

volac 



MYCOCHECK

Annual Report 2025



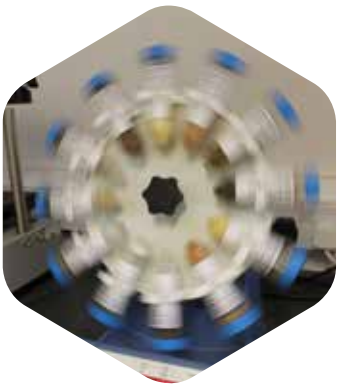
Accredited Mycotoxin Analysis



What are Mycotoxins?

Mycotoxins are toxic compounds produced by moulds. They are not alive and cannot be removed through sterilisation or good management.

- When moulds are stressed, they can produce mycotoxins.
- Stress may be caused by temperature, moisture, nutrient availability, competition or many other factors.
- Moulds do not always produce mycotoxins.



What is Mycocheck?

- Mycocheck is Volac's specialist laboratory service for measuring mycotoxin levels in animal feeds and forage.
- Designed specifically for the feed industry, it provides accurate analysis and practical risk assessments for nutritionists, feed mills and farmers.
- Using advanced UHPLC-MS/MS analytical technology, Mycocheck can detect multiple mycotoxins simultaneously at very low levels across a wide range of feed materials.
- The service supports evidence-based decisions on feed management and mycotoxin remediation strategies, helping protect livestock health, performance and farm profitability.
- Each sample is assessed and reported with a clear risk classification (Low, Medium, High or Very High) to guide ration management and mitigation strategies.
- Internationally accredited to ISO 17025.

1779
samples
over
3 years

35971
mycotoxin
data points
over 3 years



Mycotoxin List – What we test for

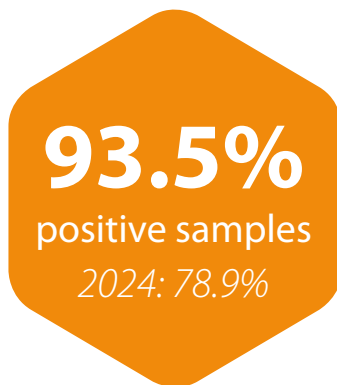
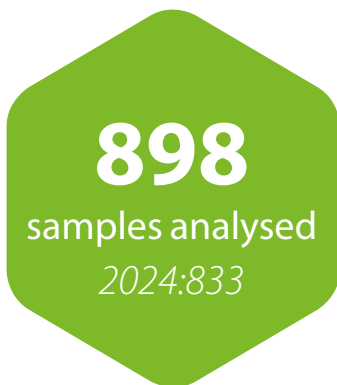
| | | | | | |
|----------------|--------------------|-----------------------|------------------|--------------------|---------------|
| Deoxynivalenol | Diacetoxyscirpenol | Alpha Zearalenol | Sterigmatocystin | Penicillic Acid | Citreoviridin |
| Zearalenone | DON-3-Glucoside | Beta Zearalenol | Aflatoxin B1 | Patulin | |
| Fumonisin B1 | 3-Acetyl-DON | Fusarenon X | Aflatoxin B2 | Citrinin | |
| Fumonisin B2 | 15-Acetyl-DON | Neosolaniol | Aflatoxin G1 | Mycophenolic Acid | |
| T2 Toxin | Deepoxy-DON | Zearalenone-4-Sulfate | Aflatoxin G2 | Roquefortine C | |
| HT2 Toxin | Nivalenol | Ochratoxin A | Wortmannin | Cyclopiazonic Acid | |

-  *Fusarium*
-  *Aspergillus*
-  *Penicillium*

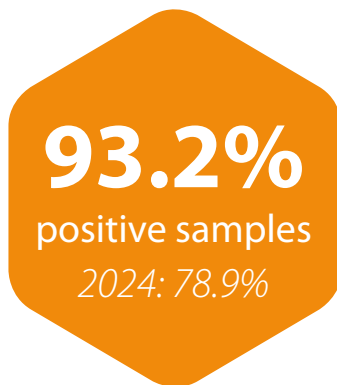
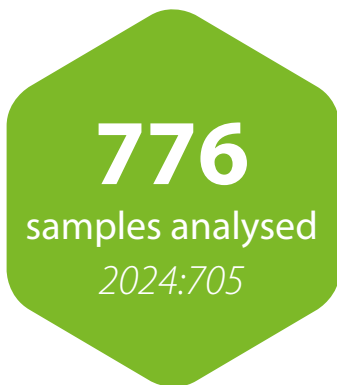


Mycocheck 2025 Summary

Worldwide

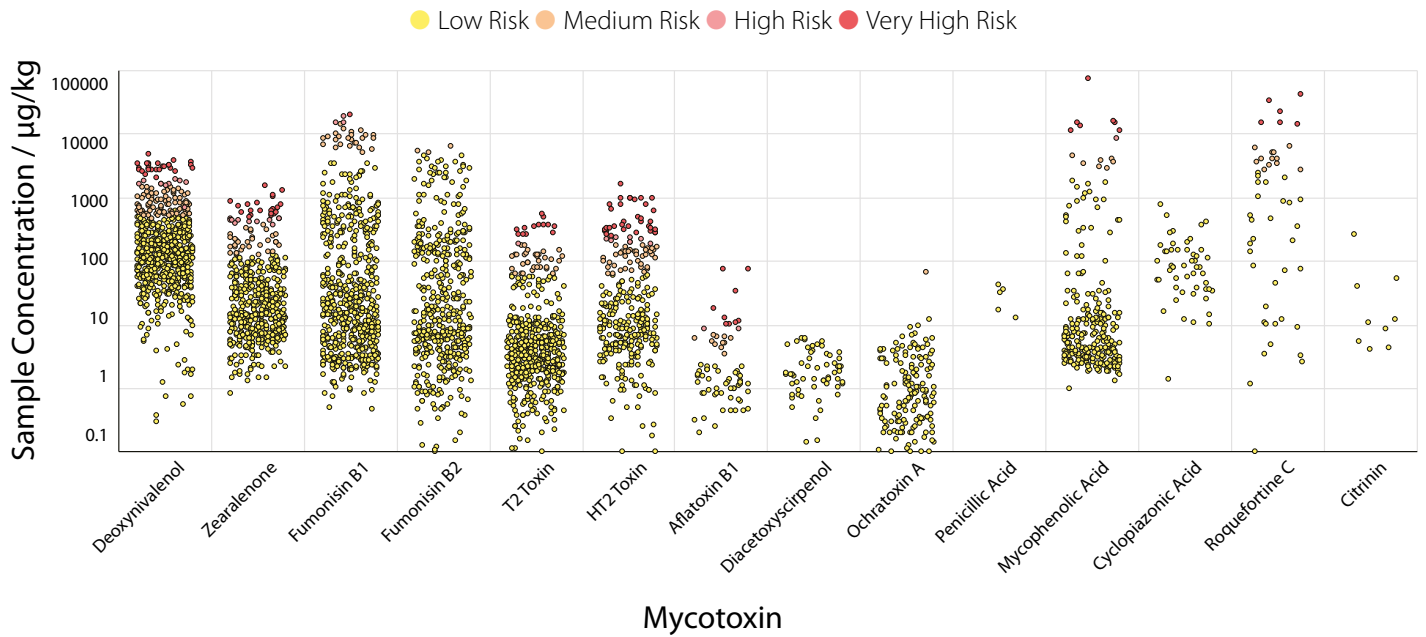


UK & Ireland Only





Measured Mycotoxin Concentrations



What the data shows

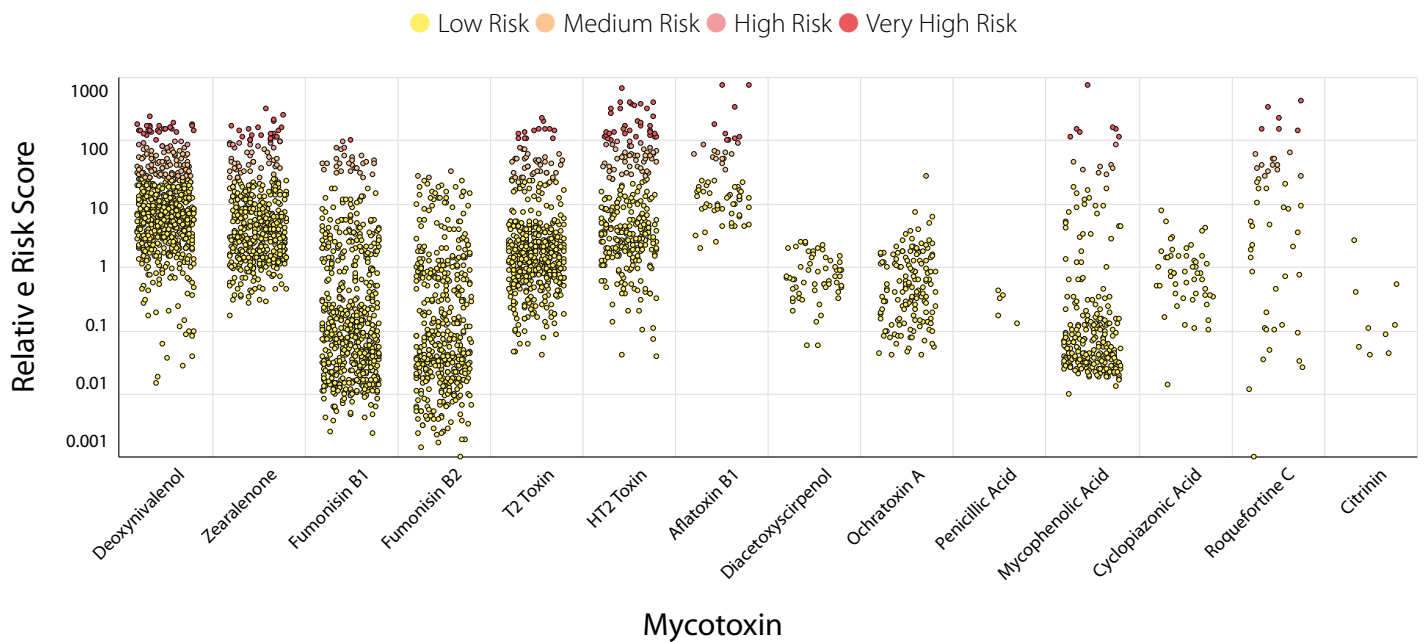
Mycocheck made 3764 individual positive mycotoxin measurements in 2025 from 898 samples. Trichothecene mycotoxins were found most frequently, in 83% of samples, primarily due to Deoxynivalenol (62%) and T2 & HT2 (48%). Other *Fusarium* mycotoxins such as Fumonisin(s) and Zearalenone were found in 57% and 47% of samples, respectively.

Penicillium mycotoxins were found in 27% of samples, with Mycophenolic acid being most frequently responsible (23%).

Aspergillus toxins were found in 18% of samples, primarily due to Ochratoxin (15%) and Aflatoxins (6%).



Risk Scores for Detected Mycotoxins



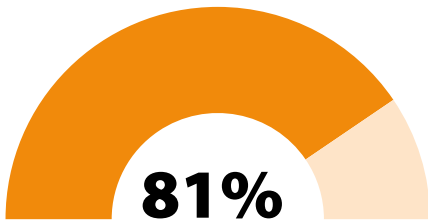
What the data shows

Normalising the results to account for the different toxicities of the mycotoxins shows which toxins and groups should be causing the most concern. Although most samples fall into the low-risk band (risk score less than 25), 1 in 3 samples were categorised as medium risk or higher in 2025, as indicated by the orange and red coloured dots in the charts.

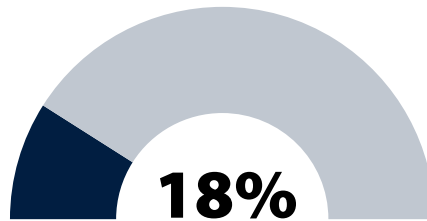
The majority of these high-risk samples are contaminated with *Fusarium* mycotoxins. These toxins are difficult to bind using only a clay-based product so a more comprehensive product containing ingredients able to break down and detoxify these toxins is needed. Clay-based products work better during an Aflatoxin challenge, but only a small number of samples were challenged in this way.



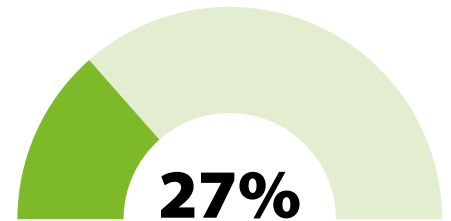
Contamination by Fungal Species



Fusarium Mycotoxins



Aspergillus Mycotoxins



Penicillium Mycotoxins

Potential Risks from Fusarium Toxins

Most of the risk is coming from mycotoxins produced by *Fusarium* moulds. These are prevalent in all environments but thrive in cooler damper conditions, typical of a UK and European climate.

These toxins can cause a range of different problems on farms. Symptoms common to all species include **gastrointestinal irritation**, poor growth rates, and **immune suppression** from trichothecene mycotoxins such as Deoxynivalenol and T2 Toxin. This can reduce the effectiveness of other health interventions, make animals more susceptible to infection, and increase recovery times. Zearalenone is a potent disruptor of **reproductive** systems and can result in delayed or irregular cycling, reduced conception rates, or increased risk of abortion. Nearly all *Fusarium* mycotoxins can reduce milk quality and quantity.



Gastrointestinal Problems

Irritation of the digestive tract leading to reduced appetite, gut inflammation, or poor digestion



Immune Suppression

Trichothecene mycotoxins such as Deoxynivalenol and T2 Toxin can reduce the effectiveness of other health interventions, make animals more susceptible to infection, and increase recovery times



Fertility Problems

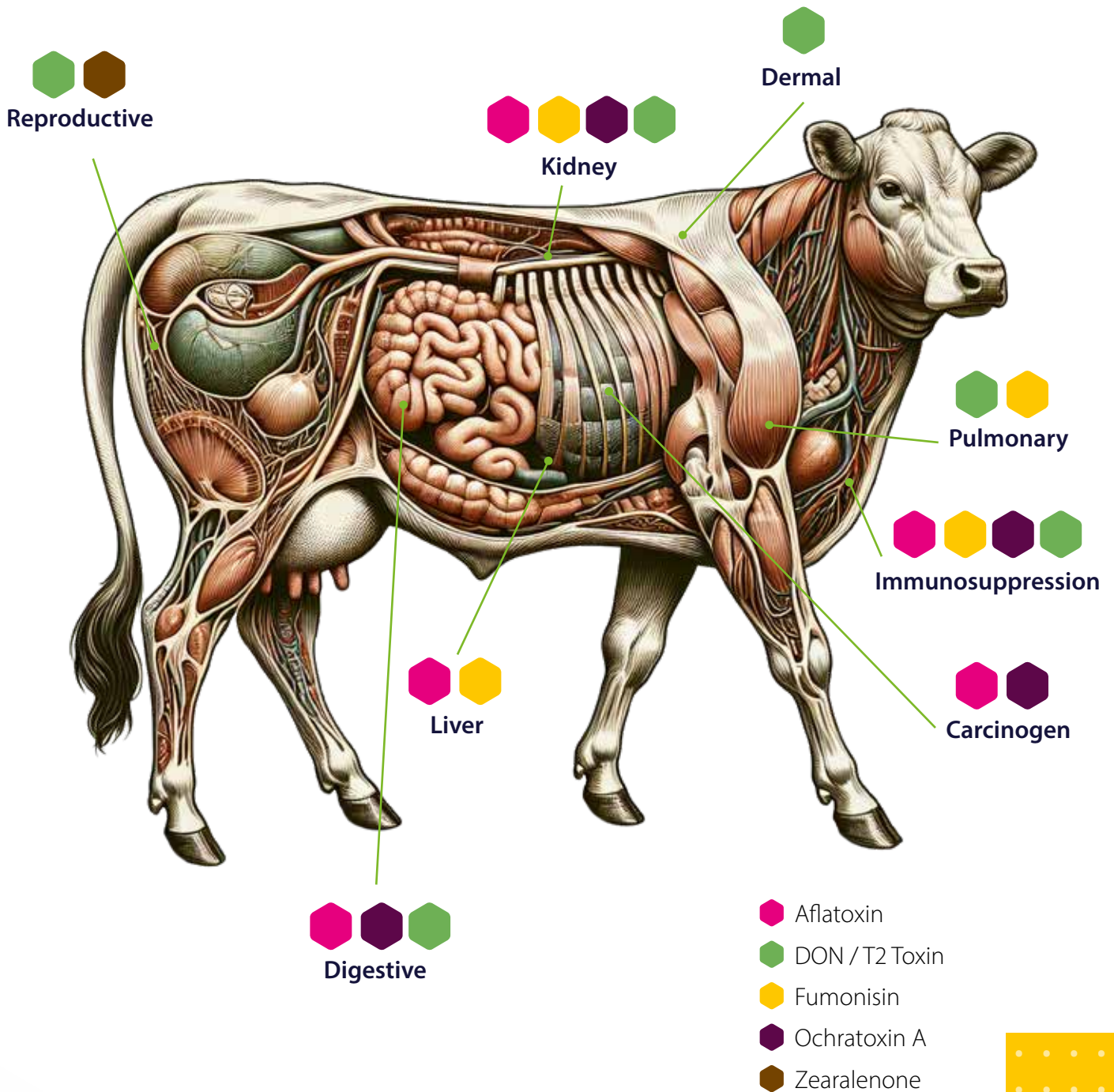
Zearalenone is a potent disruptor of reproductive systems and can result in delayed or irregular cycling, reduced conception rates, or increased risk of abortion



Milk Production

Nearly all Fusarium mycotoxins can reduce milk quality and quantity – directly impacting the bottom line

Impacts of mycotoxins on organ systems

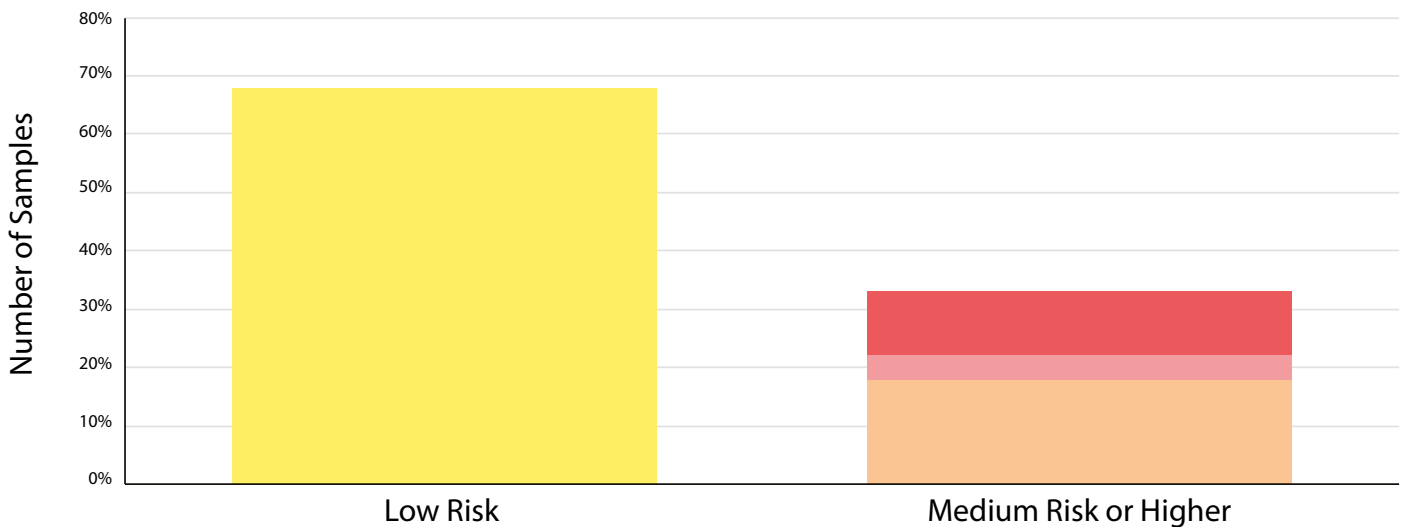




Risk Distribution Low risk is still a risk ...

● Low Risk ● Medium Risk ● High Risk ● Very High Risk

Risk Category Distribution



Where is the risk?

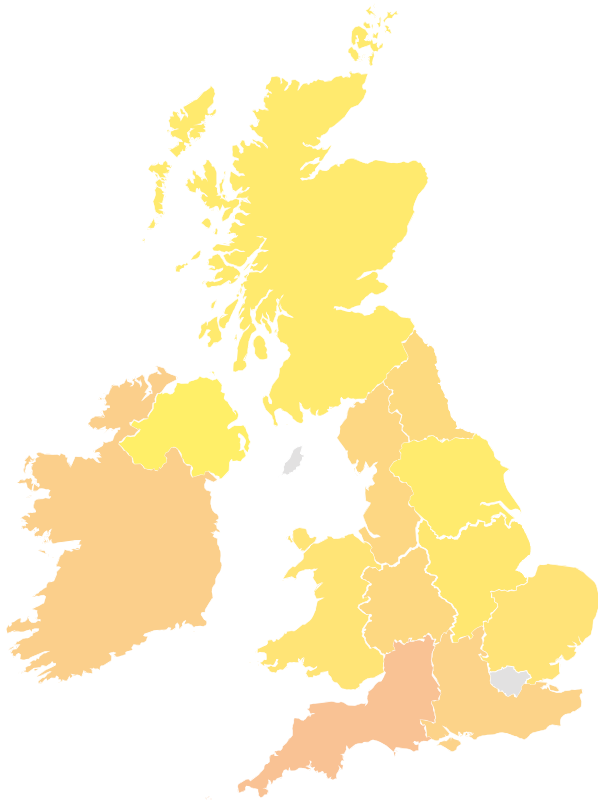
The majority of the risk comes from deoxynivalenol (DON) and zearalenone (ZEN). These toxins were found in 92% of the samples. They cannot be avoided simply by using different feed ingredients. These mycotoxins cannot be effectively bound by simple clay binders. A modern product with multiple modes of action is required.

Modern dairy systems are increasing the risk from mycotoxins. Herds are becoming older with fewer young animals entering the herd, while higher milk production means cows rely more on concentrate-rich diets.

At the same time, cull rates have reduced from around 35% to 25%, meaning cows remain in the herd longer. With around 47% of the herd typically in the transition or high-risk stage, even low levels of mycotoxins can now have a greater impact on cow health and performance.

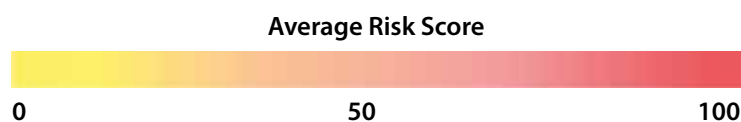
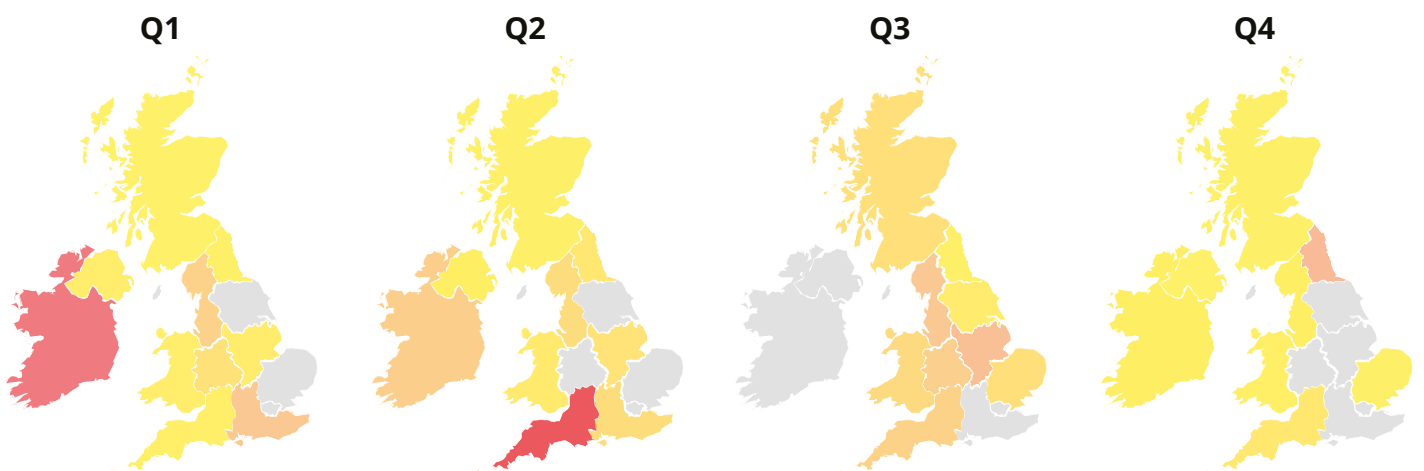


Risk across the UK and Ireland



A map of risk across the UK and Ireland for 2025 shows a consistent medium risk across the region. Risk increases slightly further south, likely due to the warmer weather.

Ireland and Southwest UK both experienced short-term increases in risk which gradually reduced back to normal levels throughout the rest of the year. This highlights the unexpected nature of mycotoxins and the difficulty with predicting contamination levels.





Why Use UltraSorb?

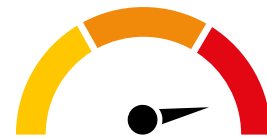
Protect performance - regardless of Mycotoxin risk



Low Mycotoxin Risk

Risk is often unknown - when, where, and which toxins may be present.

- Move from reactive treatment to proactive protection
- Cost-effective insurance against hidden performance losses
- Helps protect milk yield and milk components
- Safeguards investments in feed quality and production
- Supports cows during periods of stress
- Promotes gut health and resilience when moulds are stressed, they can produce mycotoxins.



High Mycotoxin Risk

Whole-herd impact - all animals can be affected.

- Works as both a corrective and control solution
- Visible response within days, not weeks
- Helps stabilise herd performance quickly
- Protects against challenges from multiple mycotoxins
- Maintains herd productivity under pressure
- Helps reduce production variability



UltraSorb - a mycotoxin remediator and endotoxin binder, supporting performance at every level of risk.



For more information scan the QR code

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