

## Update on Bovine Tuberculosis Programme 2022

Bovine TB herd incidence decreased to 4.31% at the end 2022 from 4.33% in 2021. However, the number of reactors increased to 23,393 in 2022 from 20,931 in 2021.

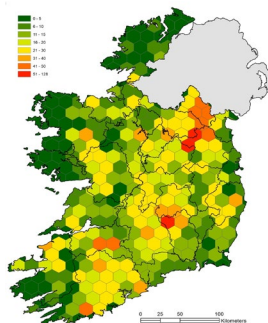
The underlying TB risks in 2022 including increasing individual herd sizes, which is principally related to the expansion in the dairy sector and the movement of cattle. Overall reactor numbers include not just skin-test positives, but also gamma-interferon (GIF) blood test positives, which make up approximately 27% of reactors. A GIF test is used in high-risk TB breakdowns and can identify infected animals which may be missed by the standard skin-test.

There is considerable regional variation in TB levels across Ireland, which can be seen from the map below. While considerable progress has been made in some areas, such as Co. Clare which has gone from being a TB hotspot to having very low levels of TB (2.65% herd incidence at the end of 2022), other areas continue to see relatively high levels. As the spread of this disease is multifactorial, it is being fought on many fronts. The TB programme in each county focuses on several factors including:

- Wildlife
- Residual or introduced infection.
- How disease is distributed in the area
- Gamma interferon testing
- Cleansing and disinfection
- Testing compliance
- Swift isolation and removal of reactors.

Ireland's bovine TB Eradication Programme operates in line with best national and international scientific research and advice. A large body of peer-reviewed research has been conducted into the spread of TB in Ireland and the risks underlying its transmission. This research has found that the principal causes of TB introduction and spread include:

- movement of cattle with undetected infection.
- residual infection in cattle previously exposed to TB.
- spread across farm boundaries.
- indirect spread through other biosecurity breaches, and/or
- spread from infected badgers to cattle.



## **Vaccination and Removal of Badgers**

Badgers are vaccinated by veterinary staff with BCG to reduce the transmission of TB between badgers. This has been demonstrated in field trials to reduce the Reproduction number ( $R_0$ ) in badgers from 1.2 to 0.5. The badger vaccination programme in Ireland has a crucial role in reducing the risk of TB in cattle from a badger source.

The area of Ireland subject to vaccination stood at 20,290 Km<sup>2</sup> at the end of 2022. In 2022, the focus was on continuing to identify as many new setts as possible to ensure good population penetration in badger vaccination areas and to continue to review operations to ensure high badger capture rates. The badger app which was launched in October 2021 continues to be used by farmers to pin badger activity locations on farmland. There were 461 submissions made on the App in 2022. These locations are then followed up by wildlife officers. Additionally, Department staff have engaged with both farmers, farming organizations and state bodies to help further identify badger setts and badger activity.

In 2022, 7,245 badgers were captured in vaccination areas, an increase of approximately 700 from 2021. Of these 3,890 badgers were newly vaccinated. Additionally, 6,027 badgers were removed where exposure to TB in badgers resulted in bovine TB breakdowns on farms.

## **Cost of the Bovine TB Eradication Programme**

The On-Farm Market Valuation Scheme is the main measure for compensating farmers for the removal of Tb reactor animal(s). Supplementary schemes such as Depopulation Grants, Income Supplement and Hardship Grants compensate for income losses and additional feed costs due to restriction. Approximately €27.2 million was spent during 2022 on all compensation elements of the Bovine TB Eradication Programme.

The total cost of the Bovine TB Eradication Programme in 2022 was €57 million

## **EU Co-Funding**

EU Co-funding is paid a year in arrears. The EU paid €2.81 million towards the 2021 Irish bovine TB eradication programme in 2022. The corresponding figure for the 2020 programme was €4.34 million. EU co-funding for TB programmes will cease after 2023.

## **Bovine Diseases Levies**

Receipts from Bovine Diseases Levies amounted to €8.2 million in 2022.



## Update on Bovine Tuberculosis Programme 2023

At the end of 2023 Bovine TB herd incidence increased to 4.94% from 4.31% in 2022. The number of reactors increased by almost 24% to 28,901 in 2023 from 23,393 in 2022.

The underlying TB threat is increasing due to larger individual herd sizes, which is principally related to the expansion in the dairy sector and the movement of cattle. Overall reactor numbers include not just skin-test positives, but also gamma-interferon (GIF) blood test positives, which make up approximately 28% of reactors. A GIF test is used in high-risk TB breakdowns and can identify infected animals which may be missed by the standard skin-test.

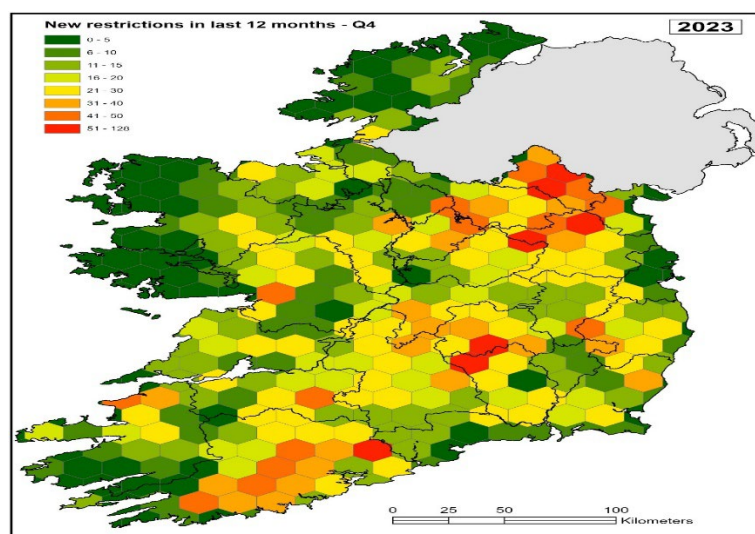
There is considerable regional variation in TB levels across Ireland, which can be seen from the map below. While considerable progress has been made in some areas other areas continue to see relatively high levels of herd incidence. As the spread of this disease is multifactorial, it is being fought on many fronts. The TB programme in each county focuses on several factors including:

- Residual or introduced infection.
- How disease is distributed in the area
- Wildlife Programme
- Gamma interferon testing
- Cleansing and disinfection
- Testing compliance
- Swift isolation and removal of reactors.

Ireland's bovine TB Eradication Programme operates in line with best national and international scientific research and advice. A large body of peer-reviewed research has been conducted into the spread of TB in Ireland and the risks underlying its transmission. This research has found that the principal causes of TB introduction and spread include:

- movement of cattle with undetected infection.
- residual infection in cattle previously exposed to TB.
- spread across farm boundaries.
- indirect spread through other biosecurity breaches, and/or
- spread from infected badgers to cattle.

The below map shows new restrictions in the last 12 months (2023)



### Vaccination and Removal of Badgers (2023 Text)

Badgers are vaccinated by veterinary staff with BCG to reduce the transmission of TB between badgers. This has been demonstrated in field trials to reduce the Reproduction number ( $R_0$ ) in badgers from 1.2 to 0.5. The badger vaccination programme in Ireland has a crucial role in reducing the risk of TB in cattle from a badger source.

The area of Ireland subject to vaccination stood at 23,778 Km<sup>2</sup> at the end of 2023. In 2023, the focus was on continuing to identify as many new setts as possible to ensure good population penetration in badger vaccination areas and to continue to review operations to ensure high badger capture rates. The badger app which was launched in October 2021 continues to be used by farmers to pin badger activity locations on farmland. There were 514 submissions made on the App in 2023. These locations are then followed up by wildlife officers. Additionally, Department staff have engaged with farmers, farming organizations and state bodies to help further identify badger setts and badger activity.

In 2023, 9,062 badgers were captured in vaccination areas, an increase of approximately 1,798 from 2022. Of these 5,116 badgers were newly vaccinated. Additionally, 6,308 badgers were removed where exposure to TB in badgers resulted in bovine TB breakdowns on farms.

### Compensation Schemes

The On-Farm Market Valuation Scheme is the main measure for compensating farmers for the removal of Tb reactor animal(s). Supplementary schemes such as Depopulation Grants, Income Supplement and Hardship Grants compensate for income losses and additional feed costs due to restriction. Approximately €39.82 million was spent during 2023 on all compensation elements of the Bovine TB Eradication Programme.

The total cost of the Bovine TB Eradication Programme in 2023 was €74 million.

## **EU Co-Funding**

The EU has co-funded the TB Eradication Programme since 2008 however, the Commission has clearly indicated that funding for TB is in their lowest priority category for co-funding of veterinary programmes and has been gradually reducing the amount available since. Ireland's portion of the co-funding for TB has reduced from a high of €15.4m received in 2012 to €1.6m received in 2023.

The decrease in funding represents a significant gap in funding for the TB programme. Funding for the programme has ceased as of 2022 because of a €415m shortfall in the overall EU budget for the Food Chain strand of the Single Market Programme.

The significant increase in Programme costs allied with reductions in EU funding means increased programme funding by the Exchequer.

## **Bovine Diseases Levies**

Receipts from Bovine Diseases Levies reduced slightly in 2023 to €8 million compared to €8.2 million in 2022