



# Tuberculosis in Ireland: provisional trends in surveillance data

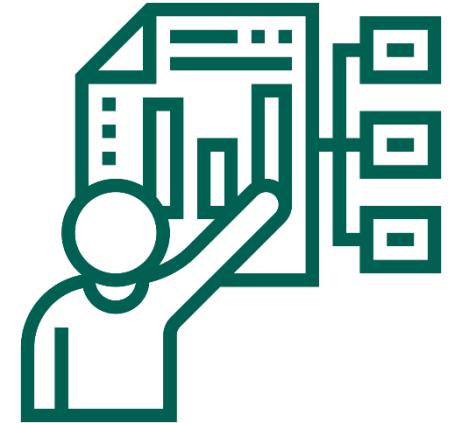
March 2025





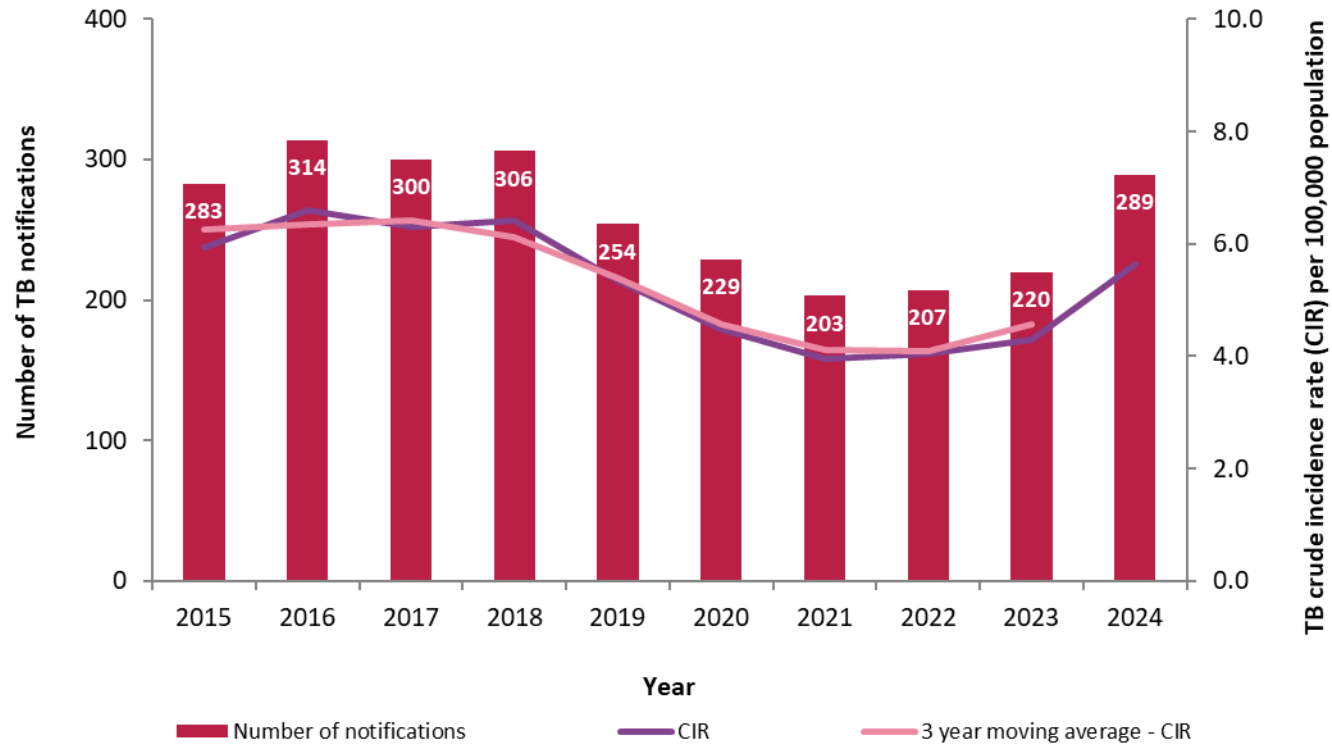
# Key points

- [TB incidence](#) increased in 2024 and is now comparable with pre-pandemic levels
- The number of cases reported exceeds the projected number of cases required to achieve [End TB target](#)
- An increase in [paediatric TB](#) rates was observed
- The number of [rifampicin resistant](#) cases has increased
- [Treatment outcome](#) completeness remained low
- Number of [outbreaks](#) reported has increased sharply in 2024
- 32 cases notified in 2024 were linked to [25 clusters](#) identified through Whole Genome Sequencing (WGS) by the Irish Mycobacteria Reference Laboratory (IMRL)





# Annual TB notifications 2015-2024



## TB cases 2024:

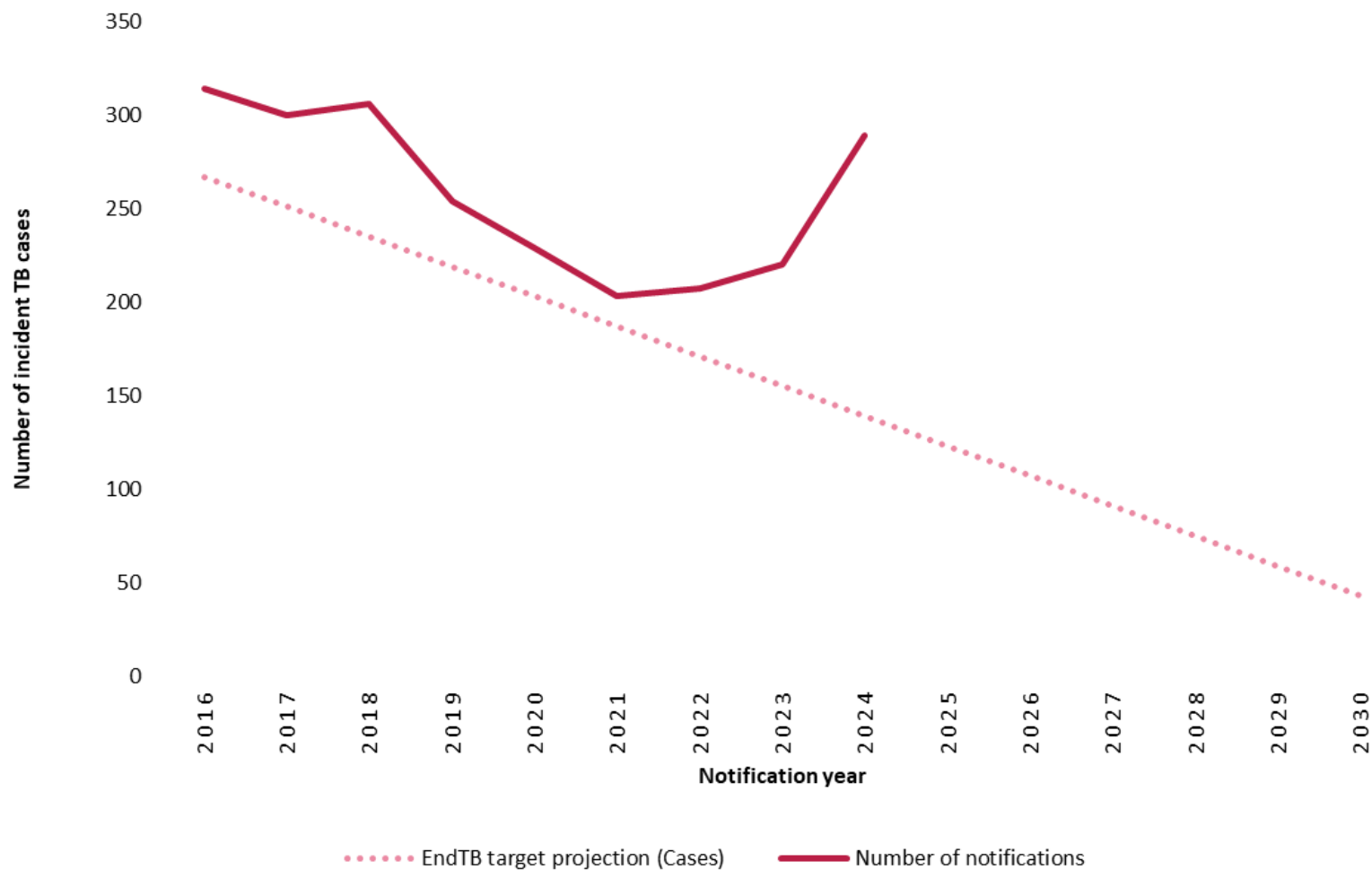
289

- Highest number of cases since 2018
- **Crude incidence rate: 5.6 / 100,000 population**





# End TB target projections

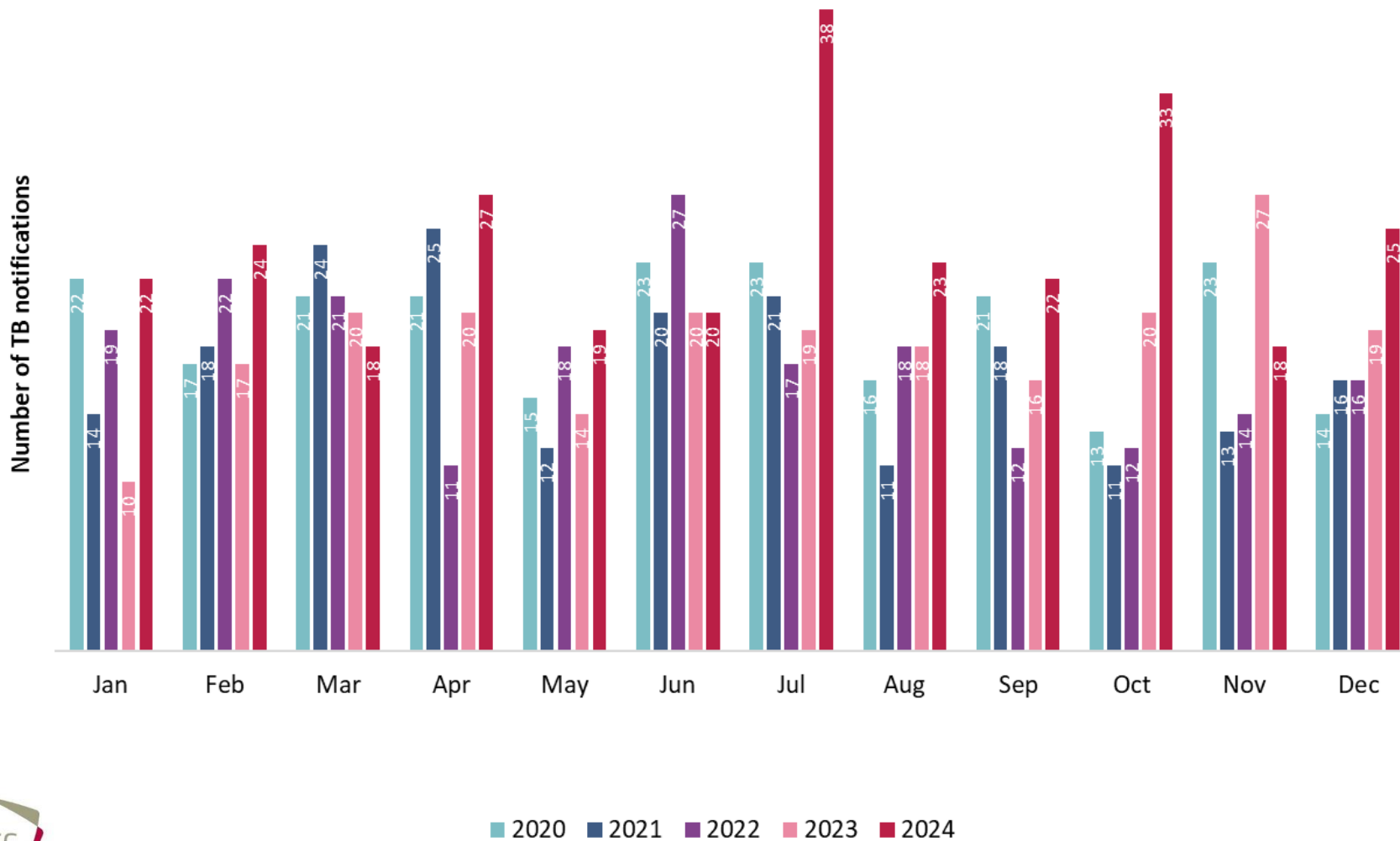


- An 80% reduction in cases by 2030 relative to 2015 levels is required to achieve End TB target
- Current TB incidence is above EndTB target projections





# TB notifications by month & year

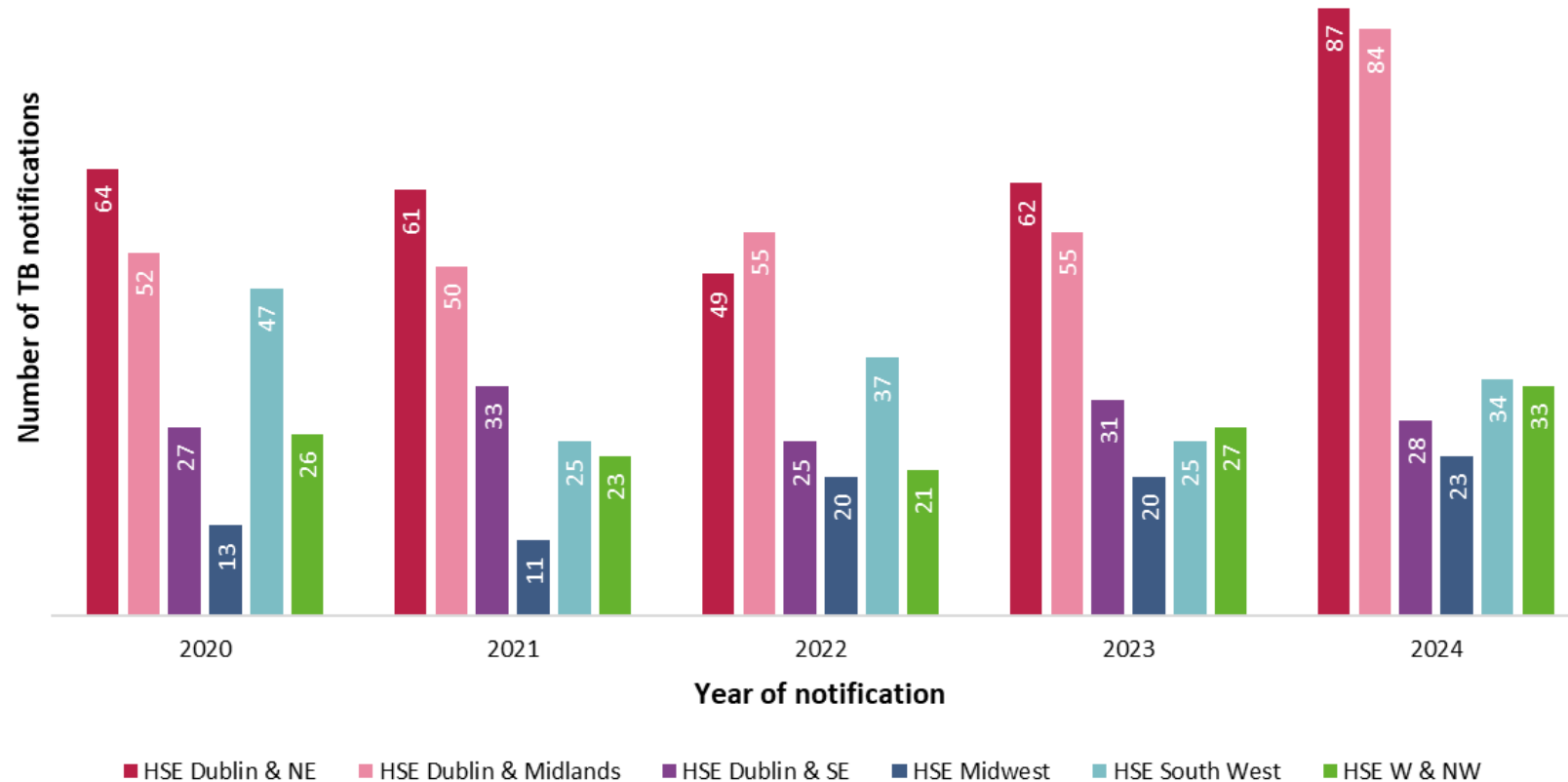


## 2024:

- Main increases in 2024 observed in July & October



# Annual TB notifications by RHA & year



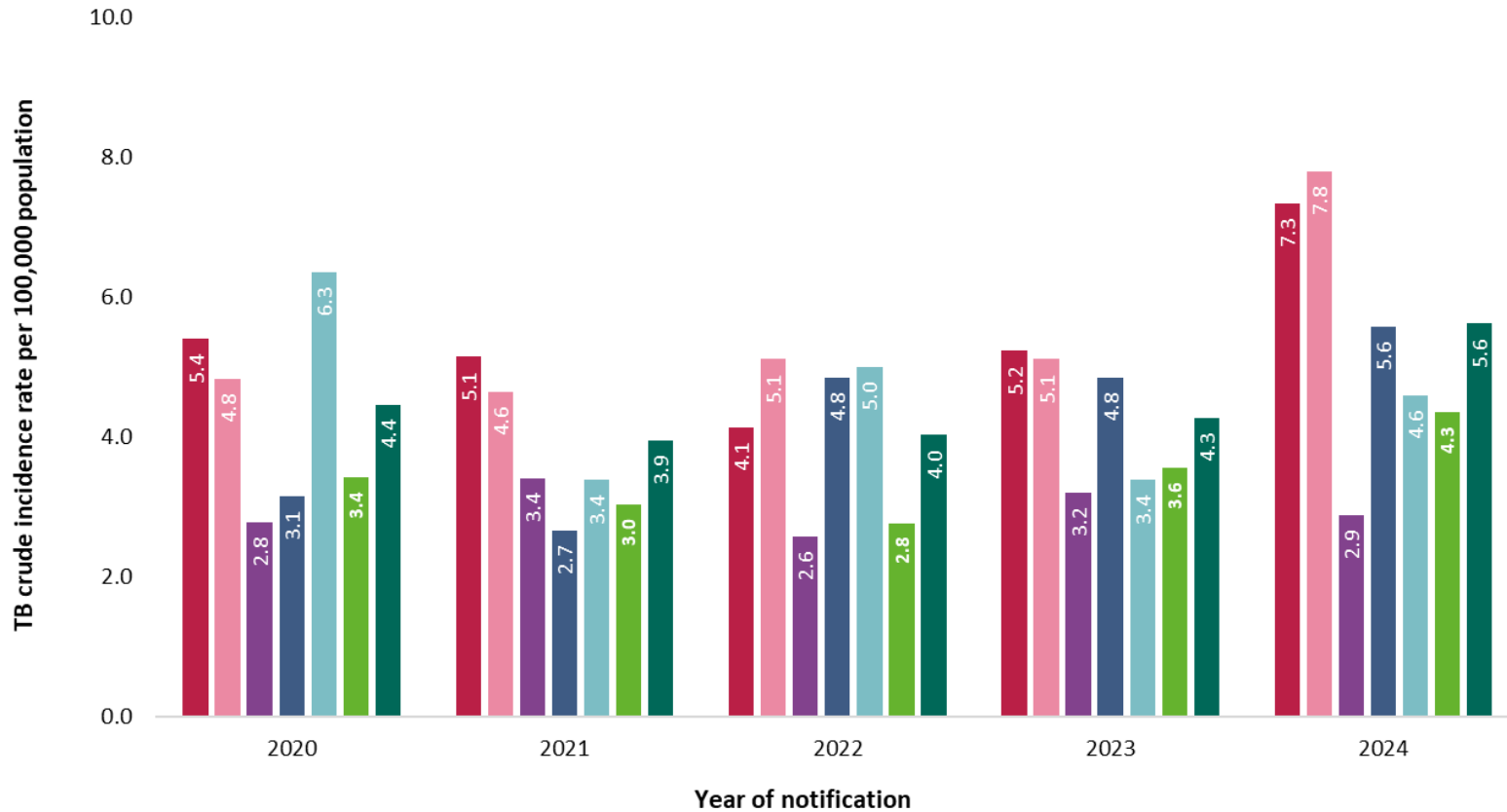
## 2024:

- Highest numbers of cases in:
  - Dublin & North East (87)
  - Dublin & Midlands (84)





# Annual TB crude incidence rates (CIRs) by RHA



2024:

- Increase in TB rates in all RHAs except Dublin & South East



■ HSE Dublin & NE ■ HSE Dublin & Midlands ■ HSE Dublin & SE ■ HSE MW ■ HSE SW ■ HSE W & NW ■ National



# TB crude incidence rates (CIRs) by RHA: 2024



## 2024:

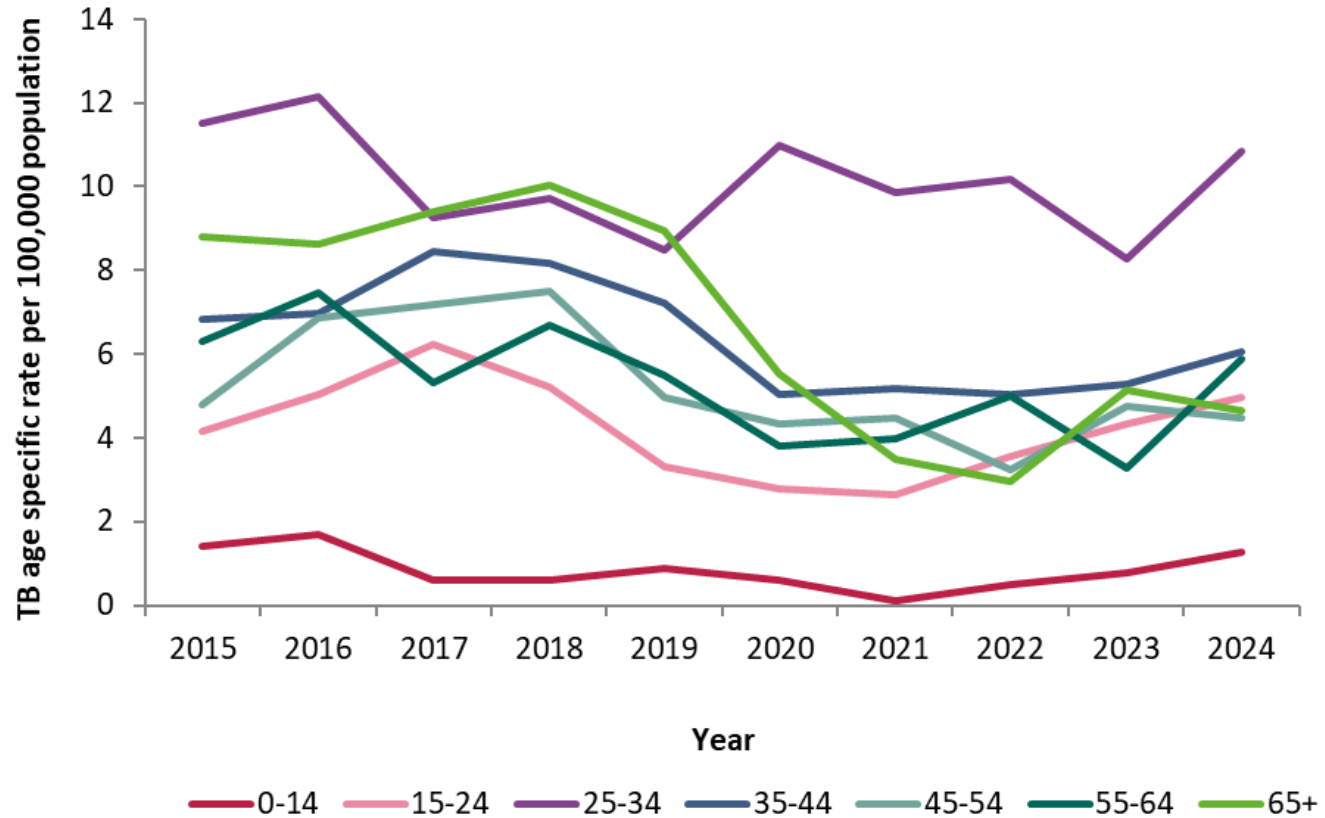
- Highest CIRs in:
  - Dublin Midlands (7.8)
  - Dublin North East (7.3)
- Significantly lower than national CIR in Dublin & South East (2.9)







# Annual TB age-specific incidence rates (ASIRs)



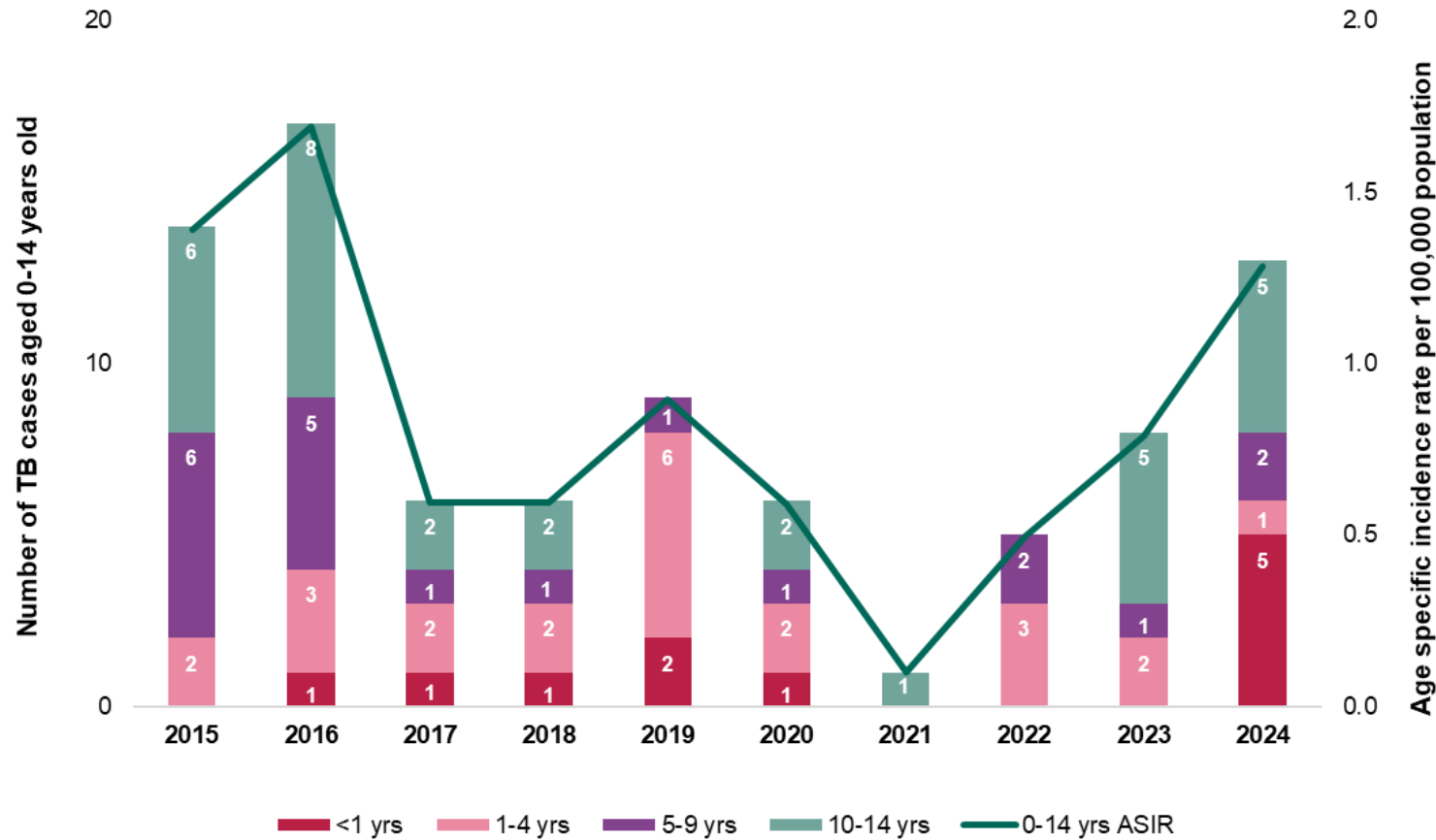
2024:

- Highest ASIRs in 25-34 year olds (10.8)





# Paediatric TB notifications and age specific incidence rate (ASIR) by year



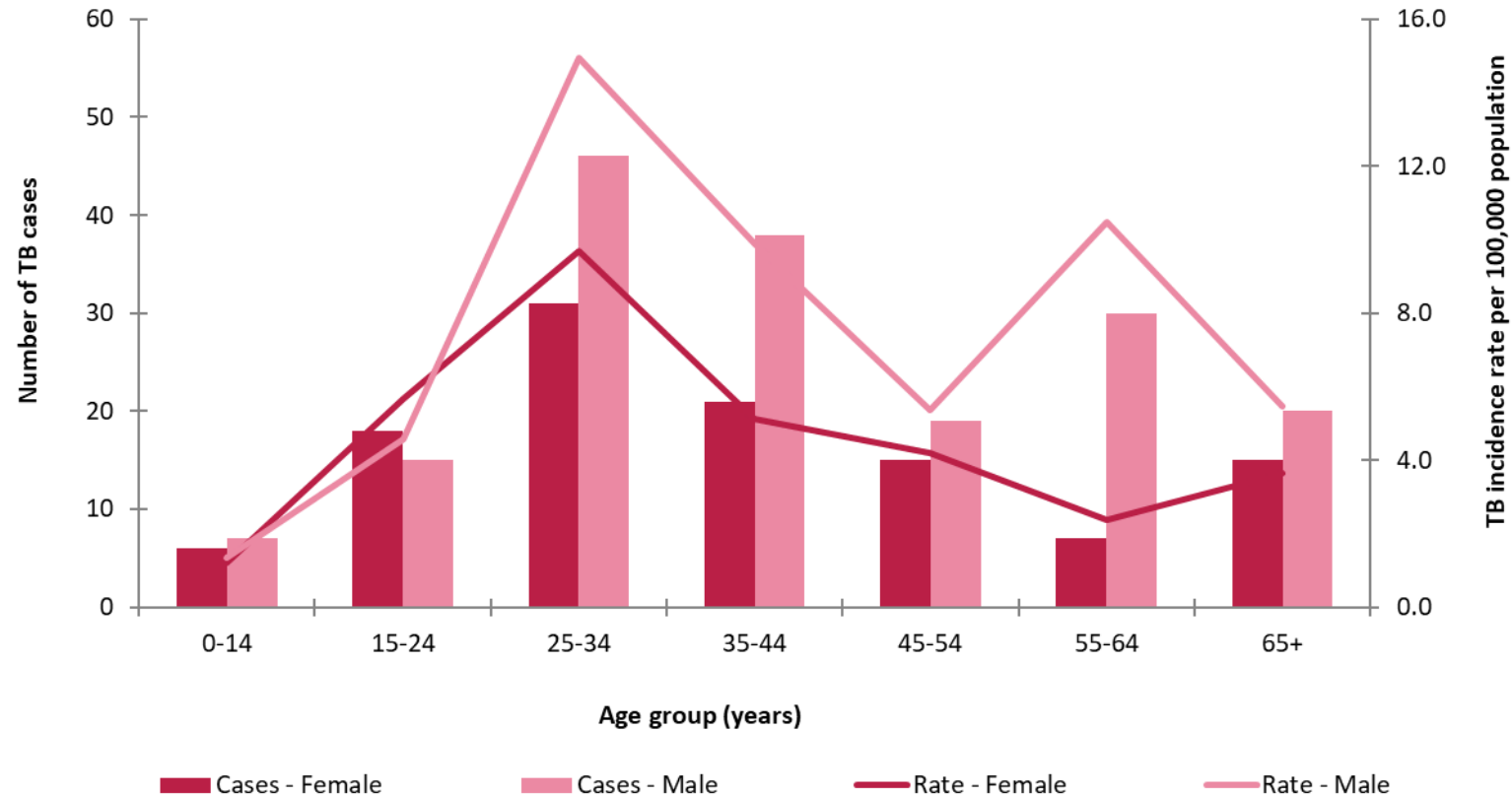
## 2024:

- ASIRs in 0-14 year olds increased from 0.8 in 2023 to 1.3 in 2024
- Increase in cases aged <1 year old





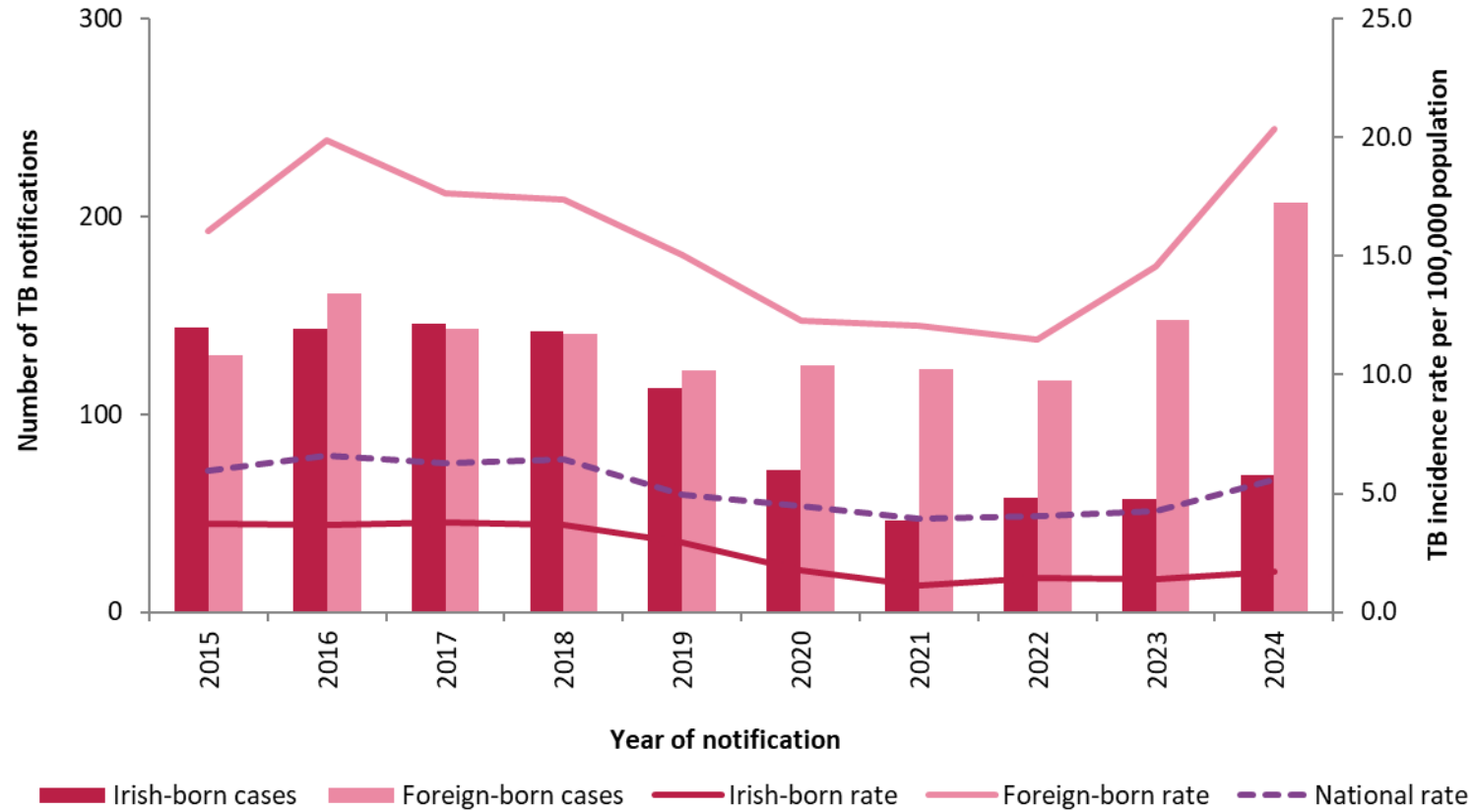
# TB age-specific rates by sex: 2024



- Rates were higher in males compared to females in the majority of age groups



# Annual TB notifications and rate by geographic origin

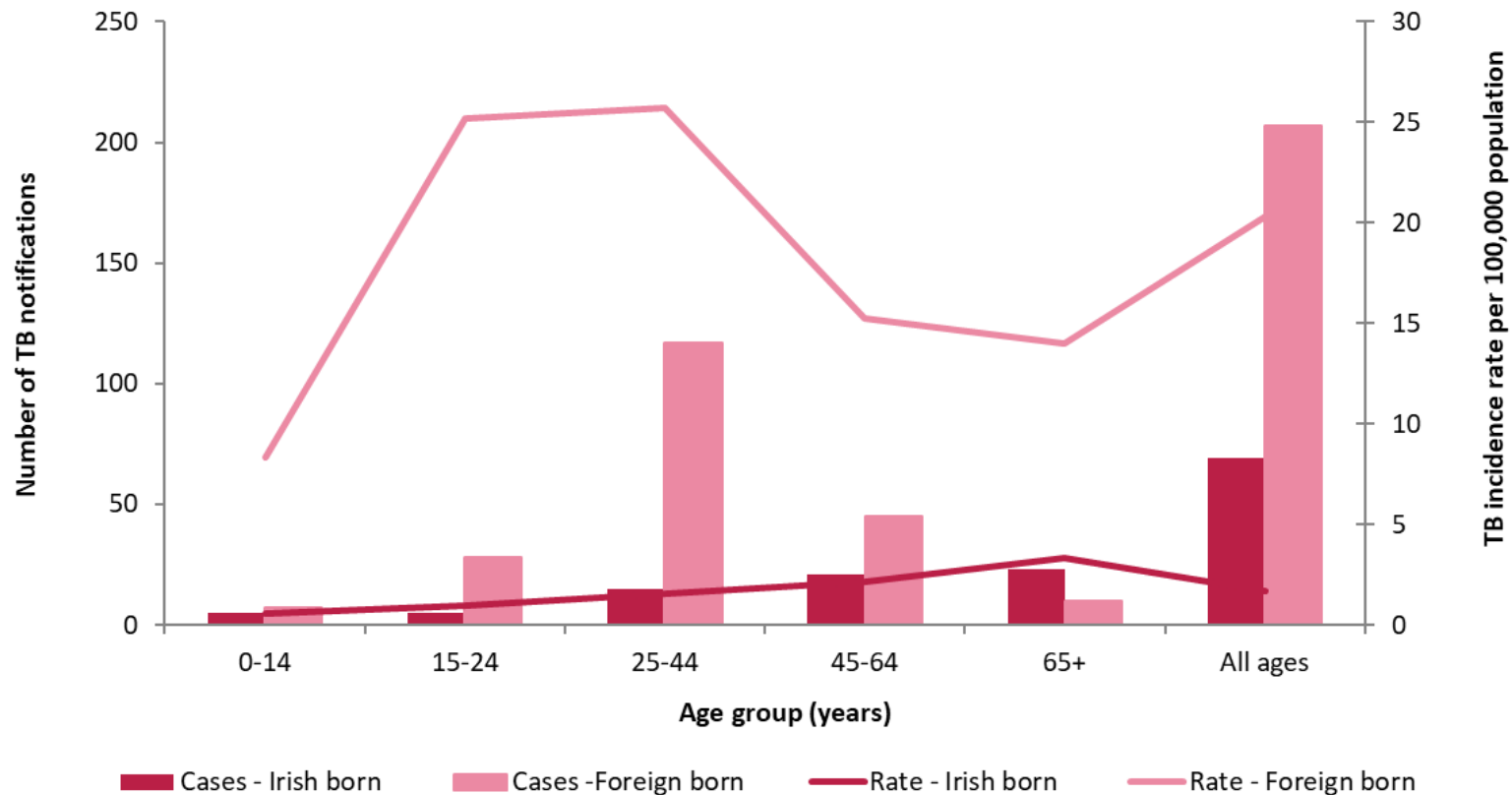


## 2024:

- Rates in Irish-born remain stable (1.7)
- Rates were higher in people born outside Ireland (20.3)
- 72% of cases in 2024 were born outside Ireland



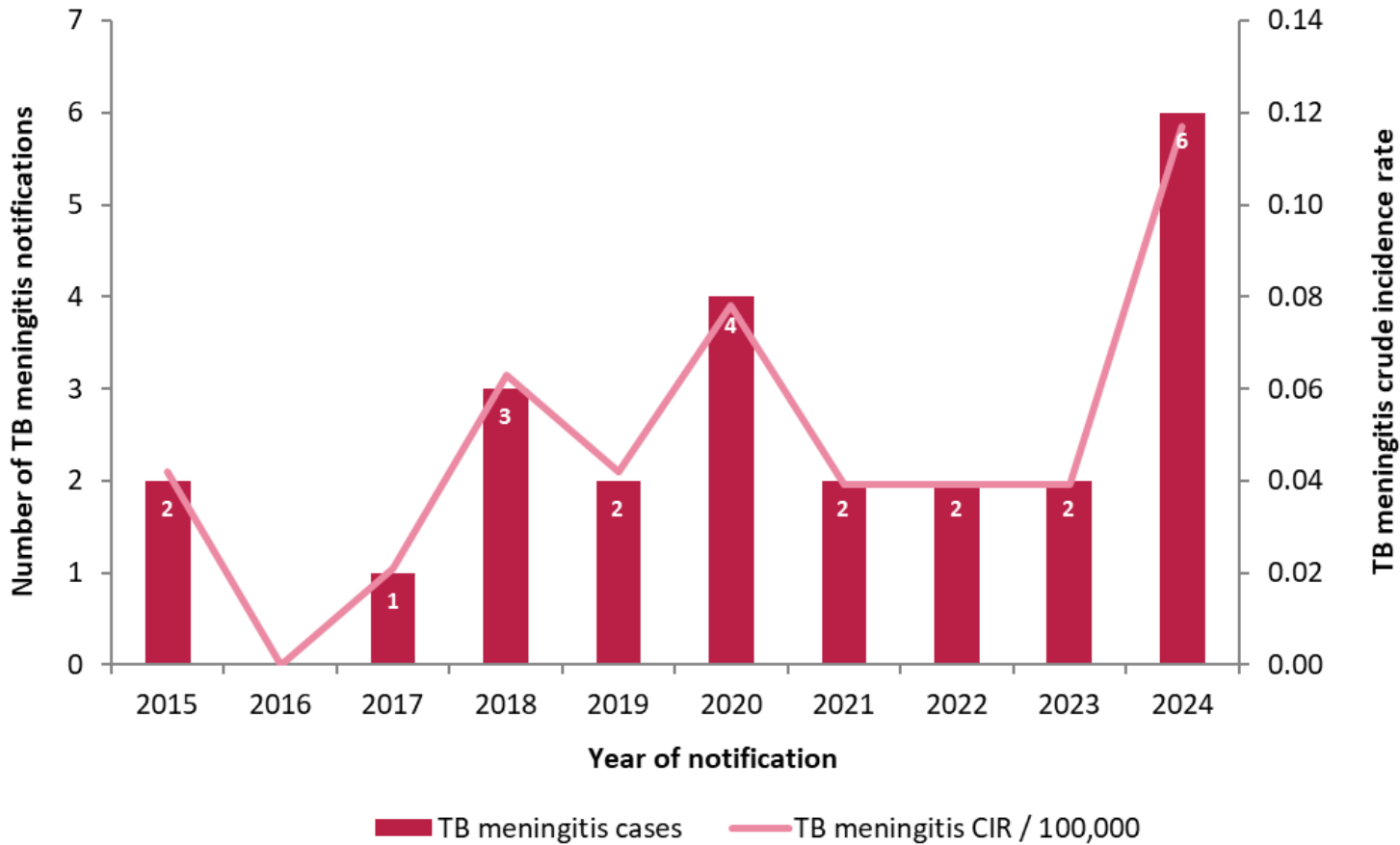
# TB age-specific rates by geographic origin: 2024



- For cases born outside Ireland, rates were highest in those aged **25-44 years** old (25.7 / 100,000).
- For cases born in Ireland, rates were highest in those aged **65 years** and older (3.3 / 100,000).



# TB meningitis notifications by year

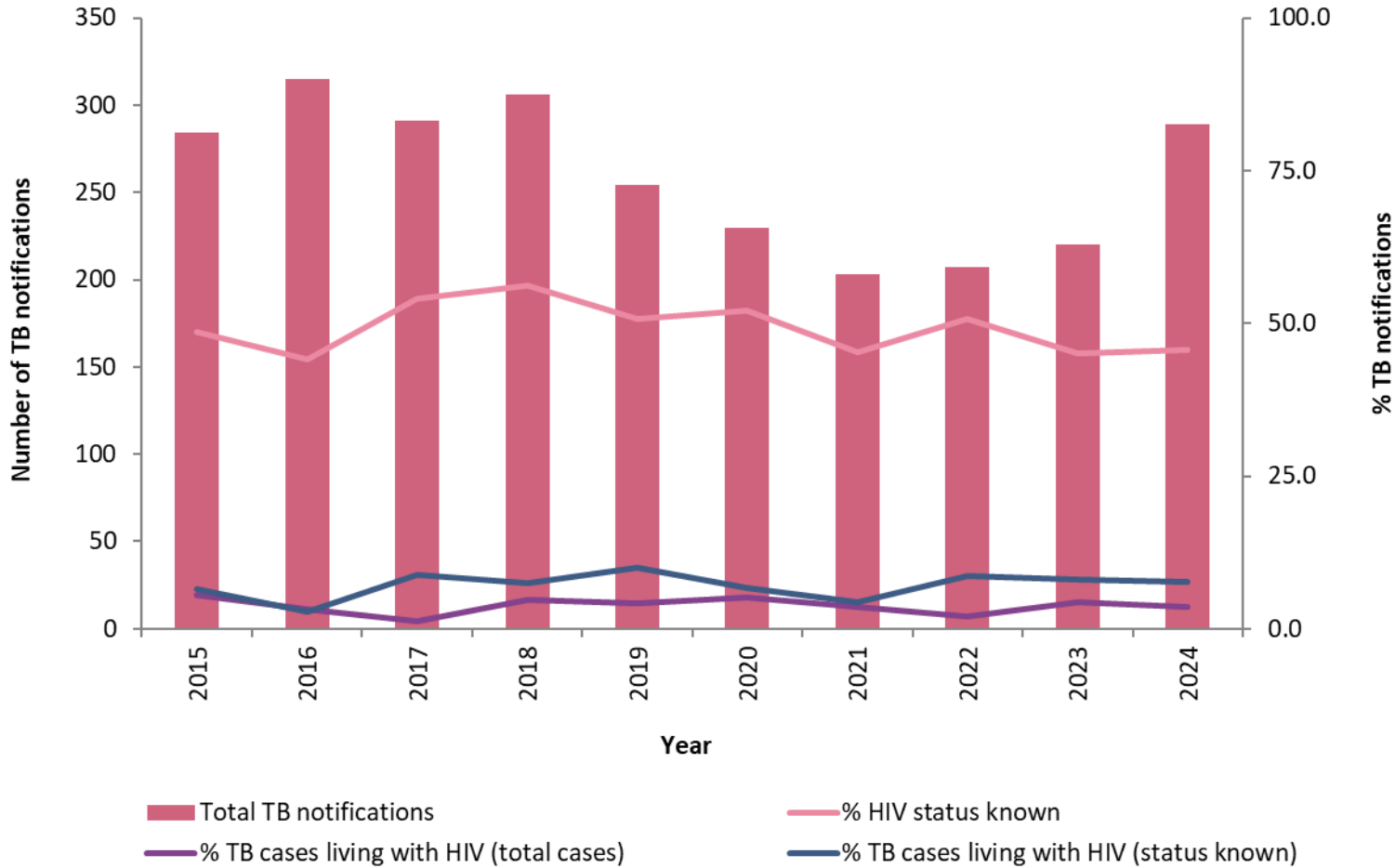


## 2024:

- 2 cases of TB meningitis were aged <1 year old.
- The rest of the cases were in adolescents and adults.



# Annual TB notifications by HIV status



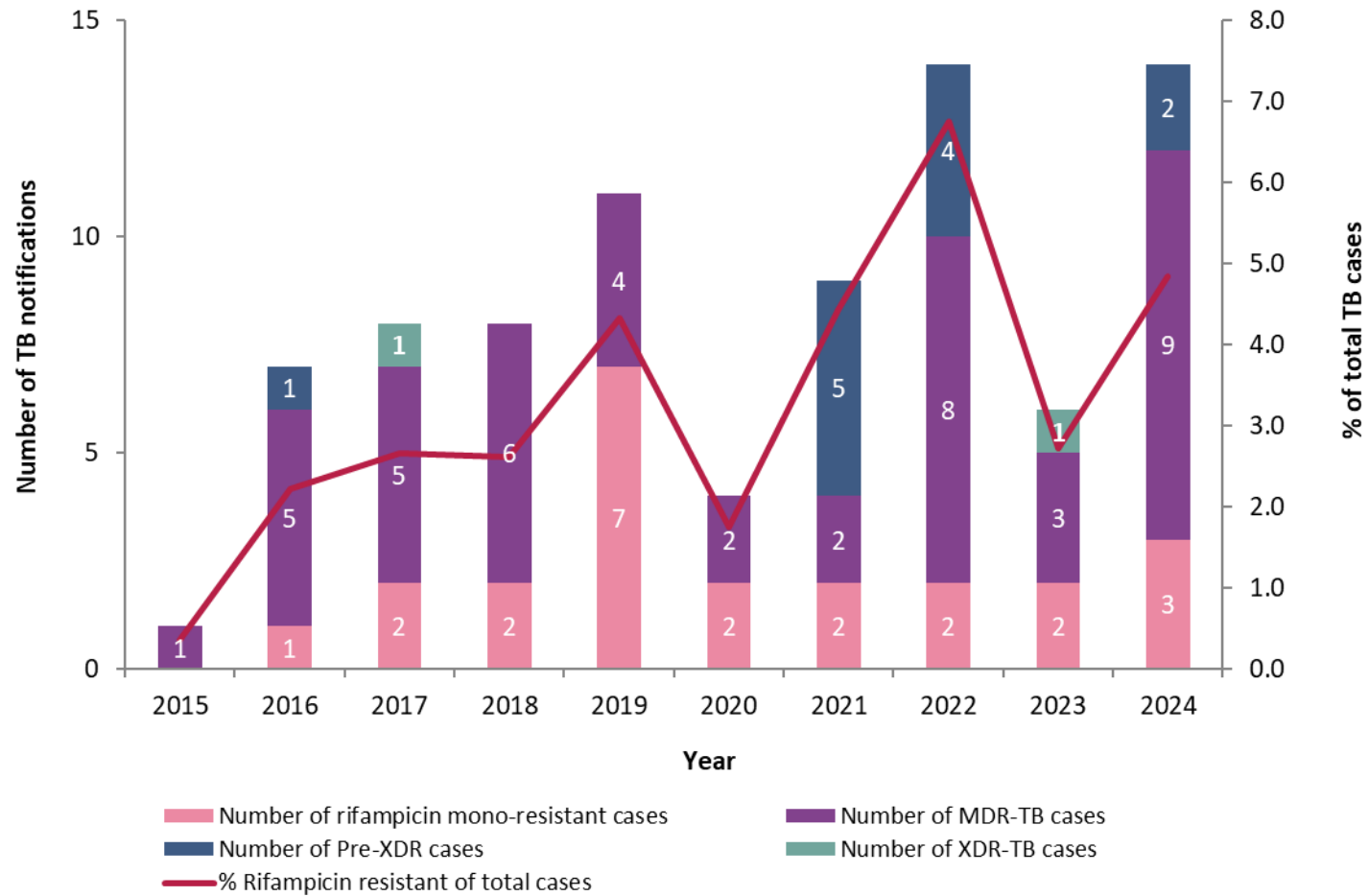
## 2024:

- The proportion of TB cases living with HIV remains low
  - 3.5% of total cases
  - 7.6% where HIV status was known
- HIV status was missing for over half of cases





# Rifampicin resistant cases by resistance profile and year



## 2024:

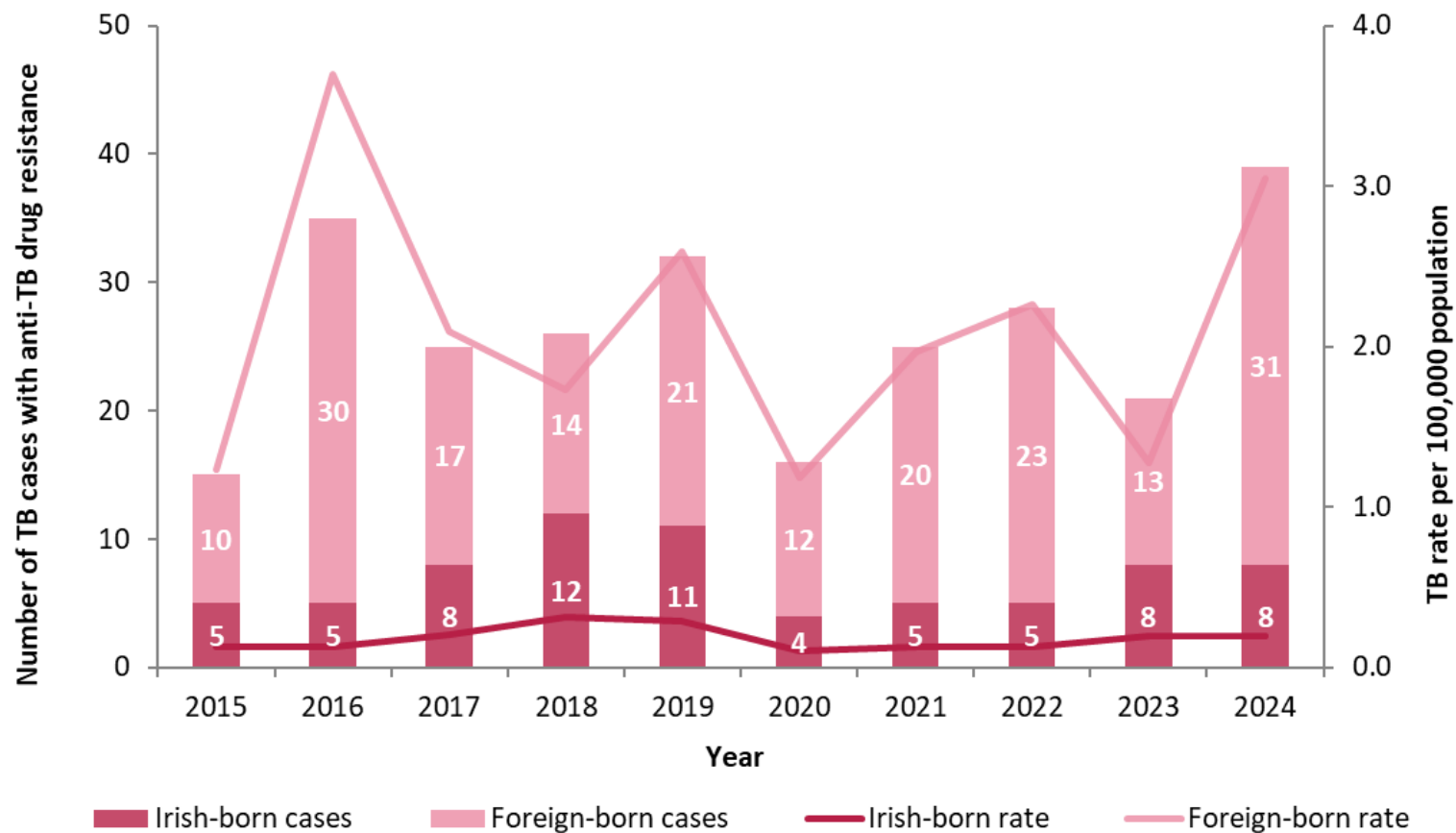
- Increase in rifampicin resistant cases







# Anti-TB drug resistance by geographic origin & year



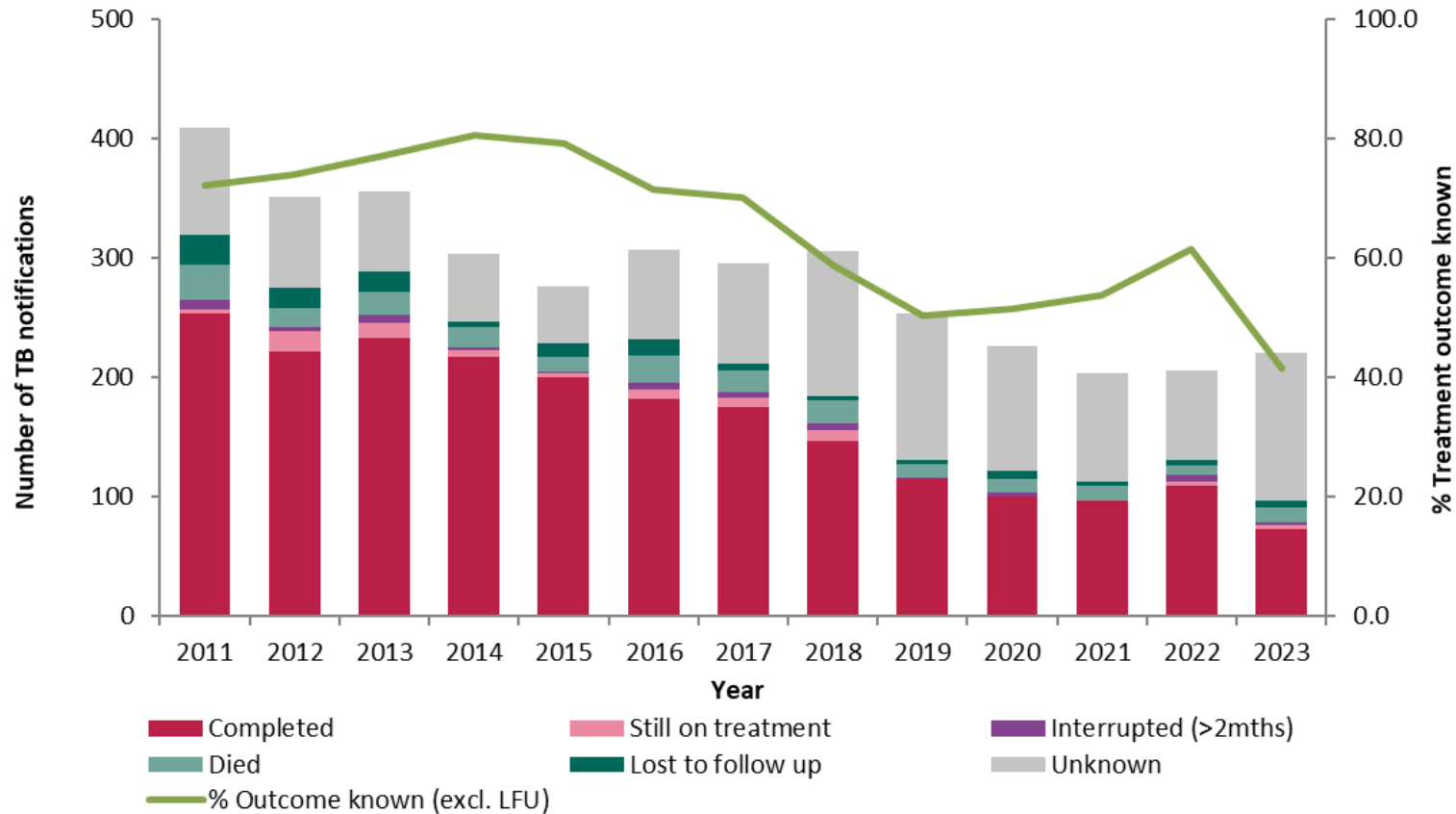
## 2024:

- The percentage of TB cases infected with strains resistant to anti-TB drugs increased but remains higher among those born outside Ireland



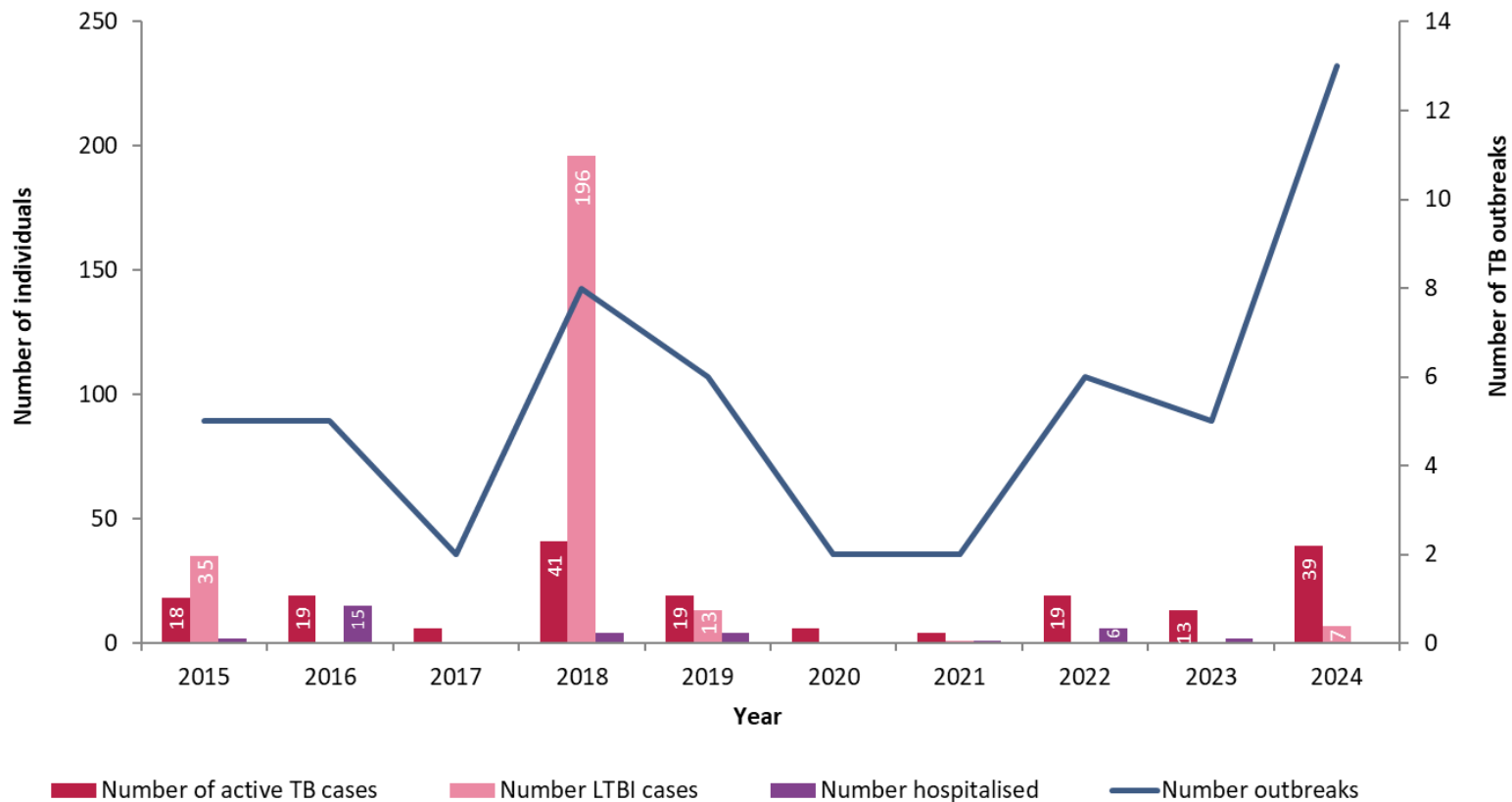


# TB treatment outcomes by year



- The percentage of TB cases with treatment outcome reported decreased during the pandemic but is slowly increasing.

# HE TB outbreak summary

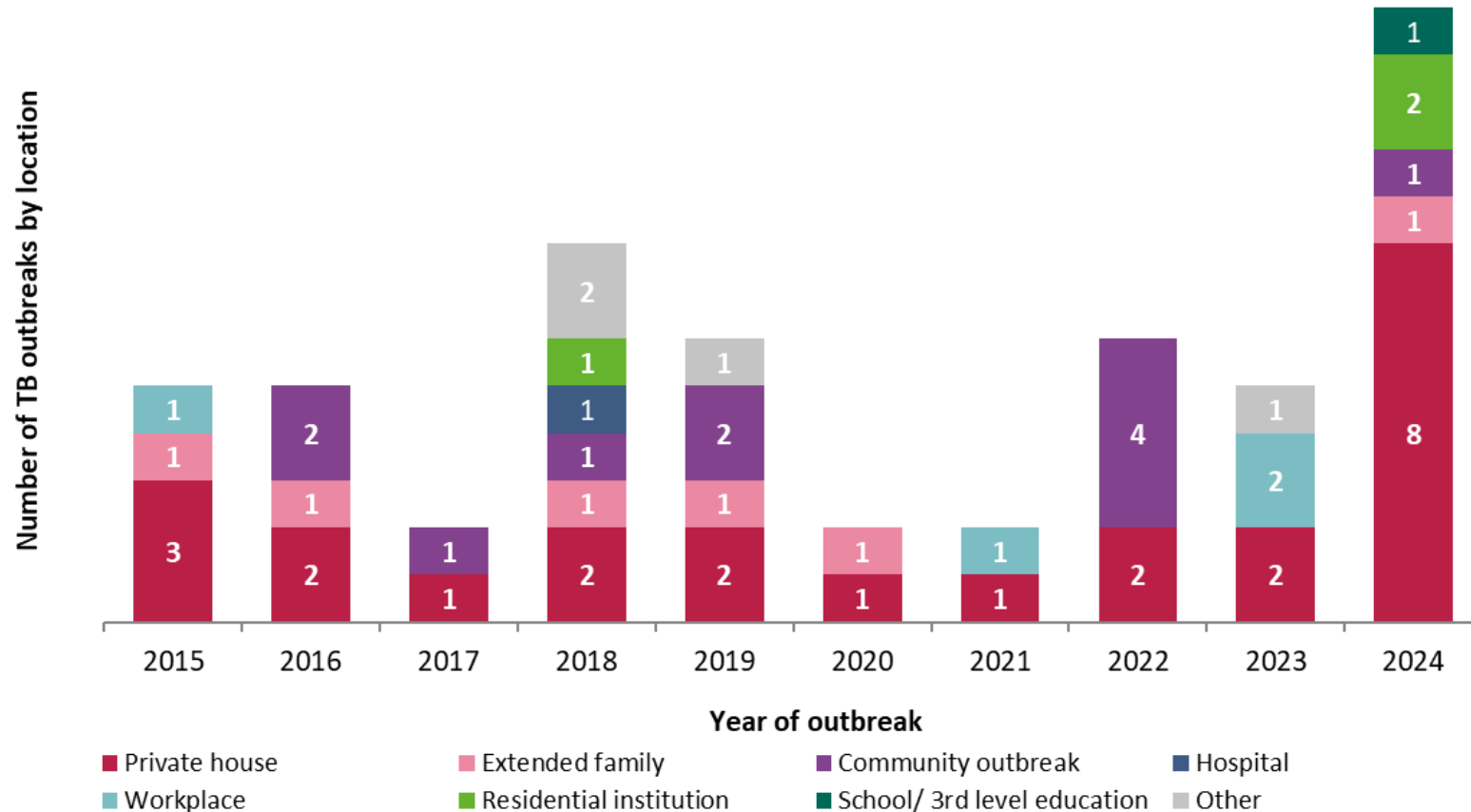


## 2024:

- 13 outbreaks
- Highest number since 2013
- Outbreak size ranged from 2-6 cases
- 11 outbreaks were confirmed by Whole Genome Sequencing results.



# Annual number of TB outbreaks by location



## 2024:

- The majority of TB outbreaks occurred in private houses / extended families
- 4 general outbreaks were reported



# HE TB cluster summary 2024



- 32 cases notified in 2024 were linked to 25 clusters identified through Whole Genome Sequencing (WGS) by the Irish Mycobacteria Reference Laboratory (IMRL)
- Of these 25 WGS clusters, 5 were confined to 2024 cases
  - cluster start dates ranged from 2001-2024
- The most common lineages among clustered cases were Euro-American (n = 5) and LAM (n = 4) and Beijing (n = 4)
- 11 WGS clusters (34%) were reported as outbreaks:
  - 8 outbreaks represented the entire cluster
  - 3 outbreaks represent a subset of epidemiologically linked cases within the WGS cluster



## Process:

Since 2022, IMRL issue cluster codes for events with  $\leq 5$  SNP distance from another isolate in IMRL biobank.



# Laboratory diagnostic survey 2024



## Process:

Each year, the World Health Organization (WHO) requests data on a range of elements within the TB Programme, including laboratory diagnostic services for TB. HPSC and IMRL conduct a survey of all diagnostic laboratories each year to inform the response from Ireland.

- 32 (82%) laboratories responded
  - 9 (28%) testing for TB
  - 9 using WHO-recommended rapid tests
  - 9 perform smear microscopy
  - 8 perform culture
  - 1 performs phenotypic drug susceptibility testing
  
- 6 laboratories provided numbers of specimens tested with rapid tests during 2023:
  - Overall positivity rate of 10%
  - % positive ranged from 2-50%



**Number of  
laboratories  
testing for TB  
in Ireland:**

9 / 32  
respondents  
(28%)

# HE Acknowledgements



HPSC would like to thank all the health care workers who enable TB surveillance in Ireland and the patients whose data was used in this report.

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

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

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## Background

This report presents a provisional epidemiological summary of the cases of tuberculosis (TB) notified in Ireland up to 2024. Analyses are provisional and the underlying data remain subject to further change following 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 Census 2022.
- Provisional data were extracted from CIDR on 07/03/2025.

## Permissions







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# Appendix 1: Regional Health Area (RHA) geography



-  **FSS an Iarthair agus Iarthuaiscirt**  
HSE West and North West
-  **FSS Bhaile Átha Cliath agus an Oirthuaiscirt**  
HSE Dublin and North East
-  **FSS Bhaile Átha Cliath agus Lár na Tíre**  
HSE Dublin and Midlands
-  **FSS an Iarthar Láir**  
HSE Mid West
-  **FSS Bhaile Átha Cliath agus an Oirdheiscirt**  
HSE Dublin and South East
-  **FSS an Iardheiscirt**  
HSE South West

