



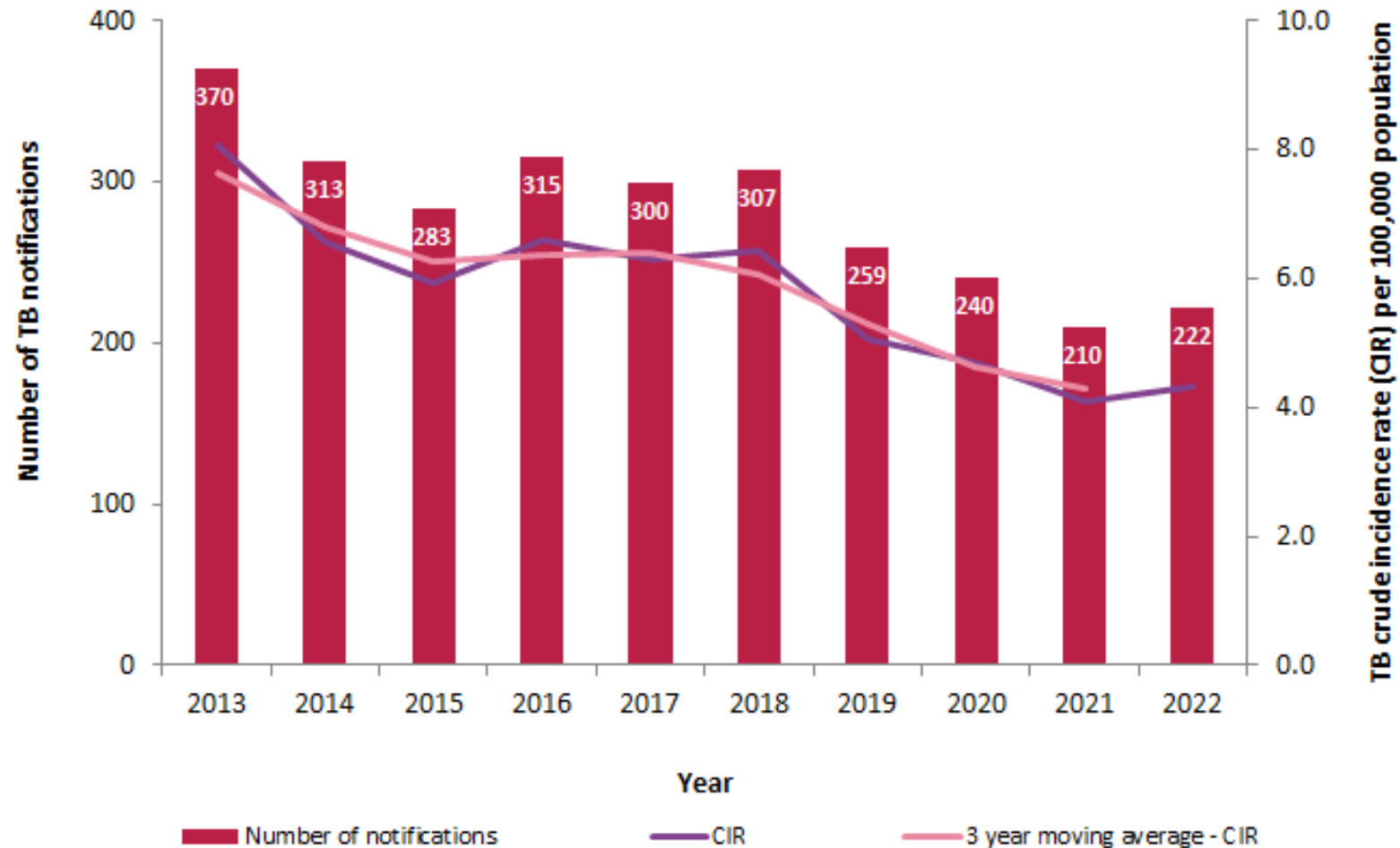
# **Tuberculosis in Ireland: provisional trends in surveillance data**

**Health Protection Surveillance Centre**

# Key points:

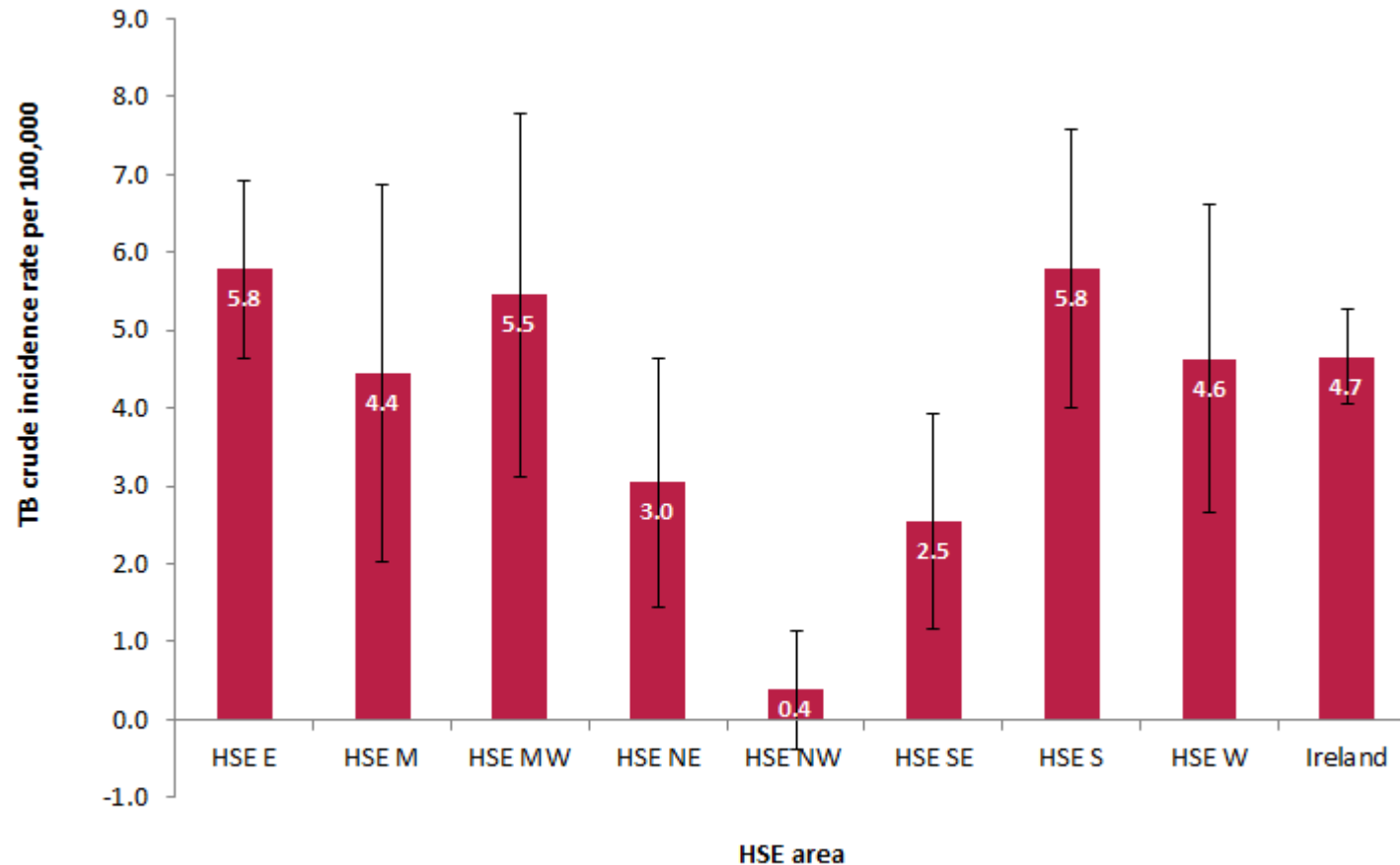
- **Data completeness levels have been impacted by resource re-allocation during the pandemic public health emergency response. Initiatives to improve data quality are underway, but analyses for this time period should be interpreted with caution.**
- TB incidence increased slightly in 2022 but is still below pre-pandemic levels
- No significant increase in paediatric TB rates observed yet despite absence of BCG vaccine
- Increase in MDR /pre-XDR TB in 2021 and 2022
- Decrease in treatment outcome completeness

# Annual TB notifications, rates & 3 year moving average



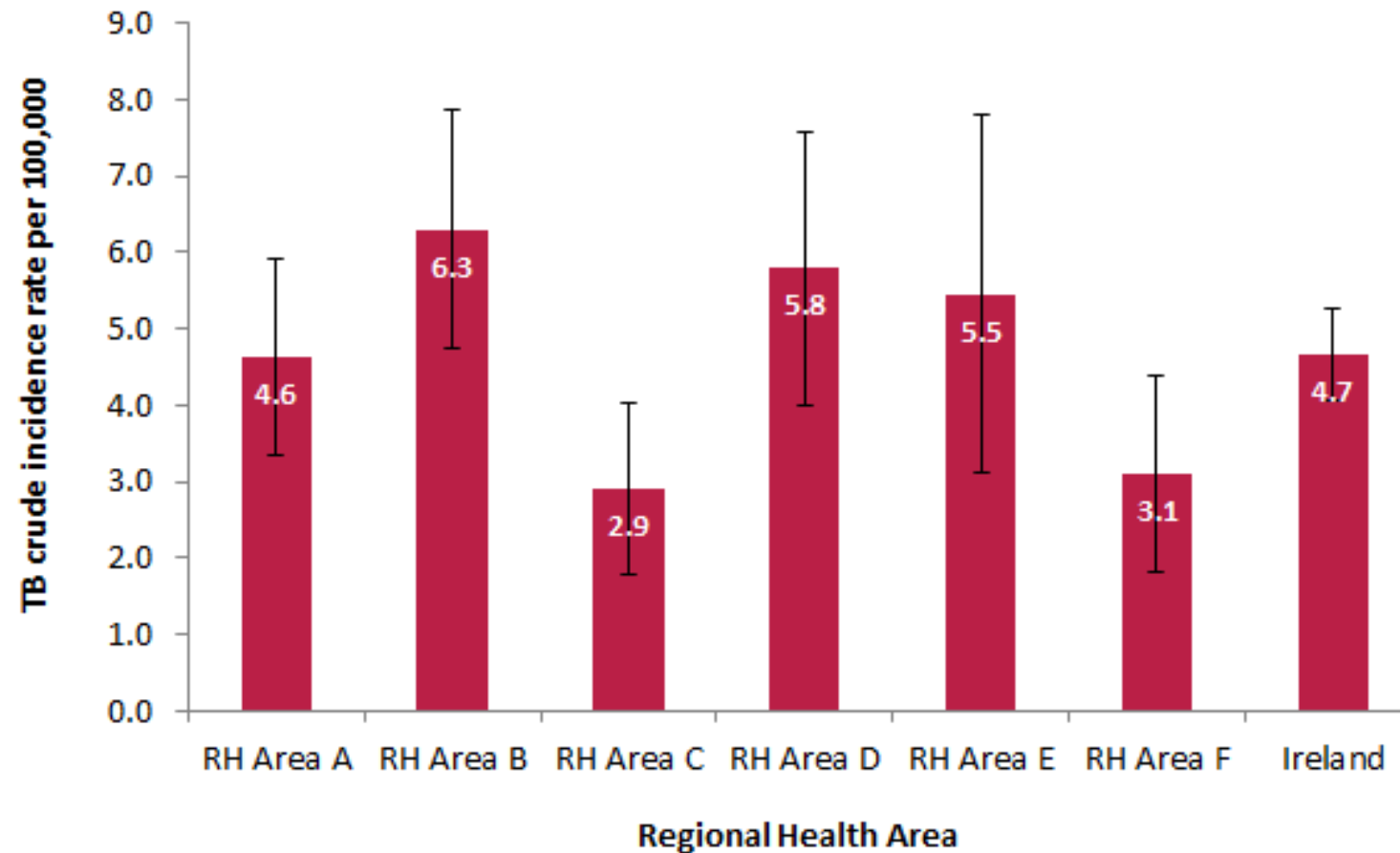
**Key point:** There was a small increase in TB cases during 2022 but not above pre-pandemic levels

# TB crude incidence rate by HSE Area: 2022



**Key point:** Rates of TB in the North West & South East of Ireland were significantly below the national TB rate and no areas were significantly above the national rate in 2022

# TB crude incidence rate by RHA: 2022



**Key point:** The rate of TB in the South East of Ireland ([Area C](#)) was significantly below the national TB rate and no areas were significantly above the national rate in 2022

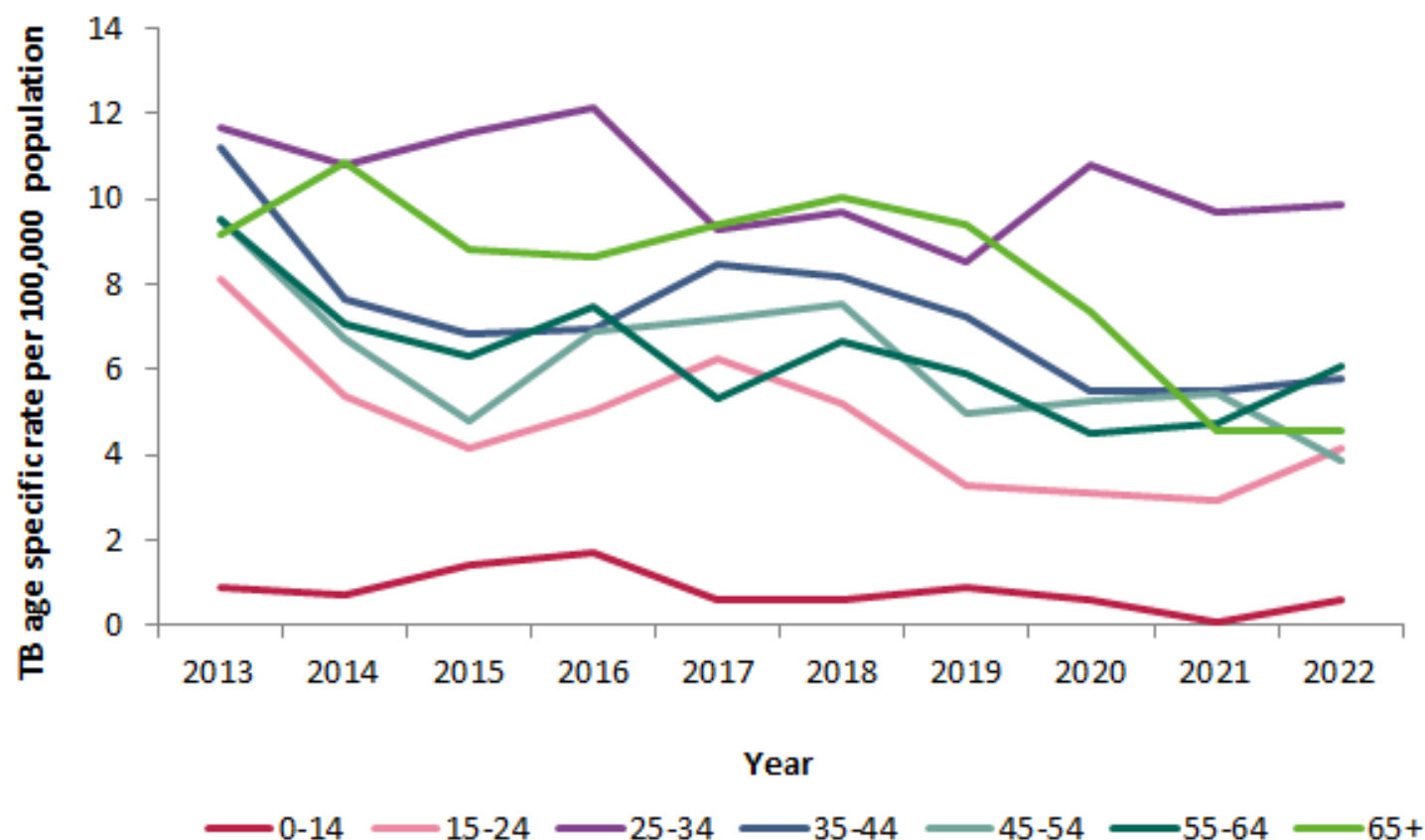
# Annual TB crude incidence rate by RHA



**Key point:** TB rates increased slightly in [Regional Health Areas](#) B, D & E during 2022, but remain lower than pre-pandemic levels

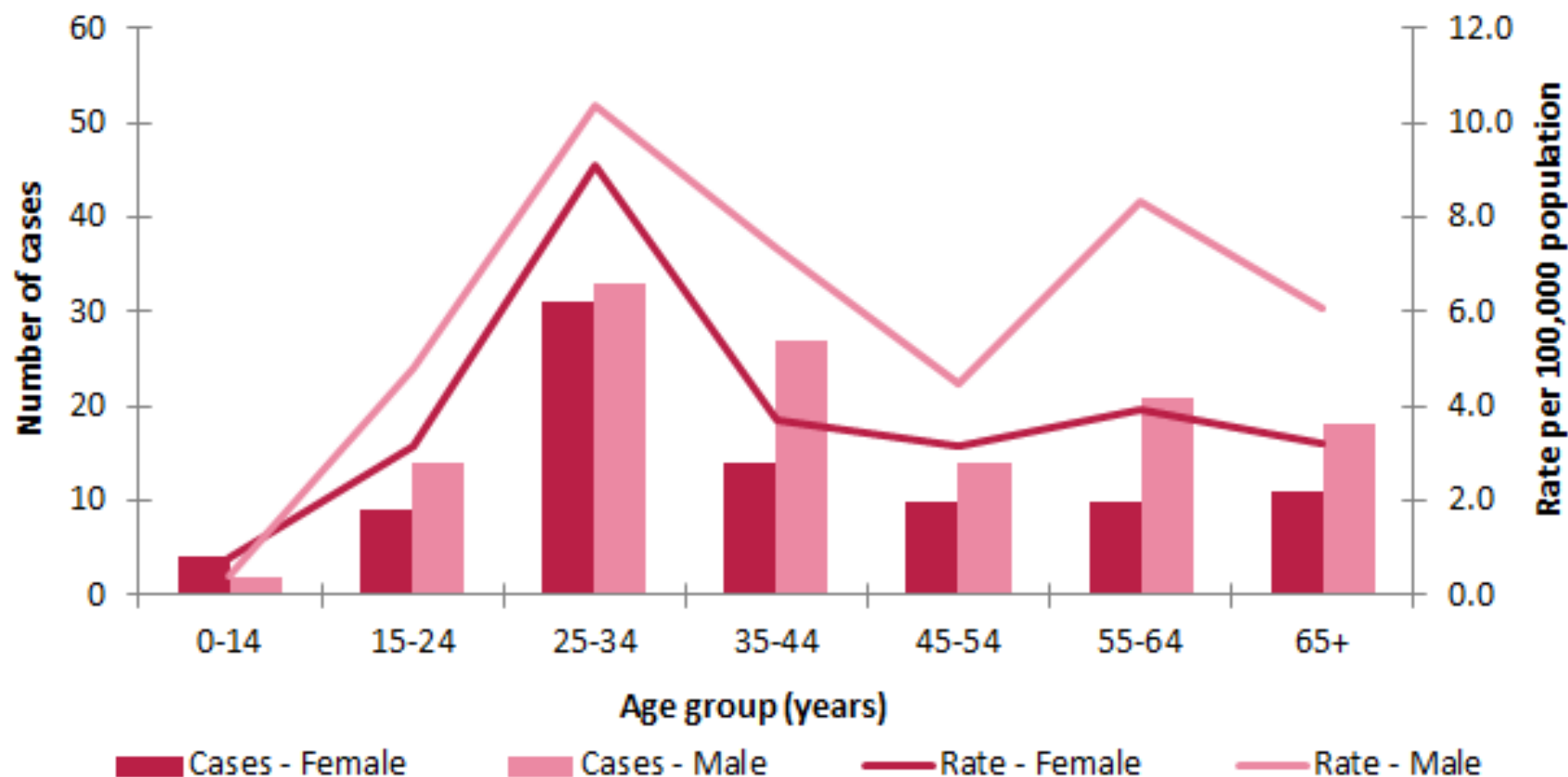
\*Note: national rates differ from annual trend slide, which used 2022 Census, while "RHA" only available for 2016 Census at time of production

# Annual TB age-specific rates



**Key point:** TB rates are highest in those aged 25-34 years old while the lowest TB rates are in the under 15 year olds. Between 2018-2022, rates have decreased in those aged 65 years and older.

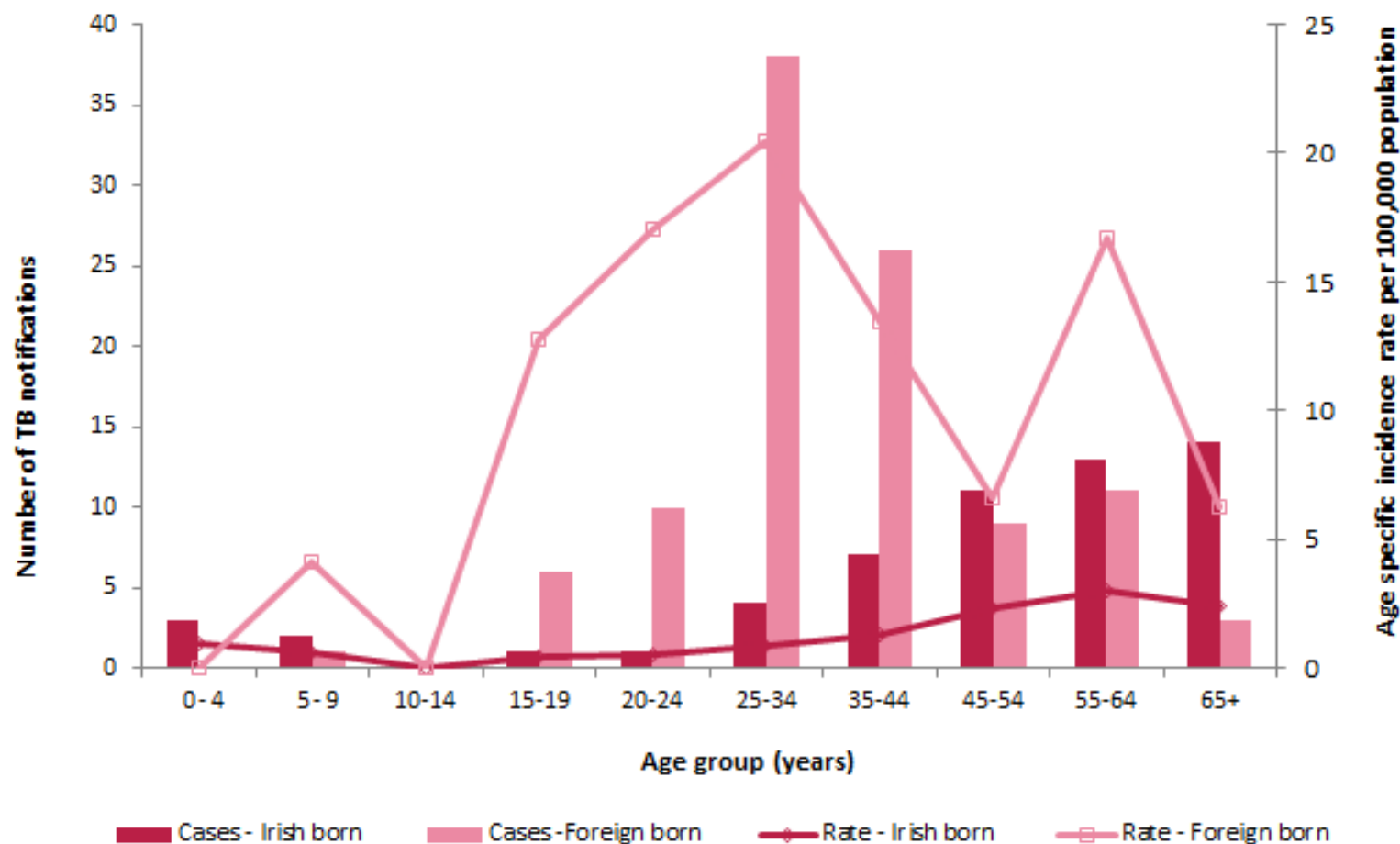
# TB age-specific rates by sex: 2022



**Key point:** TB rates are higher in males compared to females in the majority of age groups

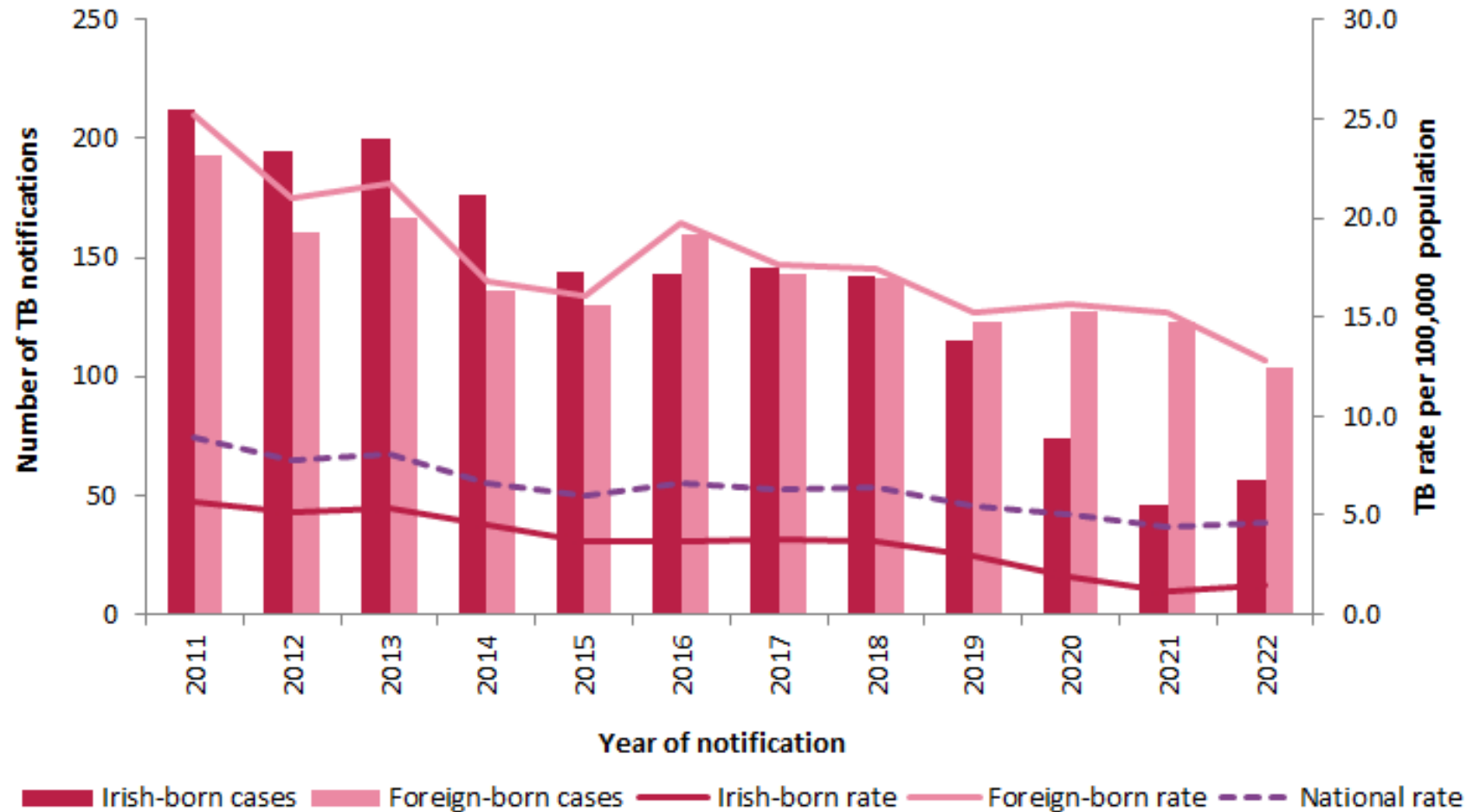


# TB age-specific rates by geographic origin: 2022



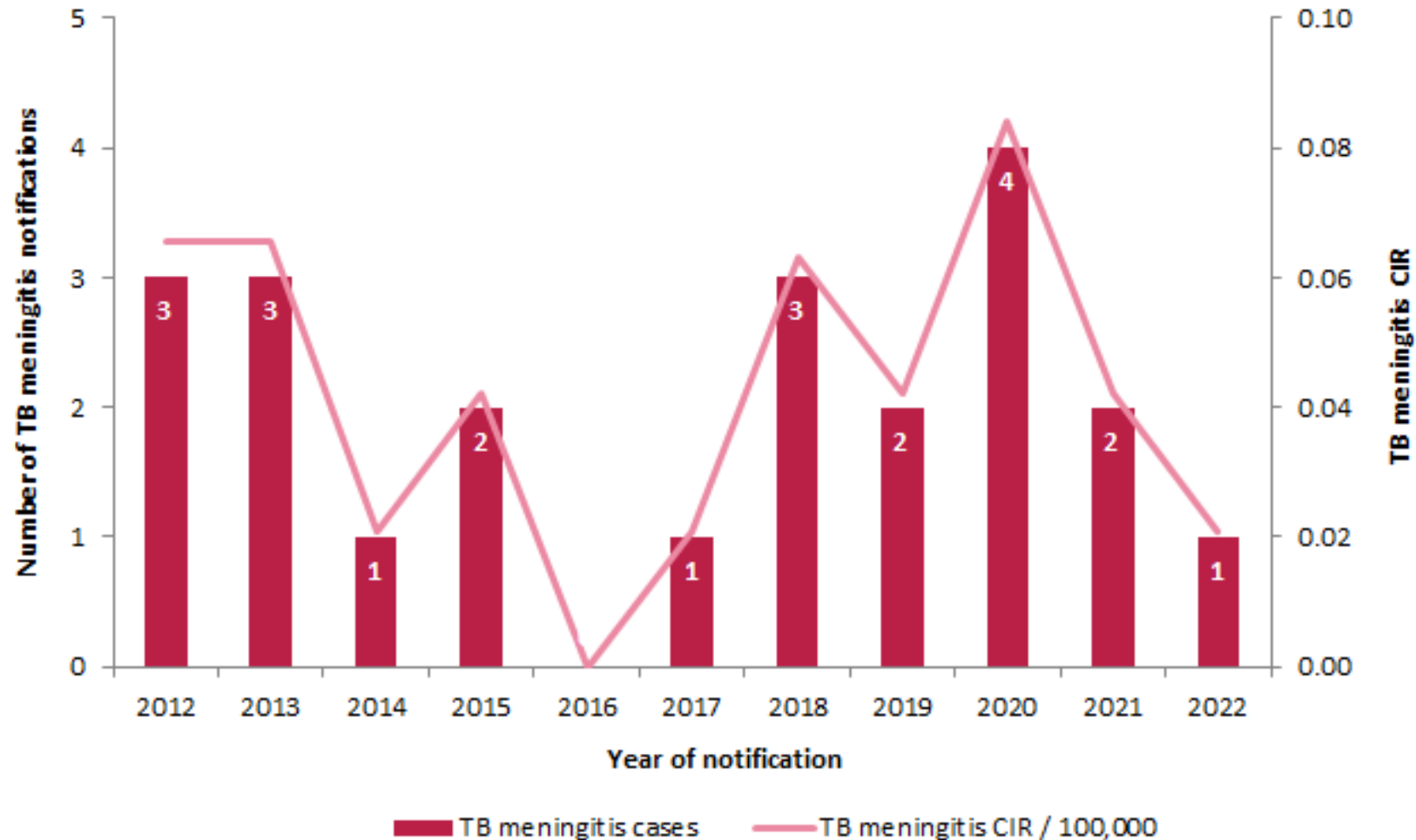
**Key point:** For cases born outside Ireland, TB rates were highest in those aged 25-34 years old. For cases born in Ireland, rates were highest in those aged 55-64 years old.

# TB notifications and rate by geographic origin and year



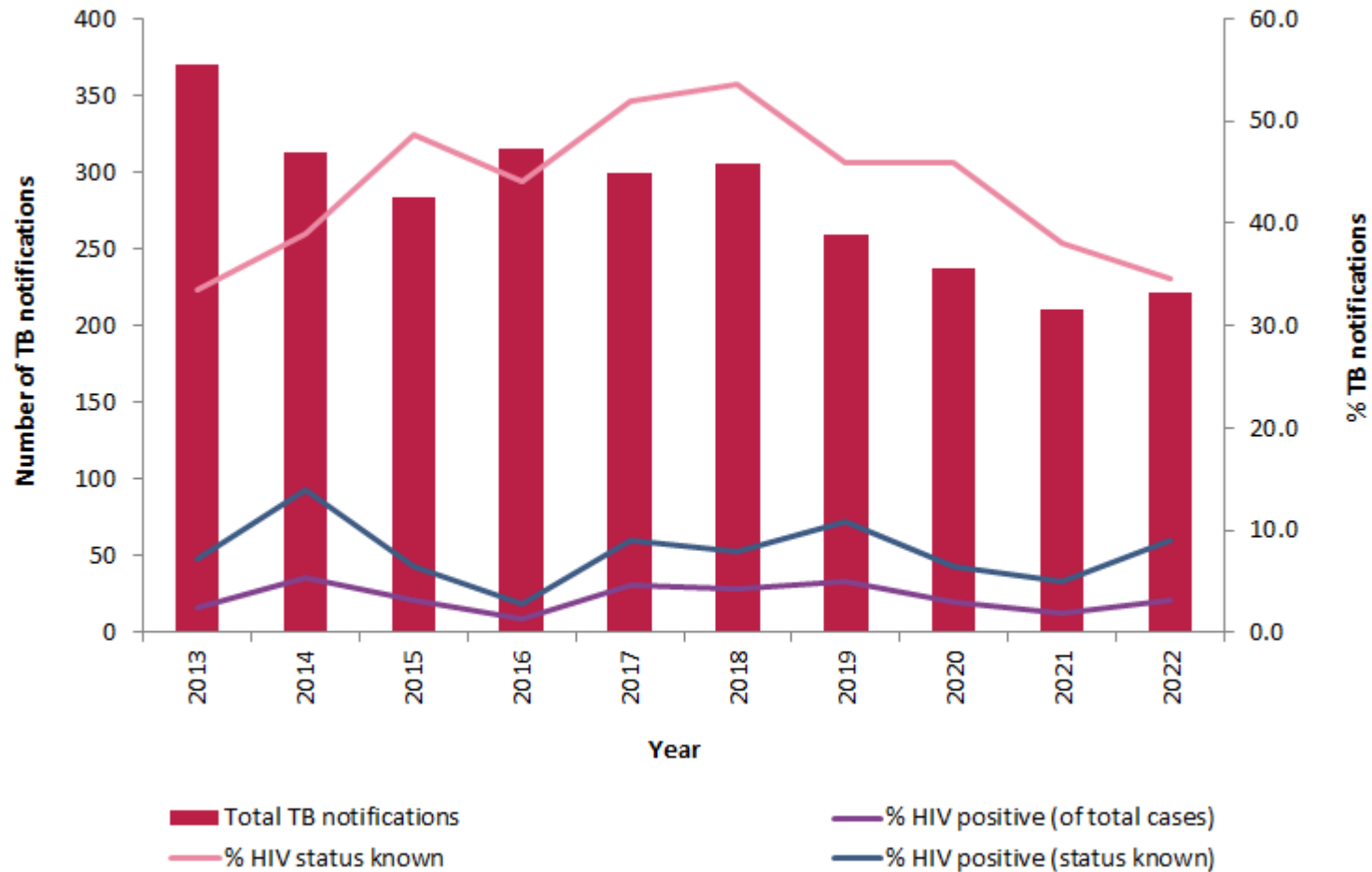
**Key point:** Between 2018-2022, TB rates were higher in people born outside Ireland compared to people born in Ireland

# Annual number and crude incidence rate of TB meningitis cases



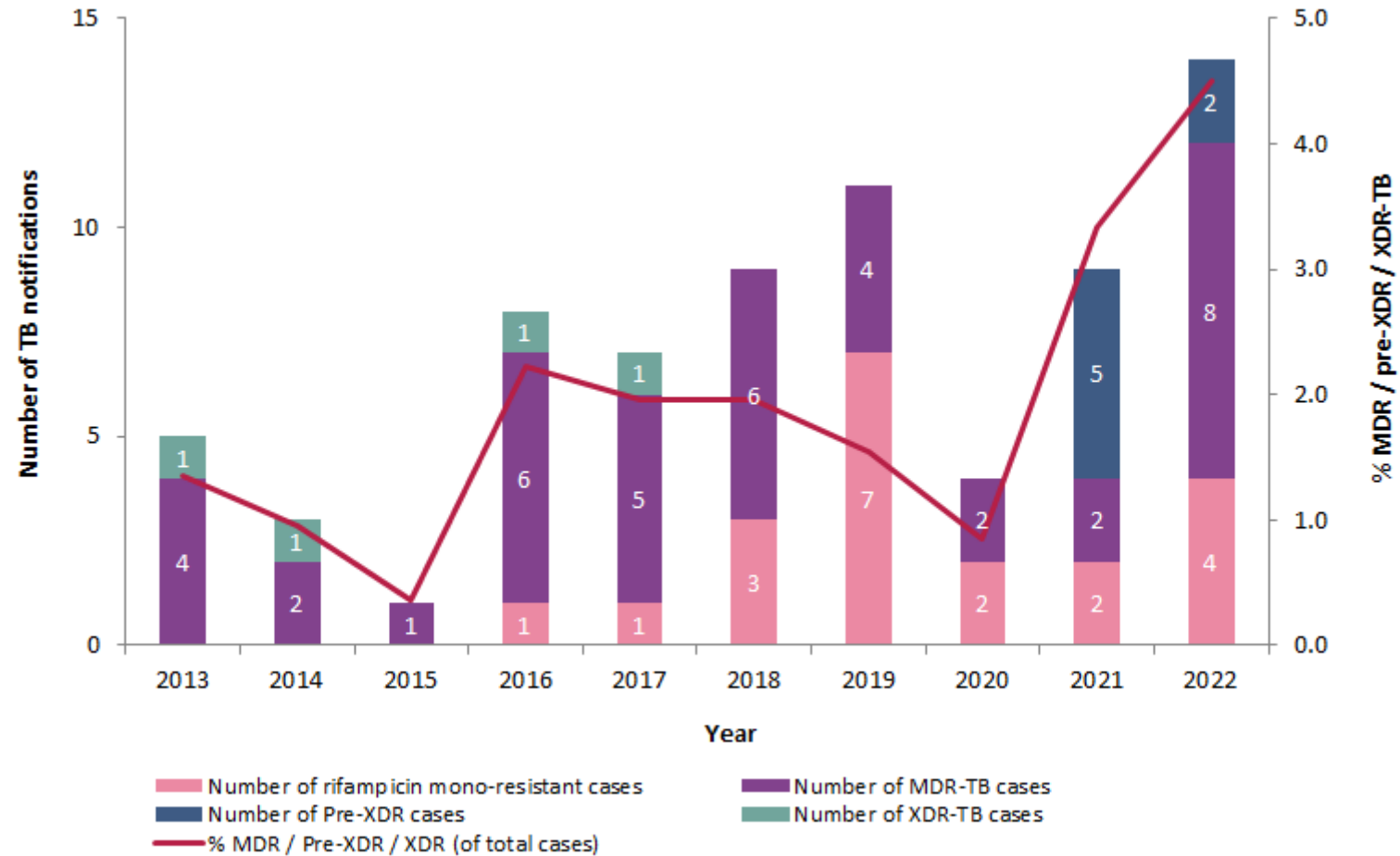
**Key point:** Between 2018-2022, two cases of TB meningitis were in children aged 0-4 years old. The rest of the cases were in adults.

# TB notifications by HIV status and year



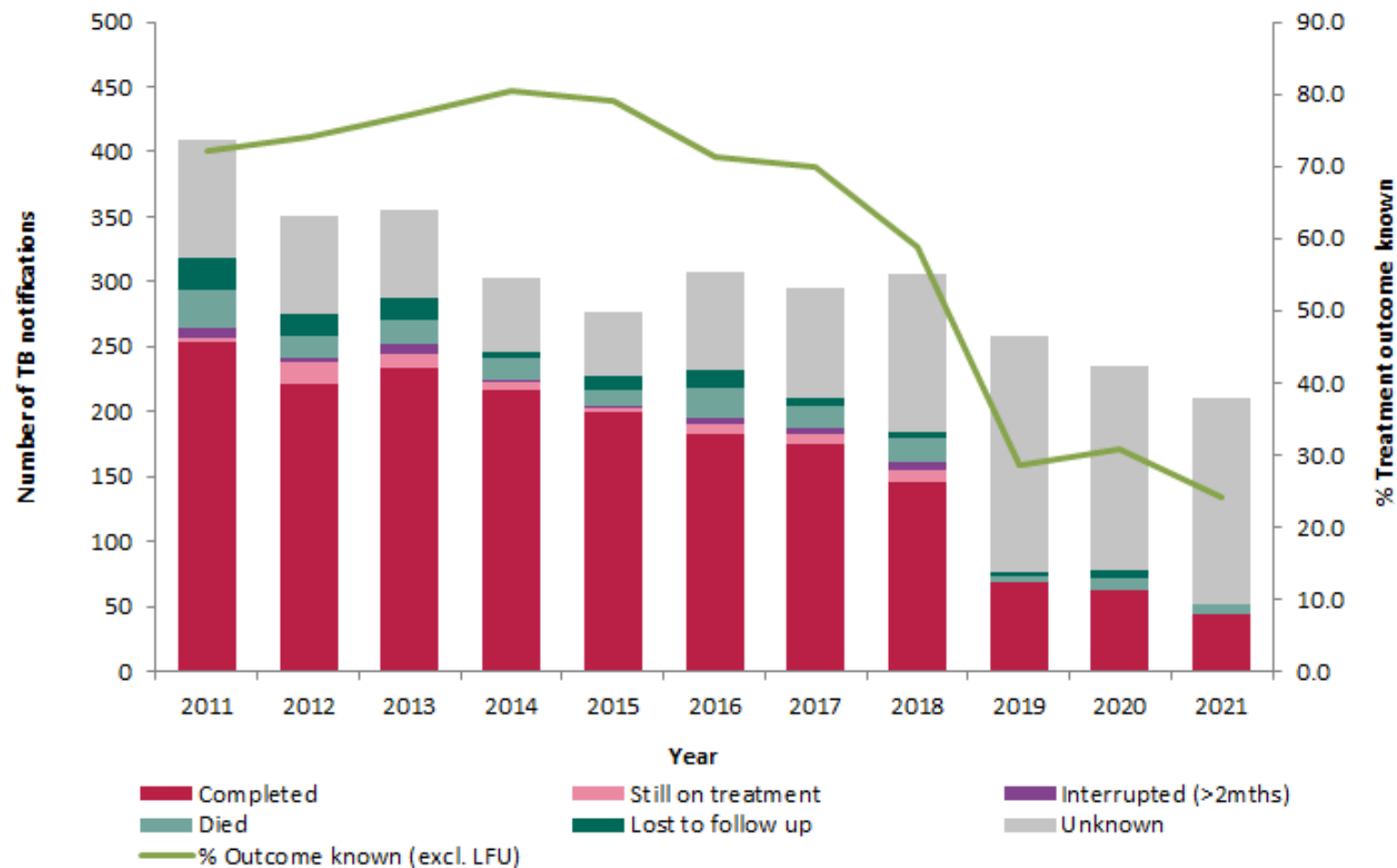
**Key point:** The percentage of TB cases living with HIV remains low but half of cases did not have information on HIV status reported

# Annual number of rifampicin mono-resistant / MDR / pre-XDR / XDR-TB cases & % of total cases



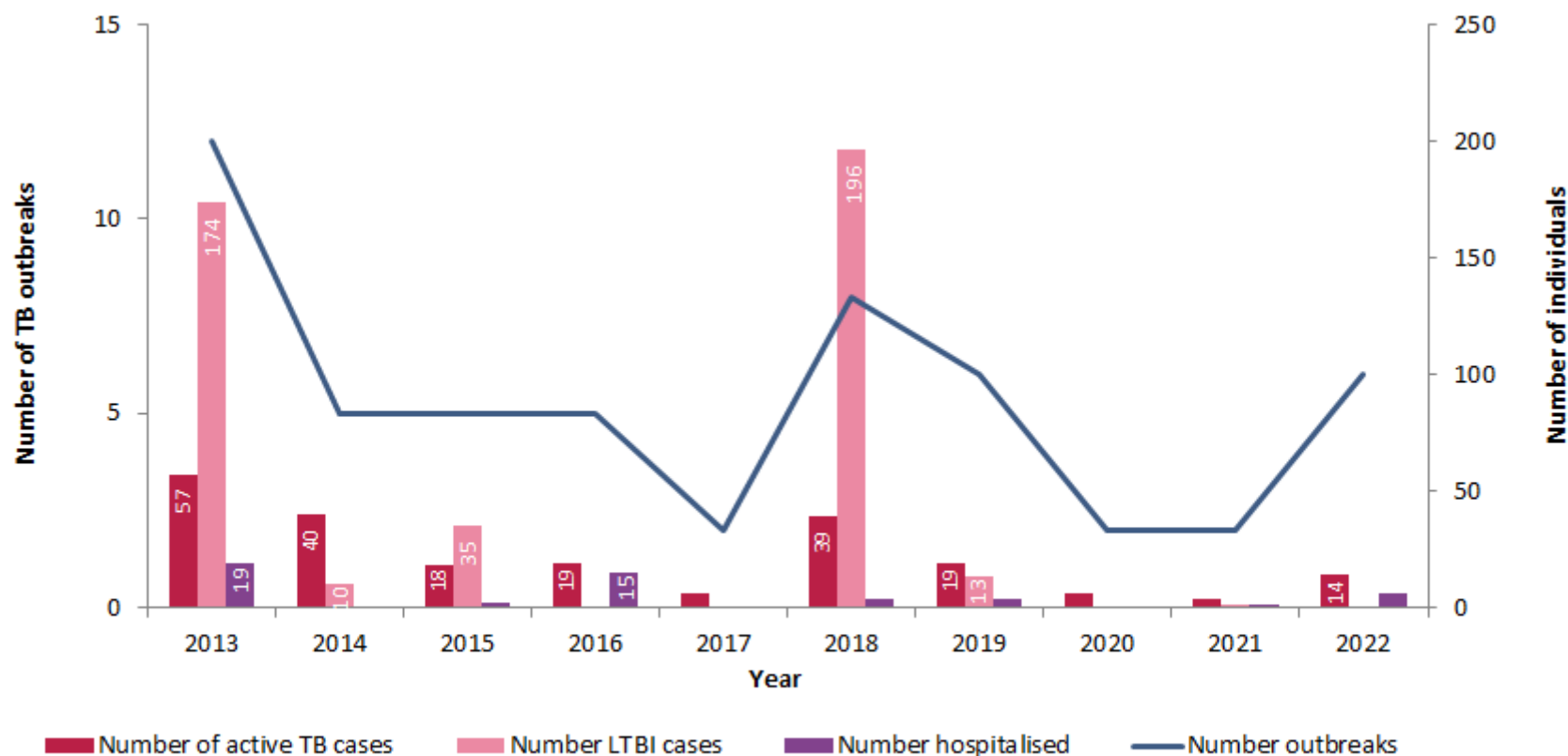
**Key point:** The percentage of TB cases infected with drug resistant strains has increased

# Number of TB notifications by treatment outcomes and year



**Key point:** The percentage of TB cases where information on treatment outcome was reported has decreased.

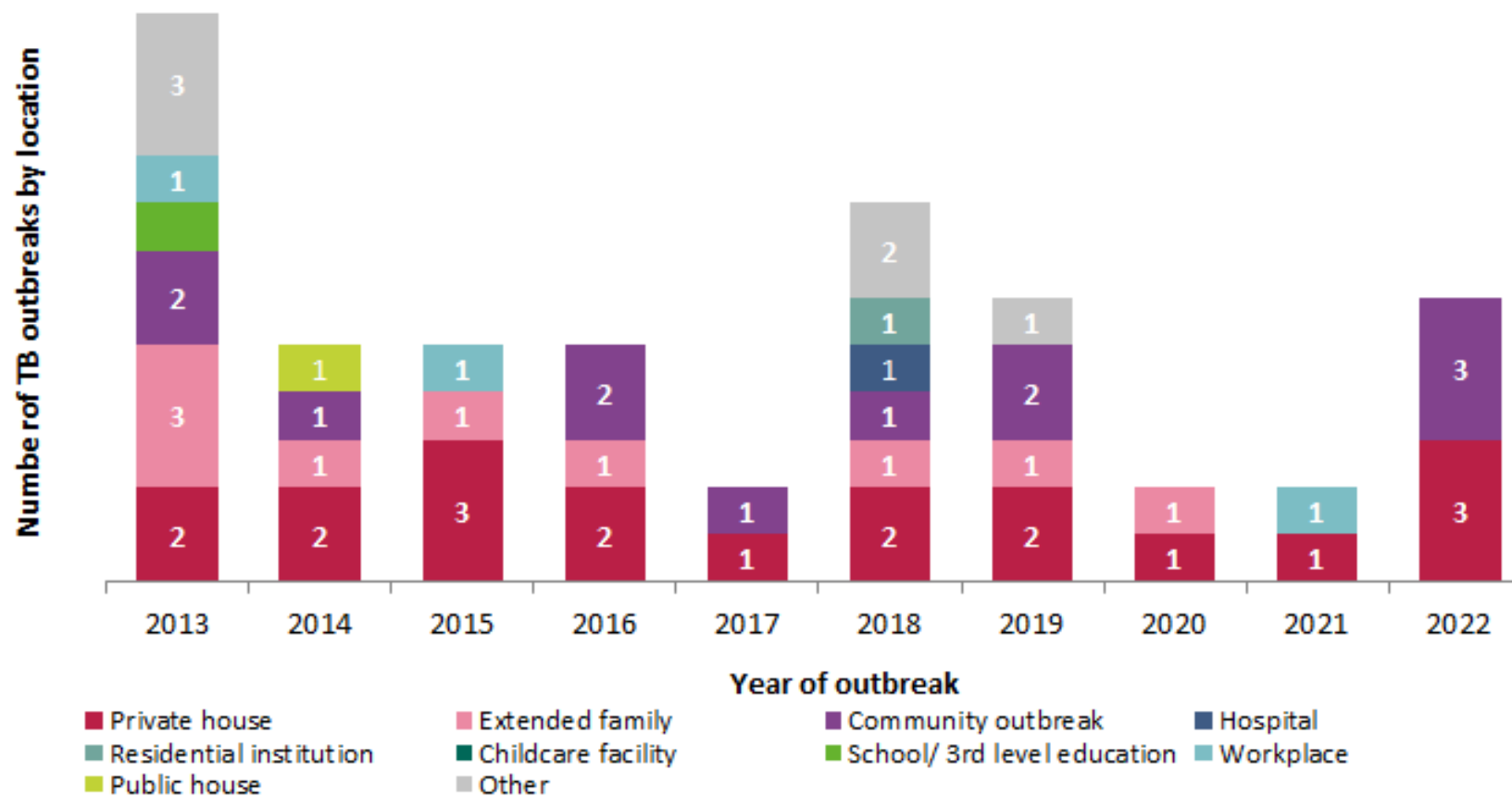
# TB outbreak summary by year



**Key point:** The number of TB outbreaks remained low in 2022\*

\*Note: 3 of the 5 outbreaks reported in 2022 occurred in previous years. These outbreaks were unlinked from historic outbreaks in 2018 & 2019 on basis of WGS results, and linked to their own new outbreak.

# Annual number of TB outbreaks by location



**Key point:** The majority of TB outbreaks occur in private houses/ extended families & community settings.



# Acknowledgements



HPSC would like to thank all the patients and health care workers who enable TB surveillance in Ireland.

Special thanks are extended to those who provided data for use in this report:

- Departments of Public Health
- Irish Mycobacteria Reference Laboratory
- Diagnostic laboratories
- Clinical staff

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# Technical notes:

## Background

This report presents a provisional epidemiological summary of the cases of tuberculosis (TB) notified in Ireland up to 2022. Analyses are provisional and the underlying data remain subject to further validation.

## Methods summary

- HPSC produces TB reports using notification data reported by departments of public health and laboratories to the CIDR system. Full details of the methods are available at [www.hpsc.ie](http://www.hpsc.ie)
- Incidence rates were calculated using population data taken from Census 2016, except for slide 5 which used Census 2022.
- Provisional data were extracted from CIDR on 03/02/2023.

## Permissions

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# Appendix 1: Regional Health Area (RHA) geography



| Geography | CHO Area covered  | Counties/LHOs (Local Health Offices)   | Hospitals (Model 4 hospitals in bold <sup>2</sup> )   | Population (Census 2016, rounded) |
|-----------|---|--|---|-----------------------------------|
| A         | All of CHO 9<br><br>Part of CHO 8 [Meath, Louth]<br><br>Part of CHO 1 [Cavan <sup>3</sup> , Monaghan] | Dublin North Central, North West Dublin, North Dublin, Meath, Louth, Cavan/Monaghan                          | <b>Beaumont Hospital</b><br>Cappagh National Orthopaedic Hospital<br>Cavan Monaghan Hospital<br>Connolly Hospital Blanchardstown<br>Louth County Hospital, Dundalk<br><b>Mater Misericordiae University Hospital</b><br>Our Lady's Hospital Navan<br>Our Lady of Lourdes Hospital Drogheda<br>Rotunda Hospital Dublin   | 1,080,000                         |
| B         | All of CHO 7<br><br>Part of CHO 8 [Laois, Offaly, Longford, Westmeath]                                | Dublin South City, Dublin South West, Dublin West, Kildare/West Wicklow, Laois/ Offaly<br>Longford/Westmeath | Coombe Women & Infants University Hospital<br>Midland Regional Hospital Mullingar<br>Midland Regional Hospital Portlaoise<br>Midland Regional Hospital Tullamore<br>Naas General Hospital<br><b>Tallaght University Hospital</b><br><b>St. James's Hospital</b><br>St. Luke's Hospital, Rathgar   | 1,000,000                         |
| C         | All of CHO 6<br><br>All of CHO 5  | Dublin (South East), Dun Laoghaire, Wicklow, Wexford, Carlow/Kilkenny, Waterford, South Tipperary            | Lourdes Orthopaedic Hospital Kilcreene<br>National Maternity Hospital, Holles Street<br>Royal Victoria Eye & Ear Hospital<br>St. Columcille's Hospital<br>St. Luke's General Hospital Kilkenny<br>St. Michael's Hospital, Dun Laoghaire<br><b>St. Vincent's University Hospital</b><br>South Tipperary General Hospital<br><b>University Hospital Waterford</b><br>Wexford General Hospital | 900,000                           |
| D         | All of CHO 4  | West Cork, Cork South Lee, Cork North Lee, North Cork, Kerry   | Bantry General Hospital<br><b>Cork University Hospital</b><br>Cork University Maternity Hospital<br>Mallow General Hospital<br>Mercy University Hospital<br>South Infirmary-Victoria University Hospital<br>University Hospital Kerry   | 690,000                           |
| E         | All of CHO 3  | Limerick, Clare, North Tipperary/East Limerick   | Croom Hospital Limerick<br>Ennis Hospital<br>Nenagh Hospital<br>St. John's Hospital Limerick<br><b>University Hospital Limerick</b><br>University Maternity Hospital Limerick   | 390,000                           |
| F         | All of CHO2<br><br>Part of CHO 1 [Sligo, Leitrim, Donegal]  | Galway, Roscommon, Mayo, Sligo/Leitrim <sup>3</sup> , Donegal  | <b>Galway University Hospitals</b><br>Letterkenny University Hospital<br>Mayo University Hospital<br>Portiuncula University Hospital<br>Roscommon University Hospital<br>Sligo University Hospital  | 710,000                           |