# BREEDING FOR TB RESISTANCE

*Have you ever wondered.....*
*why only a handful of your cows became TB reactors during a herd breakdown when all cows were managed the same?*

**ANSWER:**
**GENETIC RESISTANCE**

## GENETIC RESISTANCE

It is a measure of an animal's ability to fight off infection due to its genetic makeup

## WHAT DOES THIS MEAN?

Farmers can breed cattle that are less likely to become TB reactors

## WHAT IS IT COSTING?

The overall industry cost of the TB Eradication Programme was €104m in 2021!

## ACHIEVING A HEALTHY HERD

Select cows and bulls for breeding that have the highest overall index as welll as the lowest breeding value for TB resistance

## WHAT FIGURE SHOULD I USE?

To improve TB resistance, herds should aim to use bulls with a breeding value of less than 8%. For more rapid improvement, use bulls less than 6.5%.

| Bull | TB Ranking | TB Resistance | TB Resistance Reliabilty | No. of Herds | No. of Progeny | No. of Herdmates | Progeny Prevelance | Herdmate Prevalence | EBI |
|---|---|---|---|---|---|---|---|---|---|
| Bull A | Worst 1% | 11.70% | 87% | 46 | 124 | 6059 | 9.68% | 3.80% | €350 |
| Bull B | Best 5% | 5.40% | 93% | 86 | 254 | 16870 | 1.58% | 2.40% | €327 |

*High EBI does not guarantee favourable genetic resistance to TB. Bull A above has a high EBI, but ranks as one of the worst bulls available for TB resistance. Bull B has a similar (but lower EBI) which produces progeny with more favourable genetic resistance to TB.*

***Select high EBI bulls with a lower TB PTA to improve genetic resistance in your herd.***