

Zephyr Pathogen Identifier System – Portable Bacteria, Virus, Toxin Detection

PathSensors Inc. introduced the portable Zephyr Pathogen Identifier system, which delivers extremely rapid, highly reliable detection of bacteria, virus and toxins in powder and liquid samples in minutes. The Zephyr Identifier uses CANARY® (Cellular Analysis and Notification of Antigen Risks and Yields) technology which is licensed from the MIT-Lincoln Laboratory. With CANARY® biosensors, the rapid kinetics and signal amplification of cell-based signaling enables pathogen detection at sensitivities down to 50 cfu/pfu within 5 minutes.

Zephyr detects foodborne pathogens such as *salmonella*, *e.coli*, *listeria* and *campylobacter* in dry foods, meats and on food preparation surfaces; significant issues for food producers worldwide. Currently, PathSensors is engaged in programs with the USDA and FDA to identify pathogens in poultry and plant materials.



PATHSENSORS

"The portable Zephyr is as an easy-to-use, field deployable pathogen identification system, typically requiring less than a half hour of operator training," explains Ted Olsen, president of PathSensors. "The user interface walks the operator through each assay step, making the system extremely user-friendly."

PathSensors is currently working with other government organizations, including first responders, to deploy the portable Zephyr system in the field to provide fast, sensitive detection of biological risks.

"Typically, field samples are transported to regional laboratories for identification testing which can take critical hours," Olsen explains. "Zephyr technology enables quick testing onsite in minutes."

At launch, PathSensors is offering reagents for rapid identification of the most common bio-threat agents. Initially, these pathogens include anthrax, ricin, botulinium toxin, smallpox, the plague and tularemia. The new Zephyr system expands PathSensors' line of rugged instrumentation that includes The BioFlash-AF Identifier for aerosol collection and identification of airborne pathogens in the ag-poultry environment, using a single sample.

PathSensors now offers a complete line of instrumentation that can identify biological agents in any sample matrix: powder, liquid or aerosol. The instruments can be used as standalone or as part of an integrated biological detection system.

The existing product line also includes the rugged PathSensors BioFlash-E Biological Identifier, a high-volume, high-performance aerosol sampler for building, event and mailroom applications.