NEWS RELEASE

BioFlyte Successfully Validates Aerosolized Fentanyl Detection Capabilities

9/28/2023

Following in-house and third-party validation testing, BioFlyte adds aerosolized fentanyl to its classification library and becomes only market solution proven to simultaneously sample for both chemical and biological threat agents

ALBUQUERQUE, N.M.--(BUSINESS WIRE)-- **BioFlyte**, a bioaerosol surveillance firm with a disruptive new class of fieldable biological threat collection, detection, and identification solutions, today announced that it has added fentanyl to its classification library for its flagship **BioTOF z200** system following successful in-house proof of concept and subsequent third party validation testing. These findings also led to a significant software upgrade that allows the BioTOF z200 to simultaneously sample and accurately identify chemical and biological threat agents in minutes, unlike any other solution on the market today.

“BioFlyte’s mission is to protect people and critical infrastructure, while also ensuring the continuity of operations in the face of evolving biological and chemical threats,” said Todd Sickles, CEO of BioFlyte. “Key decision makers in government and public safety are struggling to control the flow of fentanyl into the country. Our ability to quickly and accurately detect life-threatening chemical threats like fentanyl, in addition to serious biological agents sets us apart from every other solution on the market. We plan to also explore other chemical use cases where we can potentially ensure security within additional critical infrastructure applications.”

Fentanyl continues to fuel the most severe drug crisis in the history of the United States. This proliferation of fentanyl has also led to a drastic increase in the illicit supply of weaponizable chemical threats, giving bad actors unprecedented access to materials required to conduct attacks with anthrax, fentanyl and ricin. When released as an aerosol in a biothreat attack, these materials pose a significant danger to people and critical infrastructure.

While there are some existing technologies that can detect these types of threats, they often require complex equipment, are expensive to maintain and utilize, and cannot easily cover both chemical and biological-based threat agents. BioFlyte's BioTOF z200 is the first dynamic threat monitoring solution that is capable of early warning detection, analysis and confirmatory identification across the chemical and biological threat landscape. It is a fully enclosed, scalable solution that keeps the operator safe, has an easy-to-read interface, and offers a low, predictable operating cost.

"As additional threat actors gain access to fentanyl, it poses an increasingly significant threat to people and critical infrastructure environments in its aerosolized form," said Kirstjen Nielsen, Former United States Secretary of Homeland Security and member of BioFlyte's Advisory Board. "BioFlyte's technology is able to quickly detect and identify the presence of fentanyl and a myriad of biological threats, giving response teams more time and information to handle current and future biological and chemical threats."

In response to the increasing societal threat posed by fentanyl, BioFlyte conducted initial in-house proof of concept development and testing using fentanyl in methanol solution, which yielded promising results and led to third-party validation testing with **Avarint, LLC**. In testing with Avarint, the BioTOF was exposed to both pure fentanyl and fentanyl mixed with common cutting agents such as xylazine and acetaminophen. BioTOF testing results included:

- Generated a distinctive mass spectra peak directly correlated to the fentanyl citrate's mass when exposed to a dry aerosol sample across various concentrations
- Detected fentanyl at a variety of concentrations and as little as 100 PPL with over 90% accuracy
- Distinguished fentanyl from the common cutting agents

"This successful third-party validation testing will give our customers greater confidence in our ability to quickly detect aerosolized fentanyl in not just a lab setting, but in a true environmental capacity," said Christina Patsalis, Lead Bio Test Engineer at BioFlyte. "BioFlyte's unique variable laser power MALDI ionization makes the detection and confirmatory identification of lower mass chemical threat targets and higher mass biological threat targets possible in a single solution, which removes the traditional cost and operational barriers for our market."

BioFlyte's BioTOF z200 is currently deployed at a New York-based financial institution and at pilot sites across the U.S., including Pittsburgh International Airport, and is commercially available globally. For more information, please contact **sales@bioflyte.com** or visit **https://bioflyte.com**.

About BioFlyte

BioFlyte is a bioaerosol surveillance company that is commercializing a revolutionary new class of fieldable biological contamination sampling, detection, and identification solutions. The firm's current market focus is critical

infrastructure protection and mail screening in both the government and commercial sectors. For more information about BioFlyte and its products, please visit: **https://bioflyte.com**.

Kalyn Kolek for BioFlyte – **kos@anzupartners.com**

Source: BioFlyte