

## **Report by U.S. Government Research Scientists Confirms Bio Terror Threat Detection Capabilities of PathSensor's CANARY Technology**

*Pacific National Northwest Laboratory researchers find CANARY Technology had best detection sensitivity for Ricin and Anthrax of any comparable technology evaluated.*

Baltimore, Maryland ([PRWEB](#)) February 23, 2017 -- Baltimore biotech firm, PathSensors, Inc., announced today that in a published evaluation of multiple immunoassay-based threat detection technologies by researchers from the Pacific National Northwest Laboratory (PNNL), a U.S. Department of Energy Laboratory, PathSensors' CANARY® biosensor threat detection technology was found to have the best level of detection (LOD) for two bio terror threats, Bacillus anthracis (anthrax) and Ricin.

The report, "[Evaluation of Immunoassays and General Biological Indicator Tests for Field Screening of Bacillus anthracis and Ricin](#)," compared fourteen immunoassays from ten different technology providers, including PathSensor's CANARY biosensor immunoassay and PathSensor's Zephyr assay sample reader.

A measure of the effectiveness of bio terror and bio threat detection technologies is the technology's tested "limit of detection," which indicates the level of sensitivity of the technology and its ability to avoid false positives (false alarms). A lower limit of detection indicates a better level of threat detection sensitivity and lower false alarm rate and is more desirable for bio threat detection applications. In the case of PathSensors' CANARY® Zephyr technology, the PNNL report found that for detection of bacillus anthracis:

"...the CANARY Zephyr achieved an estimated limit of detection of  $10^3$  spores/mL, which was 4 orders of magnitude lower than any other immunoassay tested." [PNNL report, page 87]

For detection of Ricin toxin, the PNNL report found that:

"...The CANARY Zephyr achieved the lowest limit of detection (3ng/mL)." [PNNL report, page 87]

"This new report from PNNL scientists is only the latest in what has been a series of independent validations of PathSensors' CANARY pathogen detection technology," commented Ted Olsen, CEO, PathSensors, Inc. "Anthrax and Ricin are just two of the many pathogens CANARY can detect; now users of CANARY can know that they are using one of the most highly sensitive and cost effective bio threat solutions available."

PathSensors' CANARY® (Cellular Analysis and Notification of Antigen Risks and Yields) technology is a biosensor technology that delivers rapid detection of pathogens – including toxins, viruses, and bacteria – at high levels of sensitivity and specificity. First developed at the MIT-Lincoln Laboratory, CANARY® incorporates pathogen-specific antibodies expressed on the biosensor surface which, in the presence of a pathogen, trigger an intracellular calcium release that in turn activates bioluminescent proteins whose light output can be measured and analyzed. In independent tests by U.S. government labs, PathSensors' CANARY® technology was shown to be superior to alternative technologies in terms of sensitivity and speed of detection. PathSensors has a continually growing library of biosensors for threats such as HLB, Phytophthora, and Ebola.

About PathSensors, Inc.

PathSensors is a leading biotechnology solutions and environmental testing company. PathSensors provides



high speed, highly sensitive pathogen and threat detection solutions for the defense, homeland security, public health, medical countermeasures, mail room screening, first responder, food processing and agricultural sectors. For more information, visit [www.pathensors.com](http://www.pathensors.com).



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