



PARTNERING WITH FIRST RESPONDERS FOR ENHANCED SOLUTIONS

First responders are the first line of defense for public safety. The Pacific Northwest National Laboratory (PNNL) partners with responders across the nation to create technology solutions that keep them protected, connected, and aware.

With a multidisciplinary team of scientists, engineers, and specialists experienced in first response, PNNL is advancing technology solutions that reflect responders' dynamic technology needs in complex and changing threat environments.

ADVANCING INFORMED SOLUTIONS

Enhanced solutions rely on robust responder input and understanding the response domain. PNNL has a long-standing history of engaging the responder community to invite their input to define and prioritize technology needs that translate into solutions that work. PNNL uses a structured, multi-faceted approach that brings technologies to market by engaging the first responder communities, strategic partners, and other stakeholders to:

- Craft a shared vision rooted in first responder functional and operational needs and requirements
- Identify existing and emerging technologies with the potential to solve the response challenges of today and tomorrow
- Develop prototypes based on the shared vision

- Champion the development of standards and policies necessary for safe and successful technology deployment
- Create a path to engage and attract industry partners

BUILDING BETTER PARTNERSHIPS

PNNL brings together regional emergency management, public safety professionals, and the private sector to identify, analyze, and recommend solutions aligned to user needs. Through our alliance of public-private partnerships, we are:

- Tackling difficult and complex first responder challenges
- Exploring long-term innovative solutions
- Integrating the efforts of first responders, research and development, and the investment community

CONTACT

Grant Tietje

National Security Specialist
grant.tietje@pnnl.gov
(206) 528-3464

Ann Lesperance

Director, Northwest Regional Technology Center
ann.lesperance@pnnl.gov
(206) 528-3223

<http://nwrtec.pnnl.gov>

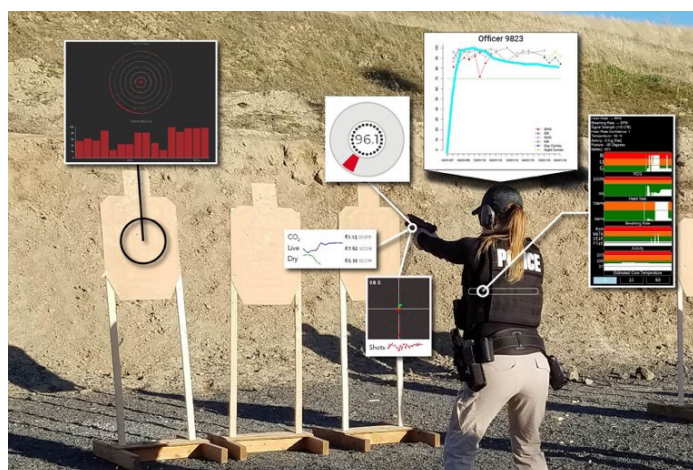
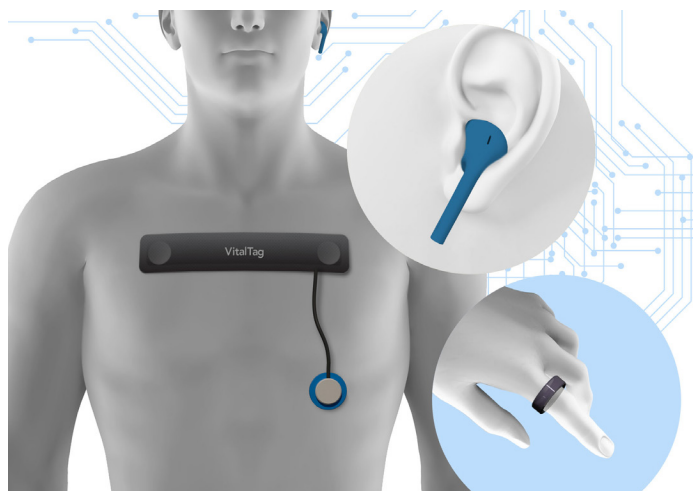
MAKING A DIFFERENCE

In managing the Responder Technology Alliance (RTA) for the Department of Homeland Security Science & Technology Directorate (DHS S&T), PNNL is accelerating the development of and bringing to market technology solutions that will improve responders' capability and safety. Recent projects are tackling challenges in:

- **Emergency response** – PNNL's patent-pending VitalTag technology will transform wearable health-monitoring, transmitting patient vital signs via a disposable, wearable suite of sensors.
- **Qualifications and training** – Project OFFICER is creating next-generation personalized, adaptive firearms training and qualification tools.
- **Technology** – PNNL supports DHS S&T's System Assessment and Validation for Emergency Responders (or SAVER), helping responders make informed procurement decisions.
- **Critical infrastructure and resilience** – PNNL's Flood APEX work is advancing tools and predictive modeling to identify flood-related consequences.
- **Situational awareness and communication** – PNNL's PORTAL offers responders a web-based cross-cutting communication system for rich information sharing from anywhere via common web-enabled devices.

Through the Northwest Regional Technology Center, PNNL supports regional preparedness, response, and recovery and enables homeland security solutions. Recent projects and collaborations include:

- Leading regional recovery and resilience planning for urban areas, military installations, and the private sector
- Supporting public safety in maritime radiation detection
- Engaging military, local, and private sector on response to all-hazard events



- Co-hosting regional cybersecurity summits with local public utility districts and industry partners
- Conducting technology pilots in resource allocation and risk reduction modeling and security system integration at large critical infrastructures

ABOUT PNNL

PNNL is the nation's premier laboratory for scientific discovery in chemistry, earth sciences, and data analytics and for solutions to the nation's toughest challenges in energy resiliency and national security. Founded in 1965, PNNL is operated by Battelle for the U.S. Department of Energy's Office of Science. DOE's Office of Science is the single largest supporter of basic research in the physical sciences in the United States and is working to address some of the most pressing challenges of our time.