

Weekly Safety Tip

Studies on Wearable Technology Acceptance



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"Hesitancy in Wearable Technology Adoption"

Two studies find several reasons for this attitude, including privacy and how data would be used.

Earlier this year, the <u>National Association for Biotechnology published a study</u> that looked into the cause of hesitancy among industrial workers when it comes to adopting wearable technology.

Using focus groups, the researchers explored the factors that influenced the acceptance by workers of wearable technology. The study examined what were considered *high-level factors* related to *management*, *work design*, and *job requirements*.

The study concluded that while *individual-level factors* such as *usability* and *comfort* do contribute to acceptance of wearable technology in industry, organization-level factors had a larger impact.

The survey participants provided several actionable insights to reduce hesitancy.

- Emphasizing safety culture and the benefits of workplace safety and health is paramount.
- The case for using wearables for performance improvement should also be discussed after leading with safety.
- · Consider voluntary participation in a wearables program with early adopters.

Looking specifically at the construction industry, another <u>study published in Science Direct</u> notes that physiological monitoring, wearable sensing devices, and location tracking wearable sensing devices have been studied and found to increase construction site safety.

The study notes that: "The validity of the technology to create wearable devices for construction safety has been studied ... and it has been found that:

"... had wearable safety devices been used in construction, they could have prevented 34% of the deaths recorded in 2018 in the OSHA archives."

However, the devices are not utilized by construction contractors on a wide scale. The research found that 46% of construction laborers are not willing to use biometric wearable sensing devices. And 59% of construction laborers are not willing to use tracking wearable sensing devices.

The biggest concern about wearing this technology was *privacy*. Workers fear that the device might capture data they consider personal and private.

There was also the issue of workers *not liking being consistently monitored* while they work.

Additionally, workers were uncertain about whether the *collection of private health data* would be used for health insurance or employment decisions.

The research, which goes into great detail, concludes that more study is needed.

Acknowledgement: EHS Today May article by Adrienne Selko

Weekly Safety Share



Work Zone Safety Update 2025



SAFETY & HEALTH SHARE

Are Roadway Work Zones Becoming More Dangerous?



Almost half of the highway construction contractors who participated in a recent study believe the risk of work zone crashes is greater now than one year ago. More than 600 firms across the United States took part in the annual Work Zone Awareness Survey, conducted by the Associated General Contractors of America and software company HCSS.

47% of contractors agreed the risk of a crash is greater than it was a year ago;

51% said it was about the same;

60% of the respondents experienced a work zone crash in the past year;

32% reported five incidents or more;

13% reported a worker fatality as a result of a crash;

24% observed a driver or passenger fatality.

"We can only make a difference if we continue to shine a light on the issues with real data, real stories and the real impact work zone safety has on people's lives," HCSS President and CEO Steve McGough said during a May 20 webinar presenting the survey results and work zone dangers. McGough outlined multiple strategies for aiding the effort, including:

- · incorporating work zone safety awareness components into driver's education courses,
- driver's license renewal tests and defensive driving courses.
- · expanded police presence at work zones,

Furthermore, changing the public's view to be more concerned with moving violations in work zones is also necessary because many see work zone enforcement as revenue-generator as opposed to it's really being about worker safety... We need drivers to think: I need to slow down because someone's life is on the line.

"Drivers are distracted and they become desensitized," said Michael Gallant, director of HaulHub, a software company. "Even with stronger work protections, it's still proven to not be enough. Crews are operating just feet from traffic. Without a clear, real-time signal that work is happening now, drivers often don't register that risk."

DaveV Note: Throughout the metro-Toledo area, you can't drive anywhere without being impacted by orange barrels and traffic cones because there are so many road projects going on at any one time, though you often don't see anyone actually at work in most of those work zones. The good news is that workers can't get hurt if they aren't there, but the bad news is that driving in and around these zones elevates the stress on drivers that can cause them to lose their patience or focus and possibly make bad decisions that can result in accidents and injuries as they negotiate their way through the temporary roadwork zones and seemingly never-ending detours.

What is always missed in this is the deleterious impact on the quality-of-life and the mental health/well-being of NW Ohio residents, over what now constitutes decades.

Consequently, I would add another strategy: Get one roadwork project done at a time, then move on to stage and complete the next one... The safety challenges to workers and public safety from too many temporary roadwork zones needs serious attention in Northwest Ohio. Our elected officials and governmental agencies must become more accountable for getting the work done sooner rather than later, and minimizing the ubiquitous (indeed, you can't drive anywhere these days without being confronted by) the driving challenges of too many temporary roadwork zones.

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