June 2019 Personal Protective Technology Program

What are our priorities?

The National Institute for Occupational Safety and Health (NIOSH) Personal Protective Technology (PPT) Program advances the application and knowledge of PPT to keep workers safe. Technologies include respirators, protective clothing, gloves, eye, fall and hearing protection, hard hats, and sensors to detect hazardous substances. The PPT Program includes the NIOSH respirator approval program, PPT research, evaluations and interventions to support the NIOSH strategic goals.

What do we do?

- Certify that new respirators meet minimum performance and respiratory protection standards before they enter the market.
- Conduct site and product audits to ensure respirators continue to meet standards after approval.
- Develop and implement science-based national recommendations for respiratory and other PPT.

What have we accomplished?

- Completed 465 respirator approval decisions including 249 new respirator approvals.
- Completed 259 site and product audits providing confidence that respirators are effective for their intended purposes.
- Validated that chemical, biological, radiological and nuclear (CBRN) canisters protect against newly identified threats and identified additional chemicals to test.
- Established PPE Stockpile Partnerships with federal, state, city, and county stockpiles.
- Began air-purifying respirator (APR) and surgical gown testing to evaluate the effect of stockpiling conditions on protective performance.
- Identified alarm and communication testing necessary to complete the powered airpurifying respirator (PAPR) standard.

 Completed revised Long Term Field Evaluation (LTFE) strategy. Currently undergoing internal/ external stakeholder review prior to final implementation.

Develop new methods to test effectiveness of

PPT for workers, including workers engaged in

Create guidance and tools to help employers

and workers use PPT as effectively and

Develop and evaluate innovative PPT designs

and test methods to improve comfort, fit and

infectious disease activities.

economically as possible.

usability.

- Received the "CDC Laboratory Quality in Action" Award for Laboratory Excellence as a result of ISO 17025 APR lab accreditation.
- Commissioned and led the coordination of the National Academies report *Reusable Elastomeric Respirators in Health Care: Considerations for Routine and Surge Use*, which was published in December 2018.
- Completed draft respirator fit capability standard (RFC) which is undergoing ASTM review.
- Implemented the unified respirator approval process with the U.S. Food and Drug Administration.

What's next?

- Complete 400 respirator approval decisions and 250 quality assurance audits in 2019.
- Complete testing of identified APRs and surgical gowns through newly established stockpile partnerships.
- Evaluate seven priority chemicals to be tested against six NIOSH-approved CBRN canister models.
- Complete the draft PAPR standard to better meet healthcare workers respiratory protection needs.
- Initiate ISO 17025 accreditation for additional National Personal Protective Technology

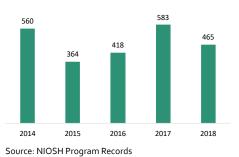
Laboratory (NPPTL) APR and Self Contained Breathing Apparatus (SCBA) labs.

- Begin implementation of the revised LTFE program strategy to inform stakeholders of fielded escape respirator performance.
- Conduct elastomeric respirator studies with three healthcare facilities.
- Collaborate with external partners in developing and evaluating new materials for use in PPE.
- Initiate the development of the Fentanyl Module for PPE INFO.

At-A-Glance

The Personal Protective Technology (PPT) Program is a world leader in protecting workers through PPT research, standards development, respirator conformity assessment, public outreach and information dissemination. This snapshot shows recent accomplishments and upcoming work.

Number of respirator approval decisions



Number of certified respirator audit activities for quality assurance



Number of consensus standards developed using PPT Program participation and PPT Program data in standards development organizations



Source: U.S. Bureau of Labor Statistics.



Centers for Disease Control and Prevention National Institute for Occupational Safety and Health

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