

July 18, 2024

## **smaXtec enables early detection of Highly Pathogenic Avian Influenza outbreaks on dairy farms**

**The latest research results from the USA confirm the considerable benefits of the smaXtec system in the event of an Highly Pathogenic Avian Influenza (HPAI) outbreak on dairy farms.<sup>1</sup> Thanks to the precise and early detection of temperature changes, the system offers farmers a decisive advantage in the fight against avian influenza (H5N1).**

Avian influenza, in particular the H5N1 strain, currently poses a significant threat to agriculture in the USA. Cattle infected with bird flu have already been reported in 140 US herds, and the number of unreported cases is likely to be much higher. Experts fear that the virus, which slowly adapts to mammals in cows, could possibly combine with seasonally circulating influenza viruses and thus also become dangerous for humans. The need to be able to react early to signs of an outbreak is therefore crucial in order to prevent major damage.

### **Detecting bird flu early with smaXtec**

A recent report from Michigan State University in the USA, based on over 500 dairy cows observed, impressively demonstrates how the smaXtec system was able to recognise the first sign of avian flu - a sharp rise in temperature - at an early stage. This is a massive advantage for farmers, as the internal body temperature often changes at night during an avian flu outbreak and usually goes unnoticed, even with regular temperature measurements, due to the short duration. In addition, the temperature rises occur well before other symptoms such as a drop in rumination, a massive drop in water intake and a drop in the animals activity. These signs were also immediately signalled to the farmer by the smaXtec system, enabling the farmer to take quick and targeted action.

### **Effective measures through early detection**

Thanks to early detection by the smaXtec system, farmers can separate infected animals from non-infected animals and treat them in a targeted manner. Immediate separation and the application of fever reducing medication help to minimise the spread of the virus within the herd and protect the health of the animals and employees.

---

<sup>1</sup> Source: <https://www.canr.msu.edu/news/hpai-dairy-herd-infection-case-report>

# Press Release



July 18, 2024

This makes smaXtec a crucial tool in the fight against the spread of avian influenza, as the health management system gives farmers valuable time to take effective countermeasures.

**Press contact:**

Magdalena Mayer

Digital Lead

[magdalena.mayer@smaXtec.com](mailto:magdalena.mayer@smaXtec.com)

**About smaXtec**

We offer professional dairy farmers the most technologically advanced health management system aimed at preventing diseases in dairy cows. As a result, farmers achieve consistently high milk yields, reduce the use of antibiotics and significantly increase animal welfare. The latest smaXtec innovation is TruAdvice™, a technology based on artificial intelligence that provides disease indication notifications. This artificial intelligence supports farmers in taking even faster and more targeted action. The high-quality data and comprehensive analysis make it possible to organize daily tasks and the entire work process on dairy farms more efficiently. In this way, we are making an important contribution to the stability and profitability of dairy farming worldwide.

For more information, please visit us at [smaXtec.com](https://smaXtec.com)