Occupational Safety and Health

America must have safe, healthy workplaces to stay competitive and productive. CDC plays a critical role in this by helping prevent illness, injury, disability, and death at work. Our research and practical tools help keep workers safe from job-related illnesses and injuries. We partner with state and federal agencies, labor, and industry to improve workplace safety and health.

Key Accomplishments 2015

- Designed and launched a patented, multi-functional guard rail system to protect workers when working at high elevations. This protects workers from hazardous conditions while doing residential construction and is commercially available.
- Produced the Hospital Respiratory Protection Program Toolkit, in partnership with Occupational Safety and Health Administration (OSHA), to help hospitals prevent spreading aerosol-transmissable diseases to healthcare workers.
- Established the National Center for Productive Aging and Work to address the needs of an aging workforce and identify proven actions to support workers of all ages and their employers.
- Expanded relationships with tribes and identified worker safety and health priorities within American Indian and Alaska Native communities through a series of visits to tribal communities, meetings with stakeholders, and a capacity-building workshop. These priorities will guide the development of a research agenda for this population as part of the newly established American Indian and Alaska Native Initiative.
- Led the national effort to support the use of personal protective equipment (PPE) in the Ebola response by completing initial testing on PPE ensembles used in West Africa to provide additional heat stress mitigation guidance.

CDC helped develop innovative "through-the-earth" communications to keep coal miners safer.

Communication in a Coal Mine: CDC Helps Improve Disaster Response

The ground shakes, machinery stops, a distant rumbling is heard, then silence. A mine worker picks up the mine phone, but it's dead. This predicament, where a mine fire, explosion, or other major event in a coal mine knocks out regular communications, can easily lead to tragedy. The miners are in danger until they can communicate with rescuers on the surface, but the emergency communication must be able to pass through the earth, which regular radio transmissions cannot do.

The Mine Improvement and New Emergency Response Act of 2006 (MINER Act) requires that underground coal mines develop emergency response plans that specify two-way wireless communications and electronic tracking systems. Through-the-earth communications are one aspect of these plans, but no suitable technologies existed.

CDC tackled this difficult technical problem, calling for innovative solutions to address this challenge. As a result, two through-the-earth communications systems were developed and made available. These systems can now be a lifeline for mine workers to communicate with rescuers on the surface during a mine emergency.

1 in 5

About 1 in every 5 American workers is over age 65 today, and 1 in 4 American workers will be over 55 by 2020.

$250 billion

Work-related deaths, injuries, and illnesses cost employers more than $250 billion in medical expenses and productivity losses a year.

48,000

There have been almost 48,000 downloads of the Ladder Safety app, designed to prevent worker falls and other injuries since it was introduced.

26,000

About 26,000 truck drivers or their passengers were injured in crashes in 2012.