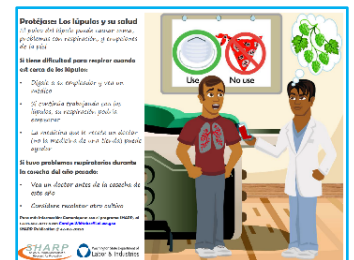


Improving respiratory and ergonomic health in the hop industry

From 2013 to 2015, the Washington Safety & Health Assessment & Research for Prevention¹ (SHARP) program's relationship with the hop industry focussed on the respiratory health of hop workers. In 2015, the Washington Hop Commission, along with the state department of agriculture, requested our help to answer ergonomic questions about worker health during the high-paced activity of hop bale core sampling.

Respiratory health challenge & response

The incidence rate of respiratory disease in hop workers is 30 times greater than the rate of respiratory disease in comparable Washington agricultural workers. Respiratory concerns were first identified through SHARP's work-related asthma surveillance program and subsequently published as a case series in the primary literature. Over a two year period, both the industry and health care providers were engaged through prevention materials, mailings, and presentations to raise awareness on the respiratory health of hop workers.



Spanish brochure on respiratory health

Ergonomic risk challenge & response

Once familiar with SHARP's occupational expertise, the hop industry requested ergonomic assistance. Upstream advancements in baling technology had introduced new ergonomic risks downstream for inspectors when taking core samples from hop bales. SHARP evaluated the musculoskeletal risks for hop inspectors while core sampling conventional 200 lb hop bales compared to new-style 150 lb bales. In addition to a successful ergonomic assessment, the evaluation revealed an opportunity to improve hop bale tracking, further streamlining the inspection process.



Core sampling of a hop bale

The impact

Initial outreach efforts regarding respiratory health of hop workers reached 200 industry managers and over 300 health care providers. On healthcare, there was an increase in the number of workers referred to regional providers and to pulmonary specialists. For hop growers, there were increased opportunities to discuss respiratory health including local presentations, farm tours, and a national webinar. The ergonomic evaluation enabled the industry to propose updates to the current USDA hop bale inspection manual, a step forward to integrate new bale technology into long-standing inspection protocols.

This story demonstrates the value of state occupational programs to form long-term partnerships with local workers and employers to problem-solve occupational safety and health issues.

Outreach material: www.lni.wa.gov/Safety/Research/OccHealth/Asthma/Prevention.asp

Respiratory journal article: <https://doi.org/10.1016/j.anai.2014.07.029>

¹SHARP Program, Washington State Department of Labor & Industries