

# Transitioning from Surveillance Sampling to Suspected Contamination Sampling

When surveillance sampling results meet or exceed pre-established thresholds, it's time to transition into suspected contamination sampling. The purpose of suspected contamination sampling is to identify areas within the feed mill or feed delivery that are contributing to the increased prevalence of the pathogen of interest. Feed mills can also implement mitigation strategies while undergoing suspected contamination sampling to gauge how successful these mitigation strategies are for the pathogen of interest. This resource focuses on how to transition from surveillance to suspected contamination sampling through changes in sample size and sampling frequency. If there are questions regarding sample size and thresholds, refer to the additional resource titled "Calculating Sample Sizes and Thresholds." If there are questions regarding areas of focus, refer to the additional resource titled "Interpreting Sample Results."

## ***Changes in sampling size***

Surveillance sample size is based on the probability of feed serving as a source of the pathogen of interest and the severity of the pathogen of interest. However in the case of suspected contamination, the thresholds have been met or exceeded, indicating that the pathogen of interest may be present more frequently or greater than originally perceived. Therefore, to maximize the ability to detect the pathogen of interest, increase the sample size, or decrease the estimated prevalence rate. During suspected contamination sampling, sample sizes might be larger than the sample sizes commonly used for surveillance sampling. To accommodate the larger sampling size, adjust the threshold, or in this instance, the amount of samples that need to be negative in order to return back to surveillance sampling.

## ***Changes in sampling frequency***

Suspected contamination samplings need to occur more frequently than surveillance sampling if surveillance thresholds are met or exceeded. For example, the pre-determined surveillance sample sizes are based on monthly prevalence rates and divided across weeks to make sample taking more manageable. However, when thresholds are met or exceeded in surveillance sampling that is indicative that the set prevalence rates for a monthly basis have already been met or exceeded in a week. Therefore, to understand the source of suspected contamination, for the next week, the feed mill will transition to suspected contamination. The feed mill will transition back to the normal surveillance schedule if suspected contamination thresholds are not met or exceeded. If a production system or feed mill chooses to sample more or less frequently than suspected contamination sampling will need to be adjusted accordingly.