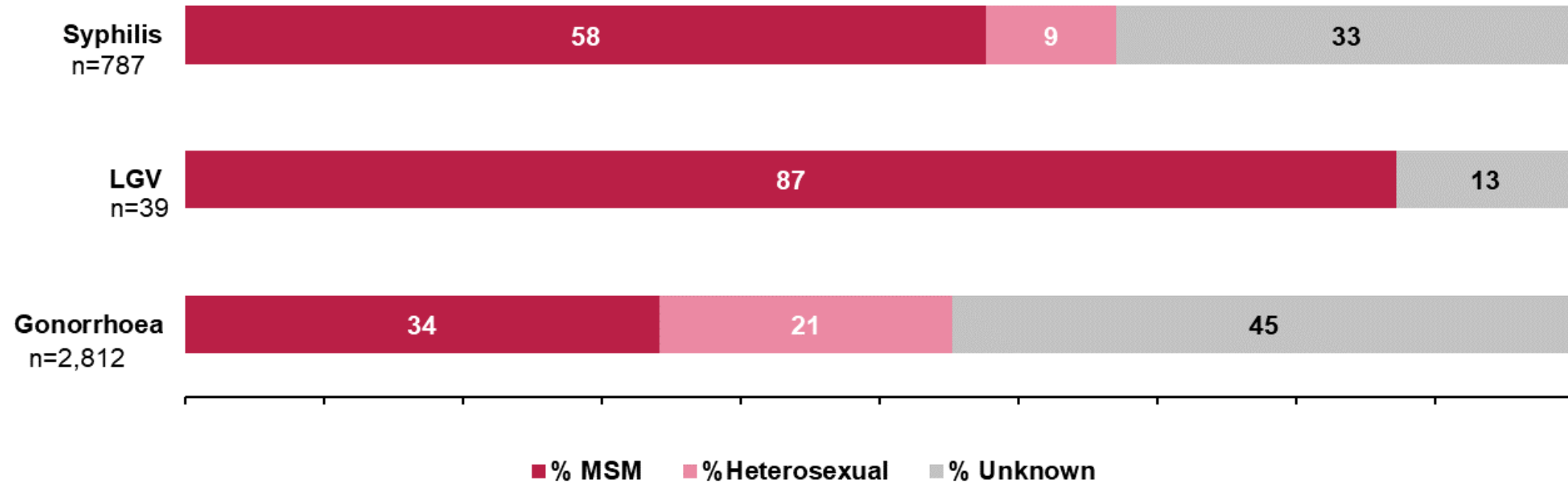


This graph excludes individuals whose age was less than 15 years and cases where age/sex was unknown

This graph shows the age/sex breakdown for cases of chlamydia, gonorrhoea, syphilis, herpes simplex (genital), LGV and trichomoniasis in 2020

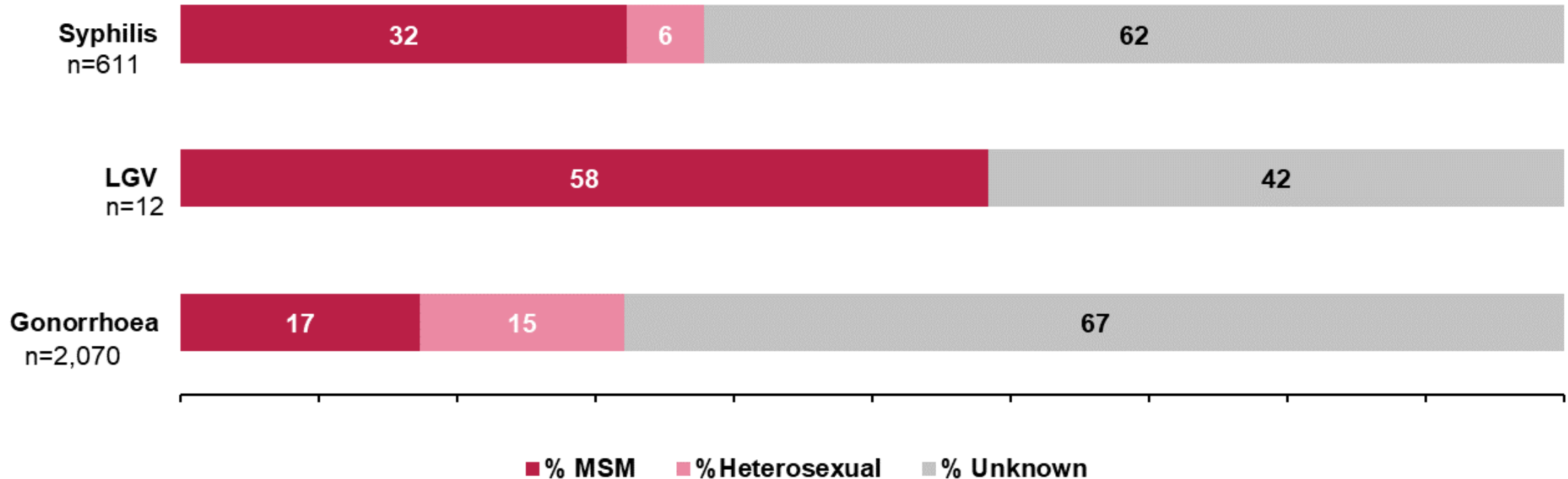
# Mode of transmission summary, 2019

Men who have sex with men (MSM) disproportionately affected



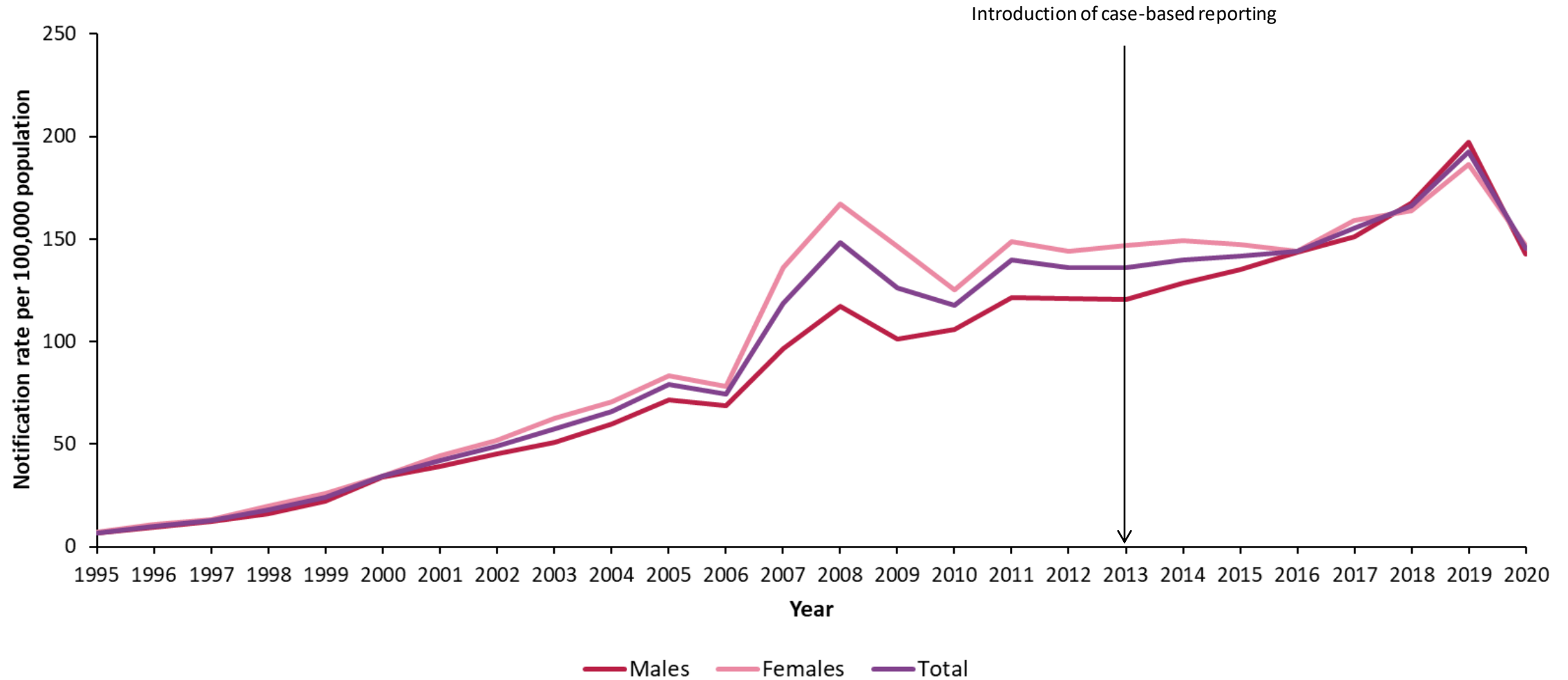
# Mode of transmission summary, 2020

2020 mode of transmission data are difficult to interpret due to the impact of the COVID-19 pandemic



# Chlamydia in Ireland

Trend in notification rate of chlamydia by sex, 1995-2020



# Chlamydia in Ireland, 2019

## Summary

- 9,173 cases of chlamydia notified in 2019 (192.4 per 100,000 population)
  - 16% increase on 2018
- Increase was slightly higher in males (+17%) than females (+14%)
  - Increase was highest among those aged 15-19 years for both males and females
- Rate in males (197.1/100,000) exceeded the rate in females (187.0/100,000)
  - Rate was highest among those aged 20-24 years for both males and females
- 51% of cases were young people aged 15-24 years

# Chlamydia in Ireland, 2020

## Summary

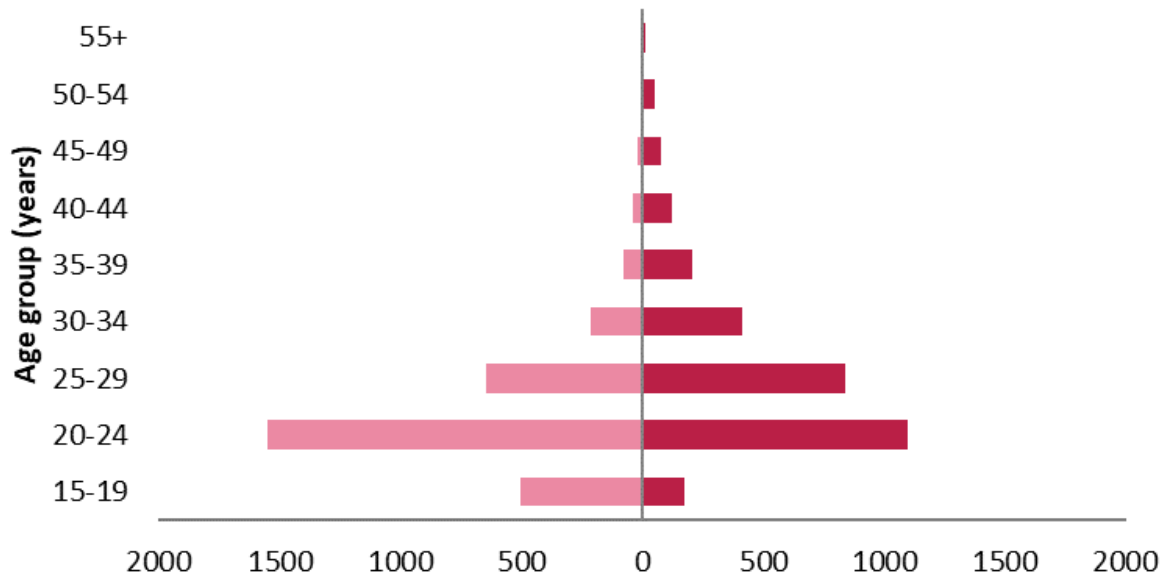
- 6,937 cases of chlamydia notified in 2020 (145.2 per 100,000 population)
  - 24% decrease on 2019 likely due to the impact of the COVID-19 pandemic
- Decrease was more pronounced in males (-27%) than females (-21%)
  - Females: largest decrease (-31%) among older age group (45-49 years)
  - Males: largest decrease (-39%) among younger age group (15-19 years)
- Rate in females (147.2/100,000) was slightly higher than the rate among males (142.9/100,000)
  - Rate was highest among those aged 20-24 years for both males and females
- 50% of cases were young people aged 15-24 years

# Chlamydia in Ireland



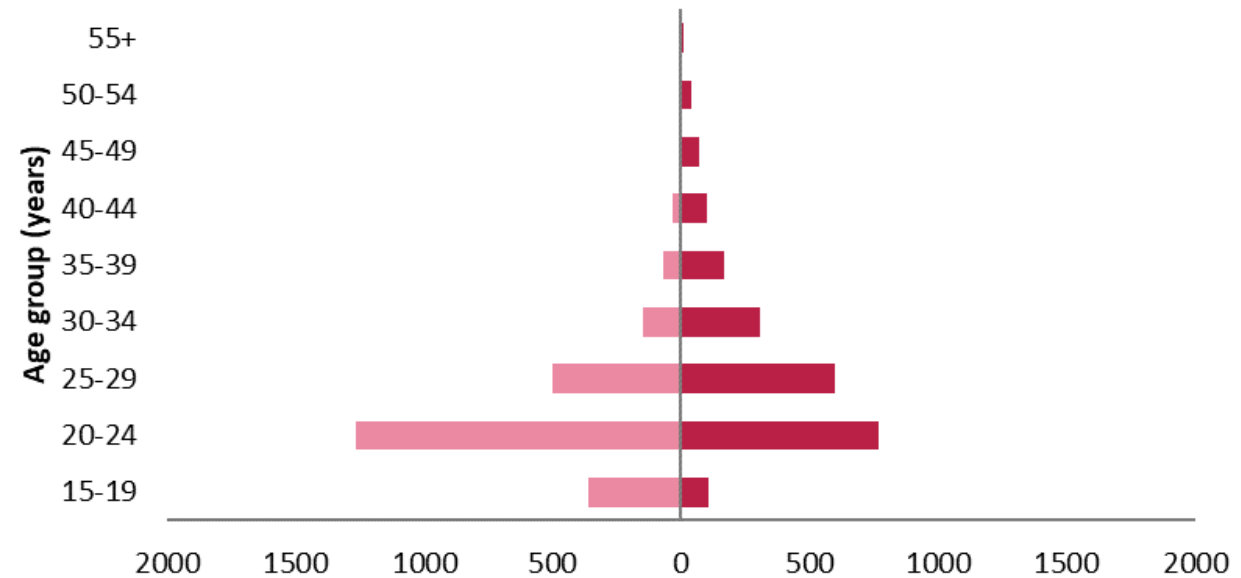
Notification rate of chlamydia by sex and age group, 2019 and 2020

**2019:**



Rate per 100,000 population

**2020:**



Rate per 100,000 population

These graphs exclude individuals whose age was less than 15 years and cases where age/sex was unknown



# LGV in Ireland, 2019

## Summary

- 39 cases of Lymphogranuloma venereum (LGV) notified in 2019, up from 28 cases in 2018
- Notification rate was 0.8 per 100,000 population
- Median age: 34 years (range: 20-62 years)
- All cases were male and where known, all cases were men who have sex with men
  - Mode of transmission was available for 87% of cases
- 38% were HIV positive
  - HIV status was available for 67% of cases

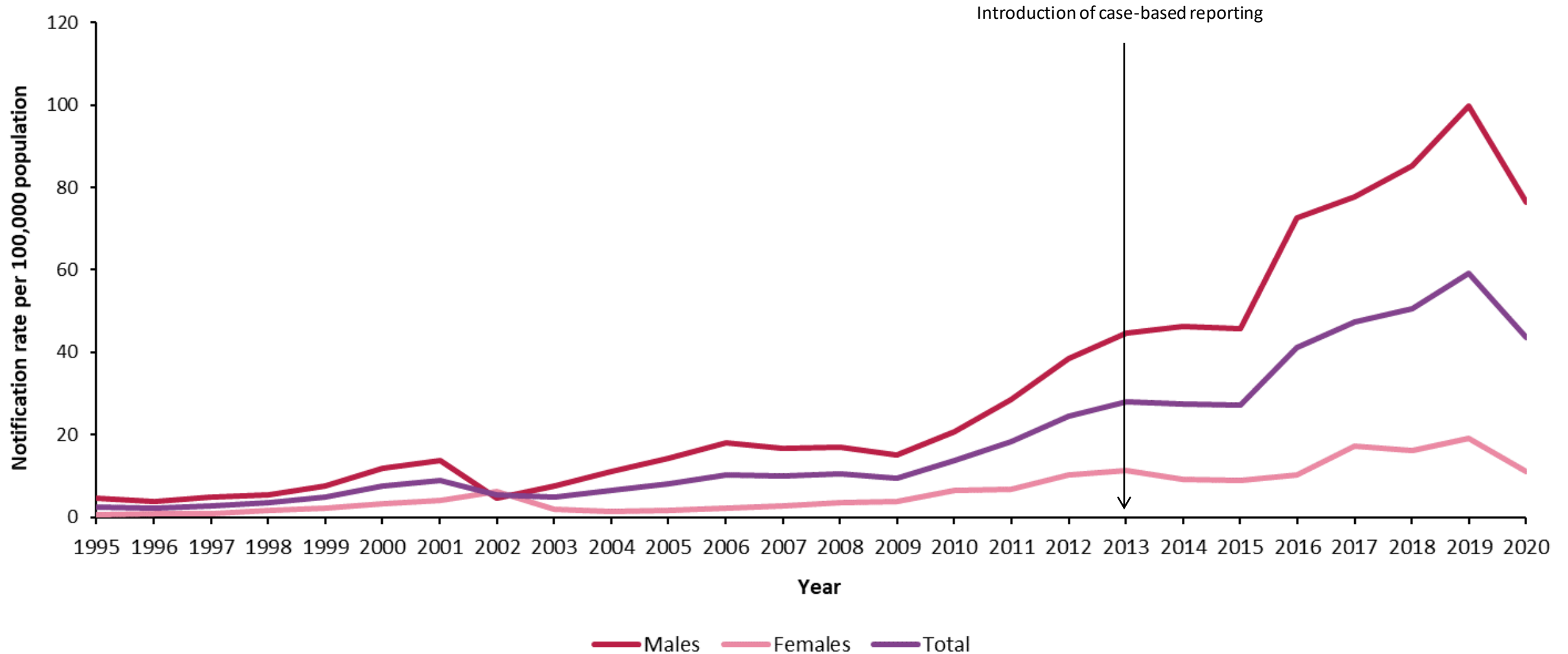
# LGV in Ireland, 2020

## Summary

- 12 cases of Lymphogranuloma venereum (LGV) notified in 2020, down from 39 cases in 2019
- Notification rate was 0.3 per 100,000 population
- Median age: 36 years (range: 22-59 years)
- All cases were male and where known, all cases were men who have sex with men
  - Mode of transmission was available for 58% of cases
- 25% were HIV positive
  - HIV status was available for 33% of cases
- Collection of enhanced surveillance data in 2020 was affected by the COVID-19 pandemic

# Gonorrhoea in Ireland

Trend in notification rate of gonorrhoea by sex, 1995-2020



# Gonorrhoea in Ireland, 2019

## Summary

- 2,812 cases of gonorrhoea notified in 2019
- Notification rate increased by 17% to 59.1/100,000 from rate in 2018
- 84% males, 16% females
- Median age: 28 years
- Highest rate among males: 25-29 year age group (402.8/100,000);
- Highest rate among females: 20-24 year age group (143.3/100,000)
- Almost a third (31%) of cases were young people aged 15-24 years
- 62% of cases were among MSM and 38% among heterosexuals, where mode of transmission was known
  - Mode of transmission was known for 55% of cases in 2019

# Gonorrhoea in Ireland, 2020

## Summary

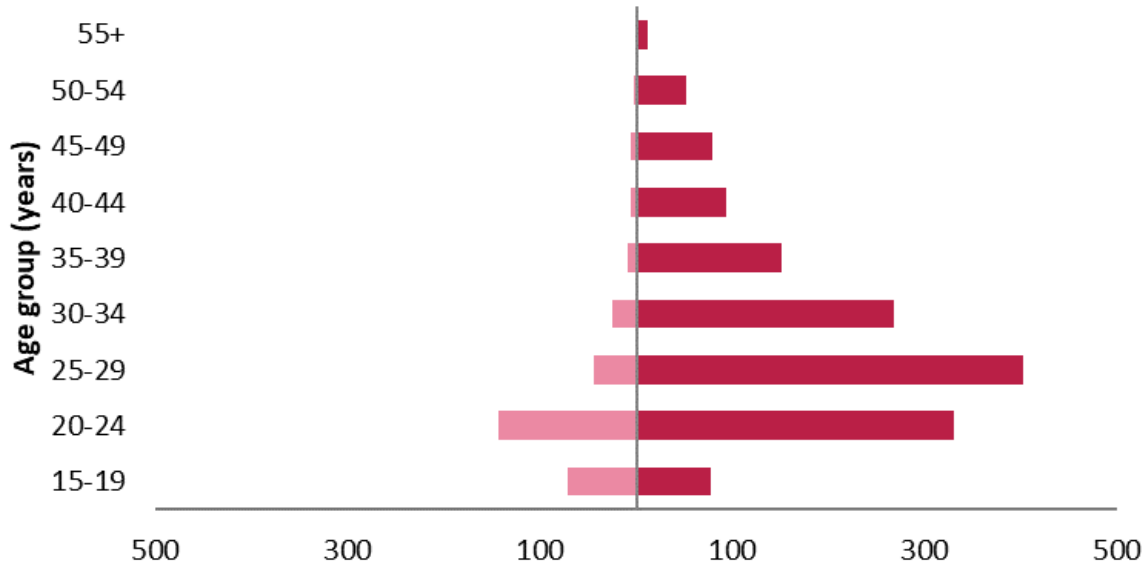
- 2,070 cases of gonorrhoea notified in 2020
- Notification rate decreased by 26% to 43.5/100,000 from rate in 2019 likely due to the impact of the COVID-19 pandemic
- 87% males, 13% females
- Median age: 30 years
- Highest rate among males: 25-29 year age group (275.4/100,000);
- Highest rate among females: 20-24 year age group (64.7/100,000)
- Over a quarter (28%) of cases were young people aged 15-24 years
- 53% of cases were among MSM, 45% were among heterosexuals and 2% were reported as "Other", where mode of transmission was known
  - Mode of transmission was known for 33% of cases in 2020

# Gonorrhoea in Ireland



Notification rate of gonorrhoea by sex and age group, 2019 and 2020

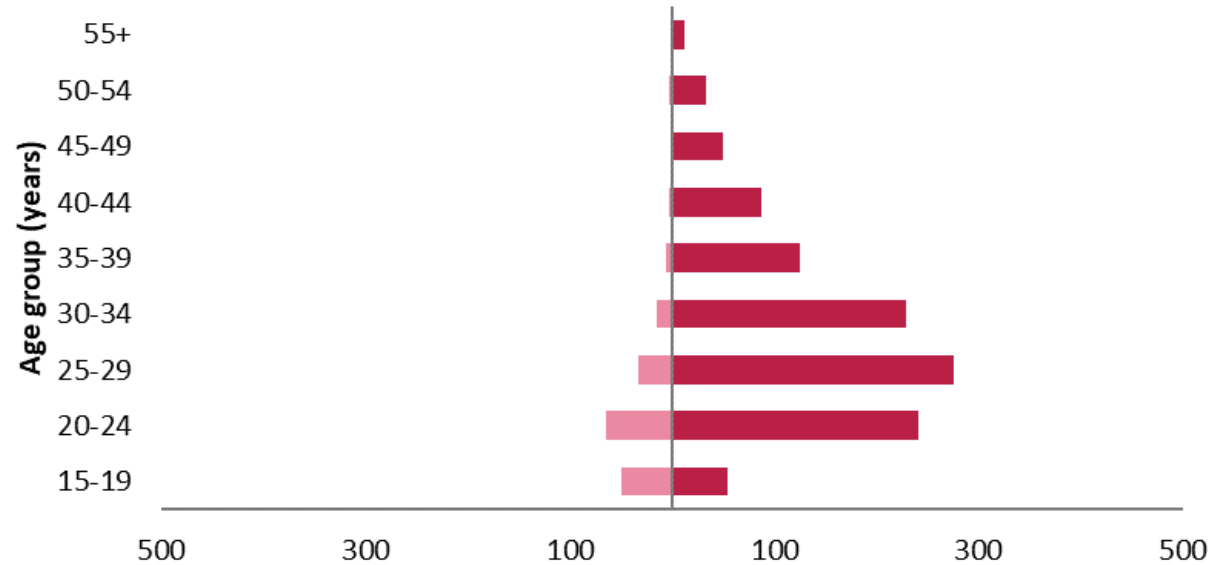
**2019:**



	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55+
■ Male	78.1	330.0	402.8	267.4	151.8	93.5	79.8	52.6	11.3
■ Female	71.0	143.3	43.4	24.9	9.6	5.0	5.5	2.0	0.8

Rate per 100,000 population

**2020:**



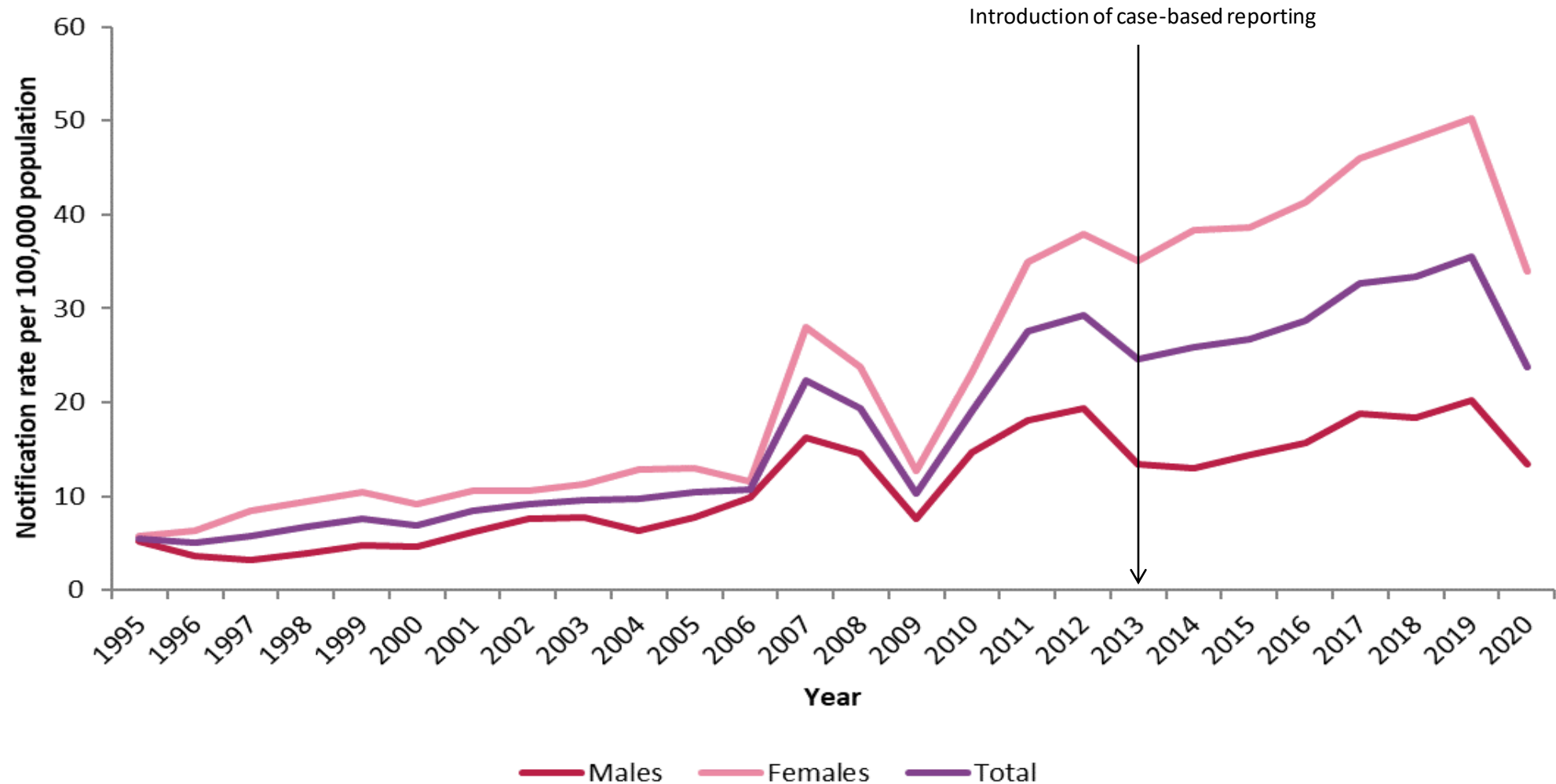
	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55+
■ Males	54.9	240.6	275.4	228.7	124.6	87.9	49.1	33.1	11.3
■ Females	49.4	64.7	32.8	15.4	6.6	2.8	1.8	2.6	0.2

Rate per 100,000 population

These graphs exclude individuals whose age was less than 15 years and cases where age/sex was unknown

# Herpes simplex (genital) in Ireland

Trend in notification rate of herpes simplex (genital) by sex, 1995-2020



# Herpes simplex (genital) in Ireland, 2019

## Summary

- 1,689 cases of herpes simplex (genital) notified in 2019
- Notification rate was 35.5 per 100,000 population in 2019; a 6% increase since 2018 (33.4/100,000)
- 72% of cases were among females
- The highest age-specific rate was among females aged 20-24 years (279.3/100,000)
- Median age: 27 years
- 65% of cases were laboratory confirmed as herpes simplex virus type 1 and 34% as herpes simplex virus type 2; virus type was unknown for 1% of cases



# Herpes simplex (genital) in Ireland, 2020

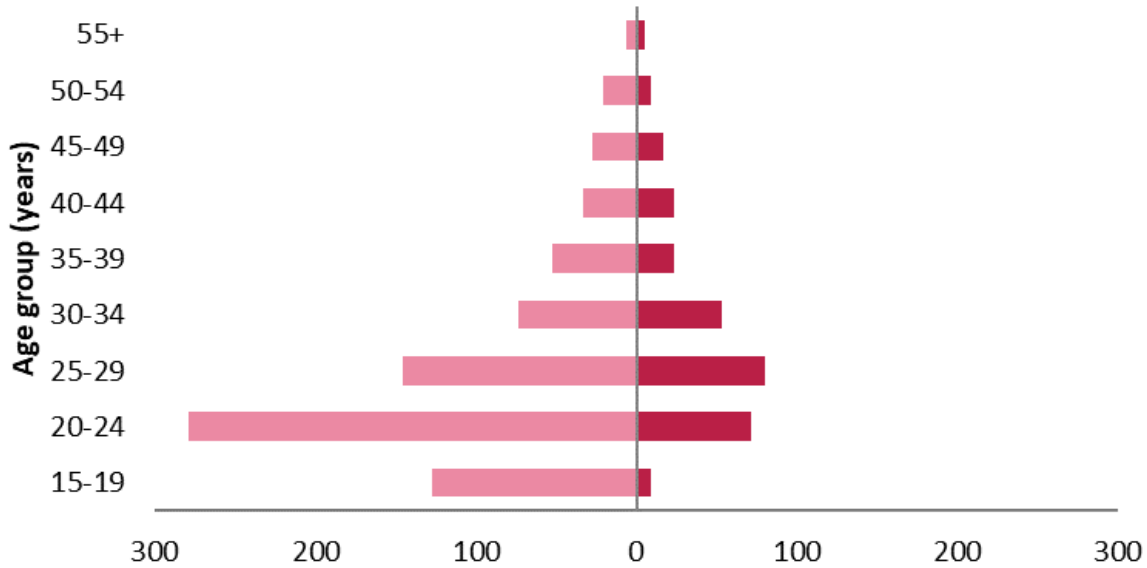
## Summary

- 1,133 cases of herpes simplex (genital) notified in 2020
- Notification rate was 23.8 per 100,000 population in 2020; a 33% decrease since 2019 (35.5/100,000) likely due to the impact of the COVID-19 pandemic
- 72% of cases were among females
- The highest age-specific rate was among females aged 20-24 years (174.9/100,000)
- Median age: 27 years
- 57% of cases were laboratory confirmed as herpes simplex virus type 1 and 34% as herpes simplex virus type 2; virus type was unknown for 9% of cases

# Herpes simplex (genital) in Ireland

Notification rate of Herpes simplex (genital) by sex and age group, 2019 and 2020

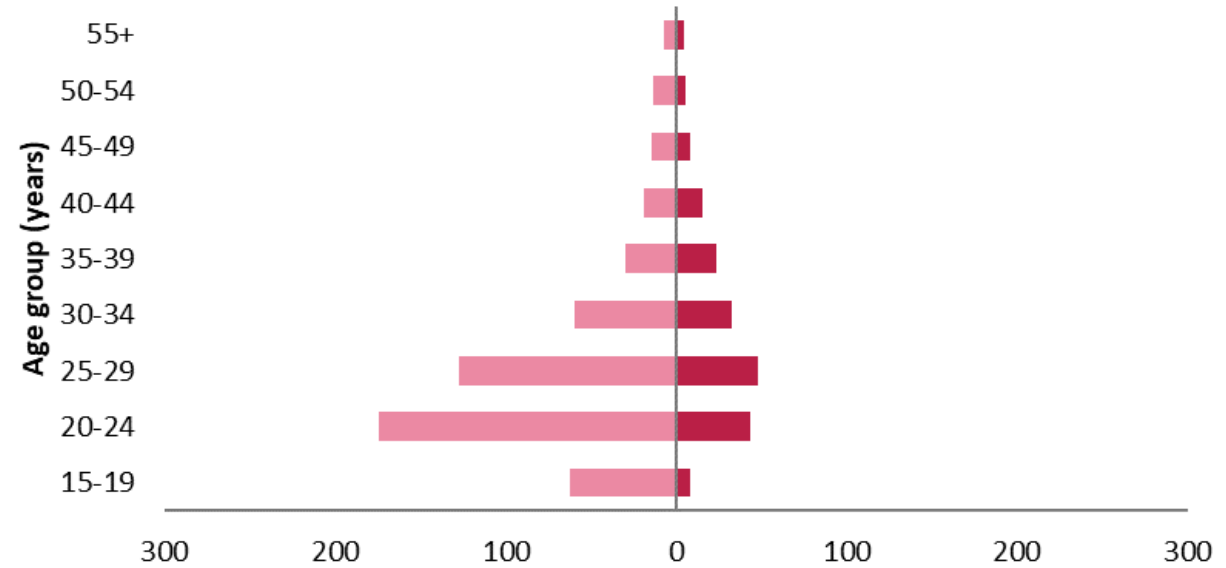
2019:



	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55+
Male	9.0	71.2	80.6	53.7	23.6	23.1	16.6	8.8	4.9
Female	127.8	279.3	145.2	73.6	52.4	33.3	26.9	21.1	6.5

Rate per 100,000 population

2020:



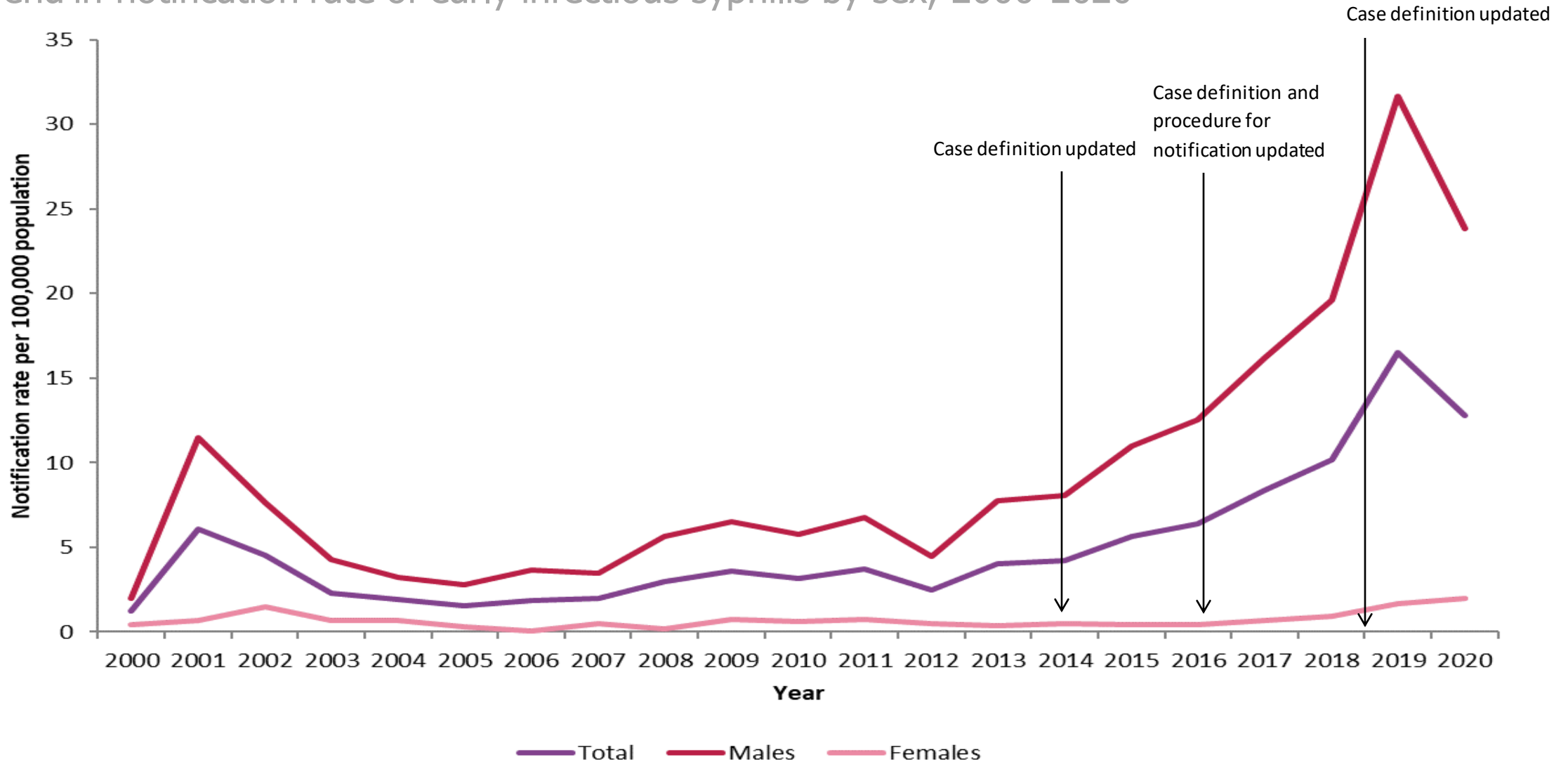
	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55+
Males	7.7	43.6	47.5	32.3	23.0	15.2	8.0	5.4	4.6
Females	62.2	174.9	127.5	59.9	30.2	18.9	14.1	13.2	6.9

Rate per 100,000 population

These graphs exclude individuals whose age was less than 15 years and cases where age/sex was unknown

# Early infectious syphilis in Ireland

Trend in notification rate of early infectious syphilis by sex, 2000-2020



# Early infectious syphilis in Ireland, 2019

## Summary

- 787 cases of early infectious syphilis (EIS) were notified in 2019
- Notification rate increased to 16.5 per 100,000 population; up 62% from 2018 (10.2/100,000)
- 95% of cases were among males
- Median age: 33 years
- The highest rate in males and females was in 25-29 year olds (115.0 per 100,000 population and 9.9 per 100,000 population, respectively)
- The majority (80%) of cases were reported by HSE East
- Where mode of transmission was recorded, 86% of cases were in MSM
  - Mode of transmission was available for 67% of cases
- Where HIV status was recorded, 36% of EIS cases were HIV positive
  - HIV status was available for 62% of cases
- 15% of cases were consistent with syphilis reinfection

# Early infectious syphilis in Ireland, 2020

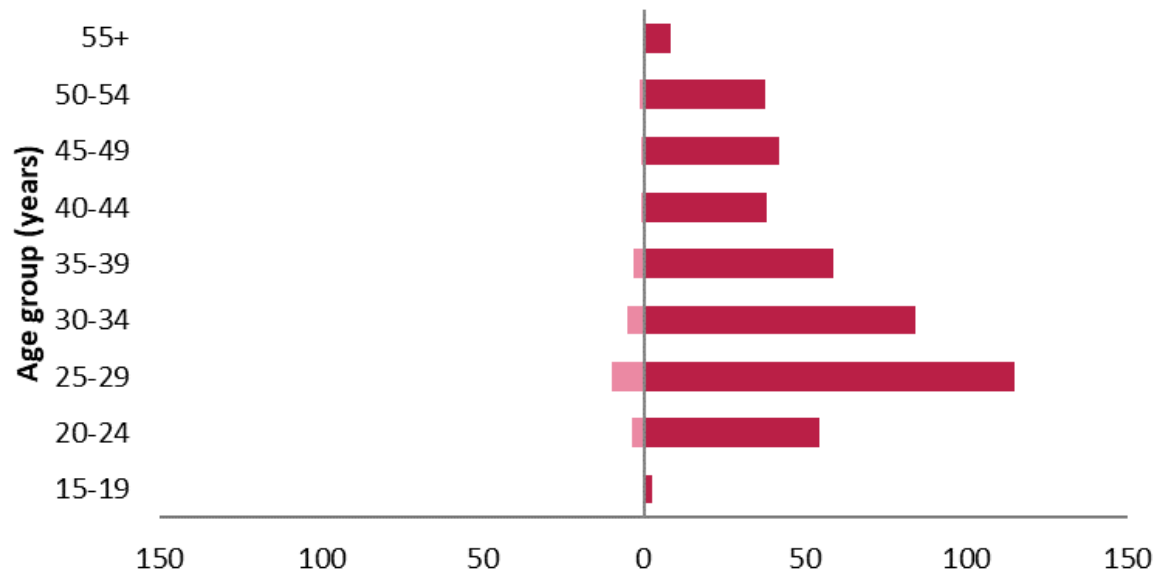
## Summary

- 611 cases of early infectious syphilis (EIS) were notified in 2020
- Notification rate decreased to 12.8 per 100,000 population; down 22% from 2019 likely due to the impact of the COVID-19 pandemic, but the rate remained higher than previous years
- 92% of cases were among males
- Median age: 34 years (range:17-87 years)
- The highest rate in males and females was in 30-34 year olds (75.6 per 100,000 population and 6.9 per 100,000 population, respectively)
- The majority (80%) of cases were reported by HSE East
- Where mode of transmission was recorded, 84% of cases were in MSM
  - Mode of transmission was available for 38% of cases
- Where HIV status was recorded, 33% of EIS cases were HIV positive
  - HIV status was available for 33% of cases
- 14% of cases were consistent with syphilis reinfection

# Early Infectious Syphilis in Ireland

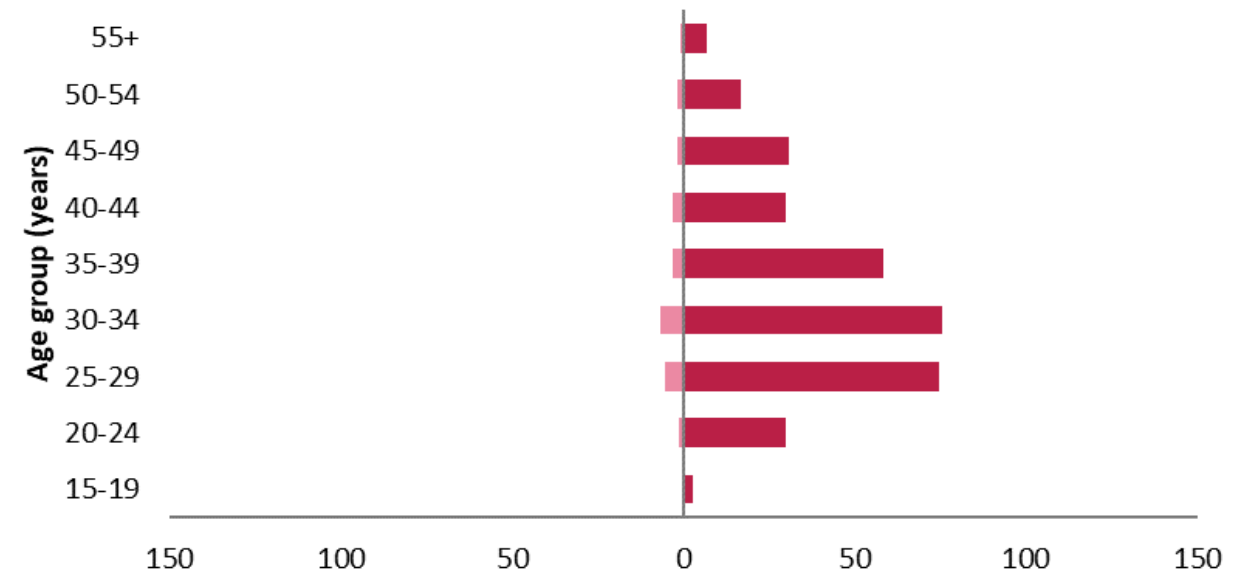
Notification rate of Early Infectious Syphilis by sex and age group, 2019 and 2020

**2019:**



Rate per 100,000 population

**2020:**

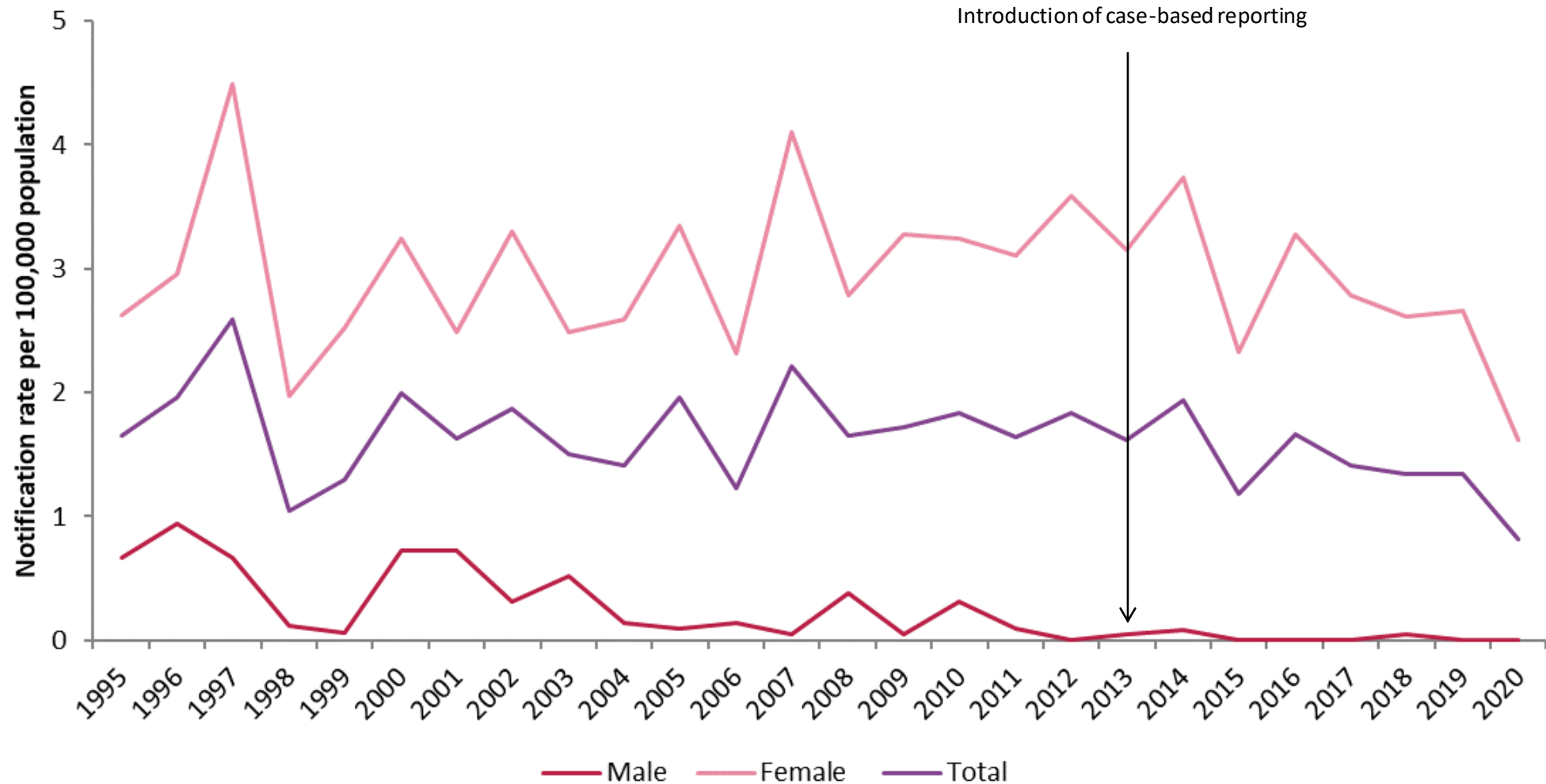


Rate per 100,000 population

These graphs exclude individuals whose age was less than 15 years and cases where age/sex was unknown

# Trichomoniasis in Ireland

Trend in notification rate of trichomoniasis, by sex 1995-2020



# Trichomoniasis in Ireland, 2019

## Summary

- 64 cases of trichomoniasis notified in 2019, unchanged from 2018
- The notification rate was 1.3 per 100,000 population, and has remained fairly steady since the early 2000s
- All cases were female
- Median age: 32 years (range: 16-68 years)
- Numbers and rates should be interpreted with caution as some laboratories use new molecular testing methods that are not currently included in the laboratory criteria for notification, therefore cases may be underreported.



# Trichomoniasis in Ireland, 2020

## Summary

- 39 cases of trichomoniasis notified in 2020, a 39% decrease from 2019
- The notification rate was 0.8 per 100,000 population
- All cases were female
- Median age: 30 years (range: 17-65 years)
- Numbers and rates should be interpreted with caution as some laboratories use new molecular testing methods that are not currently included in the laboratory criteria for notification, therefore cases may be underreported.

# Other notifiable STIs in Ireland, 2019 and 2020

Summary: chancroid, granuloma inguinale, anogenital warts and non-specific urethritis

- Notifications of anogenital warts and non-specific urethritis from STI clinics and primary care are usually collated by Departments of Public Health and notified to HPSC in aggregate format on a bi-annual basis. Due to the impact of the COVID-19 pandemic, these data were not collated for the second half of 2019 or during 2020.
- Furthermore, interpretation of NSU and AGW trends is difficult due to under-reporting of cases and missing data.
- There were no notifications of chancroid or granuloma inguinale reported in Ireland in 2019 or 2020.

# Preventing STIs

## Safer sex and STI testing

- **Use condoms for vaginal, oral and anal sex**
- **Reduce the number of partners and overlapping partners**
- **Get tested for STIs if:**
  - You have symptoms of an STI;
  - Change your sexual partner;
  - Have multiple or overlapping partners;
  - Your partner has an STI.
- Further information on STIs and **free sexual health services** is available at
  - <https://www.sexualwellbeing.ie/>
  - [www.man2man.ie](http://www.man2man.ie) (resource for gay and bisexual men and other men who have sex with men in Ireland)