

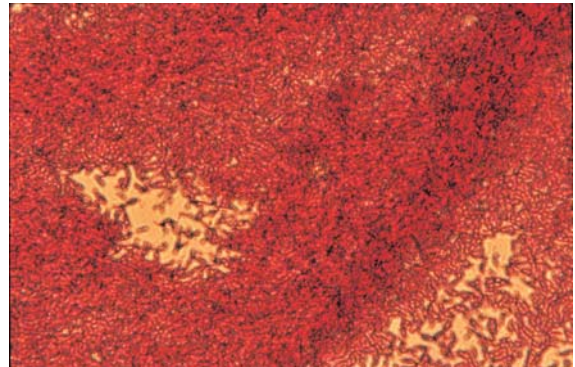
BAX[®] System

Reducing false positives is critical for processed meat producer

When quality assurance personnel at food production facilities test raw ingredients, finished products or environmental samples for the presence of bacteria, a positive result can mean they have a real problem on their hands – one with potentially devastating financial consequences, even if the positive result turns out to be false.

A leading producer of value-added processed beef, pork and poultry products was experiencing a very high percentage of false positives during routine *Listeria* testing. The QA director was pleased that the production facility did not have contamination problems, but was very concerned about the negative impact that these false positives were having on both the bottom line and the company's credibility with its customers.

Standard practice at the production facility was to test for contamination in-house, and then send samples with positive results to a third-party laboratory for confirmation. The QA department was dismayed to find that nearly all of these samples were being returned as false positives. This indicated that although the production facility had good Hazard Analysis and Critical Control Point (HAACP) plans in place and was implementing necessary measures to significantly reduce the risk of pathogens, its testing method in the QA laboratory was not meeting the company's needs.



Impact of false positives

Sending a high volume of false positive samples to a third-party laboratory cost the company a significant amount of money and caused major delays in shipping finished product. Perhaps even more important was the damage to the company's reputation caused by false alarms.

Repeatedly telling customers that there may be a problem with contamination in the production facility, only to report a few days later that everything is okay, doesn't inspire faith in the business. According to the company's QA director, "You can't put a dollar value on what you've lost in credibility when you consistently report false positives."

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The solution

The company wanted to improve its in-house quality assurance procedures to reduce the high number of false positives being generated. To do that, it needed to invest in a testing method with a proven track record for reliability and accuracy. The QA director knew that the third-party contract laboratories he depended on were using the DNA-based BAX® detection system. After doing some additional research, he decided to bring a BAX® system in-house.

After the QA laboratory started using the BAX® system to distinguish whether a positive result is true or false, they saw dramatic improvements. Now, only 1 in 10 positive results needs to be sent to a third-party laboratory for confirmation because the BAX® system shows the other 9 to be false. And, with the BAX® system on site, the company has this valuable information faster than ever before. “I can get answers by 9:00 today instead of 2:00 tomorrow—and that’s a big advantage,” said the QA director.

The QA laboratory supervisor noted that the BAX® system is very easy to use because it is completely automated and does not require any special operator skills. The fact that the BAX® system delivers clear and reliable “yes-no” answers is another advantage because it virtually eliminates the need for expert interpretation of results.

Conclusion

Incorporating the BAX® system into routine testing has made a tremendous difference for this company. Now, the QA laboratory has the technology it needs to distinguish a true from a false positive result. The faster turnaround time and fewer positives sent out for third-party confirmation translate into improvements in the company’s bottom line. Most importantly, renewed credibility with its customers and with inspectors from the United States Department of Agriculture’s (USDA’s) Food Safety and Inspection Service (FSIS) has strengthened the company’s reputation.

When it comes to food safety testing, the QA director for this company considers the BAX® system the gold standard. “I won’t even consider using a third-party laboratory that doesn’t have a BAX® system,” he said.