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## **IMMEDIATE RELEASE**

## Study Compares Multiple Rapid Tests for Salmonella Detection

Head-to-head comparison measures time to result required to detect Salmonella in ground chicken

ST. PAUL, Minn. – January 27, 2017 – 3M Food Safety today announced the results of a scientific study conducted by a third party ISO/IEC 17025 accredited laboratory. The research found that the  $3M^{\text{TM}}$  Molecular Detection Assay 2 – *Salmonella* test saved significant hours and cost versus three other common pathogen detection platforms included in the study.

For each of the four pathogen detection platforms, a total of 96 samples of ground poultry were evaluated in duplicate, resulting in 192 detection method tests per platform, for a total of 768 results. Time was measured on the aggregate and according to the following parts of the detection protocol: sample preparation; instrument and software set up; sample lysis/capture; and assay setup. The study focuses largely on speed because turnaround time significantly affects food production and testing, particularly when a producer's goods are perishable or in high demand. While the introduction of any rapid microbiology method should have a positive impact, there are still distinctions between each method.

**Table 2.** Total time to result for the detection of *Salmonella* by four different platforms in 96 samples.

Method Steps	Time to Result (minutes) <sup>a</sup>			
	3M <sup>TM</sup> MDA2	Technology 1*	Technology 2*	Technology 3*
Detection method set up	31.7	37.3	63.9	84.8
Lysis/capture incubation +Instrument run time	80	240	124	207
TOTAL	111.7	277.3	187.9	291.8

<sup>&</sup>lt;sup>a</sup>Preparation of sample including weighing 25 g of sample and adding 225 mL of culture media was similar for all four methods, at approx. 116 min

<sup>\*</sup>Technology: Commercial method available in the marketplace

Based on the findings of this study, using the 3M Molecular Detection Assay 2 – *Salmonella* method to perform 10,000 *Salmonella* tests would save a laboratory between 132 and 312 labor hours annually as compared to the other detection platforms, up to 2.6 times faster, which would potentially result in an annual cost savings of up to \$6,240. To download the complete study and view the accompanying infographic, click <a href="here">here</a>.

For more information about the 3MMolecular Detection System, visit 3M.com/foodsafety/MDA2 or follow @3M FoodSafety on Twitter.

## **About 3M**

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