



Poultry

What is AeroCollect?

The AeroCollect® is an air sampling device designed to capture bacteria and viruses directly from the air inside poultry houses. The system is designed for flock diagnostics of entire poultry houses. From a single five minutes air sample collected in the disposable sample chambers analysis can be conducted for several pathogens. This in turns makes the routine monitoring of specific pathogens both logistically and economically possible.

How does it work?

During sample collection air is sucked trough the sample chamber. A strong electrical field generated by electrodes placed on either side of the sample capture and concentrate bacteria, viruses, and other microscopic particles in the sample chamber. The AeroCollect® is developed especially for performance in dusty environments and therefore does not rely on a traditional filter.

How do you collect the samples?

In poultry houses standard samples are collected by walking through the entire house while collecting the AeroCollect® samples. Some bacteria and virus tend to bind to dust particles which are also collected into the sample chamber along with the more naturally airborne respiratory pathogens.

The sample should be collected from the entire house by walking around and kicking up dust from the floor. Sampling should be conducted for a period of minimum 5 minutes, while ensuring that samples collected represent all sections of the house.

Before and after collection, the sample chamber should be stored in the accompanying sealed container.

What is the process flow?

The disposable sample chamber is inserted into the AeroCollect® device and the samples are collected as described above.

After sample collection, the sample chamber is removed from the AeroCollect® device and finally sent to the laboratory, where the content is analysed for pathogens using a qPCR analysis. The sample does not require any purification or concentration and can be used directly in the qPCR. The results are ready within one to two hours.



Insert



Measure



Remove



Shipment



Analyse



Result

Storage



Collected samples may be stored up to a week under normal room temperature conditions. It is recommended to store the samples in the fridge if the samples are to be stored for longer times. For long term storage the samples may be stored frozen.

Transportation



AeroCollect® samples may be shipped under ambient conditions using traditional courier or postal services. If stored under ambient conditions the samples should be analysed within 7 days from the time of collection. The storage of the sample chambers in the resealed containers combined with the small access holes to the chamber itself minimize any risk of contamination of the samples during transport.

Would you like to learn more about what AeroCollect® can do for you and your company?

Contact us at
+45 43 25 14 00
info@aerocollect.dk
or visit aerocollect.dk