

**Colorado Department of Public Health and Environment (CDPHE)
Occupational Health and Safety Surveillance Program (Fundamental Program)**

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SUMMARY OF MAJOR OUTPUTS/ PRODUCTS

Notable Program Changes

The Occupational Health Coordinator position was vacant from August 2019 through March 2020; as a result, work in our occupational health program slowed. The vacancy was filled, in a part-time capacity, from March through November 2020. During this time, the part-time program coordinator became heavily invested in occupational health issues related to the COVID-19 pandemic, supporting development and dissemination of industry-specific guidelines for COVID-19 prevention and response best practices and providing epidemiologic subject-matter expertise for workplace/industry outbreaks. As a result of this unexpected pandemic-related occupational health workload, combined with the part-time nature of the position, the original Fundamental Plus activities planned for the 2019-2020 year remained paused. CDPHE plans to elevate the current program coordinator to a full-time position by December 2020, which will increase the capacity of the program to continue to work with occupational health and COVID response while also reinvigorating continued work to other occupational health initiatives.

Surveillance Data

Accomplishments during the project budget year 7/1/2019-6/30/2020 include:

- Reported Colorado's 2016 surveillance data for the previously incomplete Occupational Health Indicators for NIOSH for publication by the Council of State and Territorial Epidemiologists (CSTE), and verified numbers for Occupational Health Indicators that saw considerable year-to-year differences as a result of changes to the ICD coding system.
- Conducted analysis for 2017 OHIs, to be reported in fall 2020.
- Reported Colorado's 2018 Census of Fatal Occupational Injuries (CFOI) cases to the Bureau of Labor Statistics (BLS).
- Reported Colorado's 2019 data of adult elevated blood lead to NIOSH's Adult Blood Lead Epidemiology and Surveillance (ABLES) Program.
- Contributed to data collation regarding COVID-19 cases among workers in food processing, food manufacturing, and agriculture industries for contribution to a CDC MMWR analysis, which was then expanded as a cross-sectional study published in the peer review journal *Emerging Infectious Diseases*.

- Waltenburg MA, Rose CE, Victoroff, et al. COVID-19 among workers in food processing, food manufacturing, and agriculture workplaces in the USA: A Cross-sectional study. *Emerging Infectious Diseases*. 2021 Jan. Pre-print: https://wwwnc.cdc.gov/eid/article/27/1/20-3821_article.
- Waltenburg MA, Victoroff T, Rose CE, Butterfield M, Jervis RH, Fedak KM, et al. Update: COVID-19 Among Workers in Meat and Poultry Processing Facilities – United States, April-May 2020. *MMWR Morb Mortal Wkly Rep* 2020; 69:887-892. DOI: 10.15585/mmwr.mm6927e2.

Presentations and Outreach Events

Accomplishments during the project budget year 7/1/2019-6/30/2020 include:

- In Summer/Fall 2019, contributed to 12 “Safety Matters” trainings held at various middle and high schools throughout the state as part of a Research-to-Practice grant from the NIOSH Mountains and Plains Education and Research Center (MAP-ERC).
 - The occupational health coordinator for CDPHE at the time, Roberta Smith, coauthored an article about this work which was published in *The Synergist* in December 2019 (<https://synergist.aiha.org/201912-teaching-young-workers>).
 - Ms. Smith also conducted an interview about worker safety in the marijuana industry for an article published in *Safety and Health* magazine in November 2019, which highlighted the trainings we conducted in 2018 and early 2019 (<https://www.safetyandhealthmagazine.com/articles/19117-cannabis-worker-safety>).
- Responded to inquiries in fall 2019 from professionals in the healthcare industry about USP800, a regulation on handling hazardous drugs in the healthcare industry.
- Responded to Dr. Cecile Rose (National Jewish Health Center, Denver, CO) regarding concerns about silica exposures and silicosis among workers in countertop fabrication that arose in fall 2019. Discussed potential outreach and prevention as well as research capacities, and coordinated contact between Dr. Rose and partners at Tri-County Health Department.
- Presented on COVID-19 Response Best Practices for several industry stakeholder groups and participated in various COVID-19 industry working groups. Examples include:
 - “Colorado Restaurant Winter Outdoor Dining Design Workshop.” Invited to participate as subject matter expert in day-long workshop sponsored by the Colorado Restaurant Association and Colorado Governor’s Office, October 19, 2020.
 - “COVID-19, Ventilation, and Energy Efficiency for Building Owners and Managers.” Webinar sponsored by Partners for a Clean Environment (PACE), August 27, 2020.
 - “What to Do if an Agriculture Employee Tests Positive for COVID-19.” Webinar sponsored by Colorado Fruit & Vegetable Growers Association, Colorado State University Extension. August 6, 2020.
 - “COVID-19 Outbreak Prevention and Response in the Cattle Industry.” Webinar sponsored by Colorado Cattlemen’s Association, June 25, 2020.
- Co-authored a wide variety of COVID-19 Best Practice Guidance Documents relevant to specific occupational groups/industries, published by the state of Colorado as official Department of Public Health documents available on the state’s website COVID-19 resource dashboard (<https://covid19.colorado.gov>). These documents serve to support local and state-level public health officials in the decisions they make related to on-the-ground COVID-19 response. Examples include:

- Ventilation and COVID-19, which addresses concerns over small aerosol spread of sars-cov-2 and how ventilation and HVAC in indoor spaces may contribute to, or serve as a tool to mitigate, disease transmission.
- Guidance for Preventing, Reporting, and Mitigating Workplace and Non-Health Care, Non-Residential Facility Outbreaks (the “Workplace Outbreak Guidance”), an extensive document that summarizes prevention best practices and response steps for all non-residential workplace settings. This document was first released in April 2020, and was complemented by occupational health program managers and COVID response teams from public health agencies in other states for being a clear, comprehensive resource that helps workplaces navigate the often confusing plethora of “guidance and resources” across federal CDC, OSHA, and NIOSH webpages.
- Guidance for the Agricultural Industry, which details recommendations for agricultural workers and employers with a special focus on legal rights of workers for safe working conditions related to COVID-19 prevention and access to healthcare and unique issues related to migrant and seasonal workers.
- Guidance for Private, Hired Transportation, which addresses non-public-utility shared transportation industry (rideshares, private shuttles used by the hotel and tourism industries, etc.)

DESCRIPTION OF PROGRAM ACTIVITIES

Public Health Surveillance Activities:

OHI data: The Colorado program annually reports Colorado’s state-wide Occupational Health Indicators (OHI) data for 20 of the 22 indicators. From the 2018-2019 program year, in which 20162 indicators were still outstanding; these were completed in the Fall of 2019 (the current program year). Information on these measures were provided to NIOSH and CSTE. The information was subsequently updated on the Colorado Department of Public Health’s website. In Spring and Summer 2020, we gathered data and conducted analysis to calculate the OHIs for the 2017 year, which will be reported to NIOSH and CSTE in November 2020.

Colorado’s Census of Fatal Occupational Injuries (CFOI) also operates under our surveillance program for the 2019-2020 budget year.

ABLES data: We continue annual reporting of adult elevated blood lead level cases to the NIOSH ABLES national dataset. 2019 data was submitted in April 2020. We continue to follow up with providers and with patients to collect information on elevated blood lead levels. We face a continued challenge of patients not answering phone calls and providers not collecting all of the variables needed for the ABLES data collection. Notably, our work with the NIOSH ABLES program related to data in Colorado is conducted without direct/specific grant funding from NIOSH; in the 2019-2020 year we continued to provide this work through in-kind support from our program. Under our Childhood Lead Poisoning Prevention Program grant, we hired a statistical analyst and we are in the beginning stages of being able to combine our adult and childhood surveillance to track clusters and help with education for the whole family/household on lead. The goal of this work is to better understand occupational exposure transfer to the home as a potential source of exposure for children. The NIOSH ABLES program continued to participate in the Colorado Lead Coalition meetings and strategic planning sessions.

Fundamental Plus Activities:

One of the specific objectives of the Colorado Occupational Health Program is to establish and strengthen partnerships. The Colorado program has many strategic partnerships to help set priorities and develop targeted public health actions. Internally at the Colorado Department of Public Health and Environment (CDPHE), the program has engaged in projects with the Healthcare Acquired Infections section, Environmental Health, Immunization section, and Air Pollution and Water divisions. Specifically in the second half of this budget year, our program created strong ties with several CDPHE and other state agencies through involvement with the COVID-19 response. Participation in the COVID-19 response resulted in strengthening connections between occupational health and

- CDPHE's Communicable Disease Branch, who lead outbreak investigations and began to rely on Occupational Health support and industry-specific knowledge for responding to workplace outbreaks,
- CDPHE's Environmental Division, as the environmental health program recognized the need for occupational health representation at on-site environmental regulation inspections to consider additional worker safety aspects,
- the Governor's Office, who recognized the important role that occupational health subject-matter expertise plays in considering policies and orders related to COVID-19 and workplaces,
- The Colorado Department of Labor and Employment (CDLE), who recognized the need for cross-communication with CDPHE related to labor laws, labor complaints, and COVID-19, and the value that working with the occupational health program to accomplish joint understanding around labor and employment laws, working conditions, and infectious disease risk.