What are our priorities?

The National Institute for Occupational Safety and Health (NIOSH) Personal Protective Technology (PPT) Program evaluates and improves equipment worn by workers and develops interventions to protect them from hazards. Technologies include respirators, protective clothing, gloves, eye, fall and hearing protection, hard hats, and sensors to detect hazardous substances. The PPT program works collaboratively with industry, labor, trade associations, professional organizations, and academia. The program focuses on these areas:

- Ensure PPT meet the requirements of the appropriate standards. Respirator approval and post approval evaluation is especially important.
- Ensuring PPT effectiveness including research to evaluate performance, comfort, fit, and usability.
- Improving protection provided by all types of PPT by developing science-based standards, guidance and interventions.

What do we do?

- Certify that new respirators meet minimum construction, 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 guidance for respiratory and other PPT.
- Develop new methods to test effectiveness of PPT for workers, including workers engaged in infectious disease activities.
- Create guidance and tools to help employers and workers use PPT as effectively and economically as possible.
- Develop and evaluate innovative PPT designs and test methods to improve comfort, fit and usability.

What have we accomplished?

- Completed 418 respirator approval decisions including 364 new respirator approvals.
- Conducted 264 site and product audits providing confidence that respirators are effective for their intended purposes.
- Expedited the completion of the National Academies Report: Integration of Food and Drug Administration (FDA) and NIOSH Processes Used to Evaluate Respiratory Protective Devices for Health Care Workers.
- Completed evaluations of four cooling devices and two innovative PPE ensemble designs to improve healthcare worker protection during emergency responses.
- Launched the personal protective equipment information (PPE-INFO) database for public use including PPE use for Ebola.
- Established guidance to identify the gowns and coveralls needed to protect users from harmful pathogens such as Ebola.
- Determined medical exam gloves continue to meet PPE performance standards after use of alcohol-based hand sanitizer.
- Recommended revised ASTM test criteria after evaluating isolation gowns from six manufacturers using current performance requirements.

What’s next?

- Finalize the research and evaluation needed to identify the priority chemical and radiological agents threat list.
- Lead and establish the test method and fit capability consensus standard for half-facepiece, air-purifying particulate-only respirators.
- Complete 400 respirator approval decisions and 250 audit activities in 2017.
- Develop partnerships with federal and state stockpile managers and national PPE manufacturers to address PPE stockpiling challenges.
- Identify factors associated with degradation of respirators and surgical gowns.
- Finalize partnership with the U.S. FDA to establish a unified respirator approval process.
- Develop an improved test method to meet the protection needs of healthcare workers when using powered air-purifying respirators.

To learn more, visit https://www.cdc.gov/niosh/programs/ppt/