

Overview

Hops are cultivated throughout the US with commercial production centered in the Northwest.

Asthma from hop was first identified through SHARP's work-related asthma surveillance program. A subsequent in-depth review of Washington workers' compensation claims identified 57 cases of respiratory disease associated with hop dust inhalation from 1995 to 2011.

The purpose of this study was to describe occupational exposure and respiratory disease in hop workers.

Respiratory Disease from Hop Plant Dust

Respiratory disease associated with occupational inhalation to hop (*Humulus Lupulus*) during harvest and processing

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Key Findings

- The incidence rate of respiratory disease in hop workers was 15 cases per 10,000 full-time workers. This is 30 times greater than the incidence rate for the comparison group 'field vegetable crop workers'
- The 57 cases were diagnosed as:
 - 61% asthma
 - 7% COPD
 - 32% allergic respiratory disorders or asthma symptoms
- Cases were associated with hop harvest, secondary hop processing, and indirect occupational exposure.
- Three cases are discussed in depth and demonstrate a strong temporal association between exposure and symptoms.

Impact

State-based surveillance systems are effective in identifying regionally-relevant exposures that might not otherwise be known. Further characterization of hop dust itself, exposure during harvesting, and worker health are needed to guide prevention efforts.

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Research for Safe Work

The SHARP Program at the Washington State Department of Labor & Industries partners with business and labor to develop sensible, effective solutions to identify and eliminate industry-wide hazards. Learn more at lni.wa.gov/safety-health/safety-research/about-sharp

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<https://www.sciencedirect.com/science/article/pii/S1081120614005547>

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