

HESIS ANNUAL REPORT

2020-2021

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November 1, 2020 - October 31, 2021

The Hazard Evaluation System and Information Service, or HESIS, was established in 1978 in California Labor Code 147.2. HESIS is located within the California Department of Public Health (CDPH), Occupational Health Branch (OHB), and is supported by an interagency agreement with the California Department of Industrial Relations (DIR). The HESIS annual budget for July 1, 2020, to June 30, 2021, was \$1,270,129; the current budget for July 2021 to June 2022 is \$1,316,762.

HESIS work reflects its original legislative mandate to "establish and operate a repository of current data on

toxic materials and harmful physical agents in use or potentially in use in places of employment in the state." HESIS's mission is to identify, evaluate, and provide "early warning" and up-to-date, practical information on toxic chemicals and other workplace hazards. This information and

the toxicological, technical, and medical expertise that HESIS provides enable employers, workers, health and safety professionals, and others to take action to make workplaces safer.

This report describes HESIS's major activities. These activities include (i) how HESIS operates as a reliable source of technical assistance in the public health and occupational health and safety communities, (ii) how HESIS staff investigate new and unrecognized workplace hazards, and (iii) HESIS's role in supporting DIR's Division of Occupational Safety and Health (Cal/OSHA) in promulgating protective occupational health and safety standards. The report highlights

HESIS's major accomplishments and provides examples of HESIS work with partners on public health projects and activities to improve workplace safety and health in California in 2020-21.

HESIS work this year continued to be dominated by the pressing needs and challenges presented by the COVID-19 pandemic. As California faces this evolving public health crisis, HESIS has shown itself to be a critical component of CDPH's emergency response. The report describes how the unique knowledge, expertise, and dedication of HESIS and other OHB staff have been mobilized to protect the workers of California from this deadly virus. HESIS has been at the forefront of CDPH's collaborations with state and federal regulatory bodies, local health jurisdictions, and private enterprise on important issues related to workplace outbreaks, vaccination, medical testing, ventilation, personal protective equipment (PPE), and workplace regulations

The Department of Industrial Relations shall submit a report to the Legislature detailing the implementation and operation of HESIS including, but not limited to, the amount and source of funds allocated and spent on repository activities, the toxic materials and harmful physical agents investigated during the past year and recommendations made concerning them, actions taken to inform interested persons of the possible hazards of exposure to toxic materials and harmful physical agents, and any recommendations for legislative changes...

- California Labor Code 147.2 (g)

and guidance. HESIS's unique role as a repository of reliable information and provider of technical support for the development of protective occupational health and safety standards has been sought after as Cal/OSHA develops its regulatory response to the ongoing COVID-19 pandemic.

HESIS staff have spearheaded efforts to design new projects to address anticipated long-term prevention of COVID-19 transmission in the workplace and other evolving workplace hazards such as silica exposure in countertop manufacturing. While doing this, HESIS has forged relationships with partners that will strengthen our future work.

HESIS MISSION IN A UNIQUE YEAR

HESIS's mission and the mandates that guide our activities remained the same in 2020-21. However, HESIS work in large part was driven by the needs and challenges presented by the COVID-19 pandemic. In addition to doing its "usual work" to protect the workforce from chemical and other hazards on the job, HESIS responded to a myriad of COVID-related requests from CDPH, DIR, and local health jurisdictions. This section describes HESIS activities in general terms; the rest of the report will provide examples and notable highlights from a most challenging year of HESIS work.

Provide reliable hazard information

HESIS is a well-known and trusted source of occupational health and toxicological information on workplace hazards; many individuals and groups turn to us when they need help or answers to their questions. Cal/OSHA relies on HESIS to provide top-rate technical assistance and guidance on a range of topics for its rulemaking and educational activities. HESIS staff regularly review Cal/OSHA and other agency guidance documents, contribute to scientific publications, and present at meetings and conferences.

HESIS places a high priority on providing information that is of practical use. HESIS operates the Workplace Hazard Helpline (Telephone Response System or TRS), a toll-free telephone number that workers, employers, physicians, and others in California use to ask questions about the health effects of chemicals, potential workplace exposures, regulatory standards, and workers' rights. HESIS works with a variety of partners to address new or underappreciated workplace hazards; this can include developing and disseminating new informational products and materials. A significant focus this year has been effective hazard communication.

Establish health effects of harmful workplace exposures

HESIS plays a critical role in identifying new or unappreciated workplace hazards to provide early warning and protect worker health. HESIS staff collect and evaluate toxicological studies and other relevant information to identify chemicals and physical agents that may be harmful to worker health. We use peer-reviewed scientific literature, published reports, and various databases to ascertain whether harmful substances are being used in California workplaces and, if so, how much and where.

HESIS provides this information to other occupational and public health agencies, Cal/OSHA, local health jurisdictions, employers, and health and safety advocates. HESIS staff also provide technical assistance to other agencies on hazard evaluations of selected chemicals or workplace exposures.



HESIS MISSION

Develop strategies for hazard reduction and disease prevention

HESIS uses its authority under California's SB 193 of 2014 to obtain customer lists from manufacturers who sell products that represent newly recognized health hazards for California workplaces. We use this information to contact companies where the products are being used to conduct targeted hazard evaluations, develop prevention recommendations, and provide information employers and workers can use to improve safety and health at their workplaces.

HESIS staff provide extensive support to CDPH whenever it must respond to a public health emergency that involves workplace health and safety. We develop workplace guidance; review draft regulations and guidance from other state agencies; respond to questions from health care facilities, local health jurisdictions, and the public; and participate in developing and disseminating critical health education materials about the emergency. The COVID-19 pandemic was the primary example of this activity in 2020-21; HESIS also participated in CDPH's activation for the wildfire smoke emergency.

Support the development of occupational safety and health standards

HESIS supports the work of the Cal/OSHA Health Effects Advisory Committee (HEAC) in the development of permissible exposure limits (PELs) for airborne contaminants, published in the California Code of Regulations, Title 8, Section 5155. HESIS staff obtain and analyze data to evaluate harmful chemical exposures in California workplaces. We provide toxicological information and make recommendations for new or revised PELs. HESIS also conducts its own research and submits recommendations to minimize exposure to harmful airborne contaminants not yet recognized or addressed by the HEAC.



HESIS provides similar support for Cal/OSHA standard-setting on other workplace hazards by providing technical assistance to other standard advisory committees. We assist Cal/OSHA staff with evaluating complex technical data for the purpose of developing standard language and responding to inquiries, statements, and proposals from stakeholders. In 2020-21 HESIS provided expertise for Cal/OSHA's rulemaking related to COVID-19 and wildfire smoke.

2020-21 HESIS Activities

Below we provide illustrative examples of the ways that HESIS fulfilled its traditional mandates related to toxic materials and contributed to CDPH's emergency response for COVID-19. We also include information on planned HESIS activities for the future.

PROVIDING RELIABLE HAZARD INFORMATION



Reproductive or developmental harm from industrial solvent.

A perinatal genetic counselor from a children's hospital in California requested information for her pregnant client who was potentially exposed to ethylene dichloride (EDC) while working in an environmental molecular lab. She wanted to know if there was any evidence that her previous work with EDC might affect the health of her baby. EDC, also known as 1,2-dichloroethane, is a commonly used industrial organic solvent known to affect the liver, kidneys, and neurological, cardiovascular, and immune systems; there is also evidence that it may cause cancer. HESIS provided available up-to-date information about the reproductive and developmental toxicity of EDC both in humans and animals.

Protecting workers from wildfire smoke. In 2020, California had five of the largest wildfires in state history; the 2021 Dixie fire is now the largest single wildfire to ever occur in California. Outdoor workers such as agricultural workers, landscapers, and construction workers are especially affected by wildfire smoke exposure. HESIS provided input to Cal/OSHA on the proposed permanent Protection from Wildfire Smoke standard by participating in informal advisory committee meetings. HESIS also provided technical assistance for protecting workers from wildfire smoke. For example, at the request of a local health officer, HESIS provided information on the requirements for fit testing respirators used for protection against wildfire smoke. OHB/HESIS highlighted this continuing health hazard and promoted Cal/OSHA resources for protecting outdoor workers exposed to smoke from wildfires in its Occupational Health Watch newsletter, Protecting Workers from Wildfire Smoke.



PROVIDING RELIABLE HAZARD INFORMATION

Medical surveillance program to protect pharmaceutical workers. An Occupational Medicine physician requested a model for an effective medical surveillance program for pharmaceutical workers. These workers handle hazardous drugs, including some that can cause cancer or reproductive toxicity, or could harm the developing fetus in a pregnant worker. HESIS provided USP 800, the United States Pharmacopeial Convention's standard, "Hazardous Drugs-Handling in Healthcare Settings," and NIOSH resources to assist the physician in establishing a medical monitoring program. These materials provide guidance on preventing exposure to hazardous chemicals and establishing a medical surveillance program for workers.

Valley fever

Valley fever (also known as coccidioidomycosis) is a potentially severe illness caused by inhaling spores of a fungus found in the soil in many parts of California. Valley fever cases in California continued to rise in 2020. HESIS activities to address this continuing hazard included:

Assisting the development manager from a company planning to do heavy construction in a Valley
fever endemic area who requested details on the elements of a dust control plan. HESIS provided a
link to Los Angeles County's Valley fever management guidelines for employers and referred the
manager to L.A. County for maps showing known locations of the Valley fever fungus. HESIS also
provided educational materials on methods to reduce dust exposures that could lead to infection
and informed the manager of employer requirements to document and investigate any Valley fever
cases that occur and take action to prevent further exposures.



- Responding to an occupational hygienist at an oil refinery who requested information on
 conducting air sampling in a warehouse storing soil samples that could contain Valley fever fungus
 spores. After consulting the most recent guidance from the Centers for Disease Control and
 Prevention's (CDC) Mycotic Diseases Lab, HESIS informed the caller that air sampling wasn't
 recommended and explained why. HESIS recommended the company instead focus resources on
 training workers about the hazard and protecting workers with potential exposures using
 respiratory protection and work practices to minimize dust released into the air.
- Promoting awareness about the continuing Valley fever hazard in California and potential confusion between Valley fever and COVID-19 given common symptoms in the August Occupational Health Watch newsletter - COVID-19 or Valley fever? Get tested to know the difference!

ESTABLISHING HEALTH EFFECTS OF HARMFUL WORKPLACE EXPOSURES

HESIS shall... fulfill the following functions:

Collect and evaluate toxicological and epidemiological data and any other information, which may be pertinent to establishing harmful effects on the health of workers exposed to toxic materials or harmful physical agents.

- California Labor Code 147.2 (c)

Workplace Chemical Hazards

 Collaborated with California Environmental Protection Agency's (Cal EPA's) Office of Environmental Health Hazard Assessment (OEHHA) to identify chemicals used in the workplace that are listed as causing cancer or reproductive/developmental toxicity under California Proposition 65.

- Developed an online Chemical Factsheet supplement to provide users of HESIS chemical factsheets with newly available information on health effects and exposure limits.
- Provided recommendations and technical support to Cal/OSHA for the rulemaking process for several chemicals.



Information Repository (HESIS Electronic Repository of Occupational Health Information)

- With support from a CDPH contract with the Los Angeles County Public Health Library, HESIS continued electronic document delivery to Cal/OSHA's Research and Standards Unit.
- HESIS continued to review table-of-contents alerts in toxicology, industrial hygiene, and occupational medicine journals, as well as evidence-based reports from sources such as national professional societies.
- HESIS also followed the activities of authoritative agencies to identify emerging hazards and issues. These agencies included the National Institute for Occupational Safety and Health (NIOSH) and U.S. Environmental Protection Agency (EPA), as well as OEHHA, the International Agency for Research on Cancer, National Toxicology Program, and European Chemicals Agency. HESIS assimilated this research by cataloging key articles in its electronic repository.

Workplace Health and Safety Activities Related to Toxic Materials DEVELOPING STRATEGIES FOR HAZARD REDUCTION AND DISEASE PREVENTION

Occupational dust diseases

Silica and asbestos are two well-recognized hazards that continue to cause disabling and fatal occupational disease for many workers in California. HESIS staff have contributed to multiple projects aimed at understanding and preventing silicosis, a scarring lung disease that has been recognized in recent years in young workers who fabricate artificial stone for countertops, and mesothelioma, a cancer of the lining of the lungs and other organs caused by exposure to asbestos. Activities include the following:

 Assessed the burden of silicosis among workers at a countertop fabrication facility by reviewing medical and employment records.

- Collaborated with Cal/OSHA to compile and begin to analyze records from inspections of countertop fabrication facilities, with the goal of summarizing silica exposures in this industry.
- Obtained NIOSH funding for a five-year project to promote respiratory health among vulnerable workers in California's countertop fabrication industry through education, medical monitoring, and statewide enhanced surveillance. The project was funded as part of the California Labor Laboratory, a new NIOSH Center of Excellence for Total Worker Health.
- Collaborated with the California Cancer Registry on a NIOSH-sponsored study of rapid identification and outreach to newly diagnosed mesothelioma patients. Began interviewing patients about their asbestos exposures and providing them with information about care in California. Information collected during the interviews will inform future prevention activities.



Workplace Health and Safety Activities Related to Toxic Materials DEVELOPING STRATEGIES FOR HAZARD REDUCTION AND DISEASE PREVENTION

Protecting workers from the hazards of 1-bromopropane

The solvent 1-bromopropane (n-propyl bromide, 1-BP) is a known neurotoxicant, a known reproductive and developmental toxicant, and a newly recognized carcinogen. HESIS continued its efforts to improve hazard communication regarding the recognized health hazards of 1-BP by:

- Working directly with manufacturers and distributors to correct deficiencies in their Safety Data Sheets (SDSs) for 1-BP-containing products. In March 2021, HESIS sent letters to 22 companies detailing which required hazard statements were missing on each of 58 individual SDSs. HESIS reviewed for accuracy and completeness 40 revised SDSs that were submitted and continues to provide detailed feedback to individual companies.
- Presenting information on the deficiencies of 1-BP SDSs to Cal/OSHA to alert them to insufficient
 information and warnings on cancer and nervous system effects for workers and employers and
 prepare them for possible referrals to Cal/OSHA in the future.
- HESIS used the results of our review of SDSs of 1-BP-containing products as an example of an area needing improvement in comments it provided on proposed revisions to the federal Occupational Safety and Health Administration (OSHA) Hazard Communication Standard.





Personal protective equipment for workplace safety and health. The HESIS Chief serves on the National Academies of Sciences, Engineering, and Medicine Standing Committee on Personal Protective Equipment for Workplace Safety and Health. This important national committee provides a forum for discussion of scientific and technical issues relevant to the development, certification, deployment, and use of personal protective equipment, standards, and related systems to ensure workplace safety and health, and works with NIOSH to identify and address emerging issues related to personal protective technology.

SUPPORTING THE DEVELOPMENT OF OCCUPATIONAL HEALTH STANDARDS

Workplace Chemical Hazards

HESIS continued to support the HEAC for the development of a new PEL for benzophenone and revised PELs for turpentine, sulfur dioxide, and trichloroethylene. HESIS also provided requested initial scientific information to the HEAC for several additional chemicals under consideration for future committee discussion. Activities included the following:

- Conducted literature searches on limonene, p-chloro-α,α,α-trifluorotoluene (PCBTF), and xylene and its isomers (o-, m-, and p-xylenes). Identified, reviewed, and shared new scientific information from recent articles on the toxicity of these chemicals.
- Collected and provided to HEAC data from the California Environmental Reporting System (CERS) for several acid anhydrides such as phthalic anhydride, maleic anhydride, and hexahydrophthalic anhydride to characterize the use of these chemicals in California workplaces.
- Provided updated health based PEL recommendations for PCBTF and trichloroethylene (TCE).

Other Workplace Hazards

HESIS provided substantial support to Cal/OSHA for its rulemaking on several regulations related to COVID-19 and other workplace hazards during the report year. In addition, federal OSHA sought evidence, input, and comments on revisions to its Hazard Communication Standard (29 CFR 1910.1200). Activities included the following:

- HESIS staff provided extensive support for the development of and revisions to Cal/OSHA's COVID-19 Emergency Temporary Standards, a permanent COVID-19 standard, and revisions to the Aerosol Transmissible Diseases (ATD) Standard. These activities are highlighted in the "Statewide Emergency Response to COVID-19" portion of this report.
- HESIS conducted a literature search and review for Cal/OSHA to support a decision on whether to
 initiate rulemaking to incorporate a new quantitative fit test procedure, the modified Condensation
 Nuclei Counter (CNC) protocol, into their existing respiratory protection regulation as federal OSHA
 did in amendments to the federal standard.
- HESIS provided information about US EPA cancer guidelines of 1986 and 2005 requested by Cal/OSHA for the preparation of Cal/OSHA comments on the federal Hazard Communication Standard.
- HESIS reviewed the new federal OSHA proposal to revise the Hazard Communication Standard and
 prepared comments. HESIS used the results of our review of SDSs of 1-bromopropane (1-BP)containing products as an example of an area needing improvement in the regulation. HESIS's
 information and analysis provided support for a strong, protective standard. They were utilized by
 Cal/OSHA in its input on the federal standard and will likely contribute to revisions of the California
 standard once the federal version is finalized.

Statewide Emergency Response to COVID-19

COMMUNICATED



- Contributed to OHB's COVID-19 worker educational materials and campaign. Conducted
 interviews with stakeholders to assess communication needs; reviewed data on COVID-19 among
 workers; and collaborated with internal and external partners to create products that meet their
 needs and maximize dissemination. Resulted in development and distribution of innovative new
 materials, including animation, videos, a scrollable scenario, and a digital comic in English and
 Spanish for a worker audience.
- Collaborated on redesigning the OHB COVID-19 website to promote the new OHB COVID-19
 materials and make the many COVID-19 resources offered by CDPH, DIR, and the California Labor
 and Workforce Development Agency (LWDA) easily available to workers and employers. The
 website features the COVID-19 & the Workplace page with general resources, information, and
 updates; Best Practices for the Workplace, which features presentations, tools, and resources for
 employers and health and safety staff; and Tools for Workers, a vibrant web page spilling over
 with vivid images and animations.
- Authored or contributed to five Occupational Health Watch newsletters related to COVID-19:
 - How AB 685 Impacts California Employers and Workers November/December 2020
 - Two diseases. Two vaccines. Two ways to protect workers during COVID-19 February 2021
 - New COVID-19 Educational Media for Workers May 2021
 - COVID-19 or Valley fever? Get tested to know the difference! August 2021
 - Indoor Air at Work & COVID-19 October 2021
- Contributed to education and guidance documents on COVID-19 produced by OHB and CDPH, such as "Get the Most out of Masking," a guide for the public on how to choose and wear a mask.







Statewide Emergency Response to COVID-19 SHARED EXPERTISE

- Developed and presented two webinars for staff in long term care settings statewide on best practices for building ventilation to minimize the risk of transmission of COVID-19 between staff, residents, and visitors. (See callout.)
- In collaboration with the CDPH Healthcare-Associated Infections program, presented a
 webinar on "Respiratory Protection Programs in Long Term Care Facilities During the COVID-19
 Pandemic" to 390 staff in long term care settings statewide to assist them in developing or
 refreshing their respirator programs to better protect their staff. (See callout.)
- At Cal/OSHA's request, conducted a literature search on the efficacy of polyethylene barriers and partitions in preventing COVID-19 exposures in the workplace. Reviewed studies to help determine whether Cal/OSHA should continue to include requirements for barriers in their Emergency Temporary Standard to protect against COVID transmission in grocery stores and other public places. Initiated discussions between Cal/OSHA Research and Standards and researchers from NIOSH to discuss early findings of barrier efficacy.
- At Cal/OSHA's request, provided literature reviews on SARS-CoV-2 as an aerosol transmissible pathogen, the role of ventilation in reducing transmission of SARS-CoV-2, and effectiveness of COVID-19 vaccination.
- Provided technical assistance to CDPH, local health departments, and other agencies in planning for and responding to the pandemic, including workplace outbreaks.
- Presented an overview of the Cal/OSHA Aerosol Transmissible Diseases Regulation to the newly formed CDPH Outbreak Consultation Team.

In collaboration with the CDPH Healthcare-Associated Infections Program, and with input from a staff member of the California Association of Health Facilities (a professional organization representing skilled nursing and intermediate care facilities), OHB/HESIS developed and presented webinars for staff in long term care settings statewide. We presented two webinars on best practices for building ventilation to minimize transmission of COVID-19 between staff, residents, and visitors. At each of the "Ventilation Strategies to Control COVID-19 Transmission in Skilled Nursing Facilities" webinars, over four hundred staff from 200 nursing facilities participated.



Ventilation Strategies to Control COVID-19
Transmission in Skilled Nursing Facilities
Part 1 | Part 2

Staff also presented a webinar on "Respiratory Protection Programs in Long Term Care Facilities During the COVID-19 Pandemic" to 390 staff in long term care settings statewide to assist them in developing or refreshing their respirator programs to better protect their staff. The webinars were followed by question-and-answer sessions and opportunities for phone or e-mail consultations on improving their respiratory protection programs and ventilation practices.

Statewide Emergency Response to COVID-19

INVESTIGATED

- Participated in an outbreak investigation at a hospital coordinated by the local health department along with participants from CDPH and CDC. In this and other outbreak investigations in skilled nursing facilities, HESIS staff offered expertise in ventilation, respiratory protection, and other occupational health best practices.
- Assisted a local health department in investigating risk factors for infection during a COVID-19 workplace outbreak in which >60% of approximately 550 horse racetrack workers were infected. (See callout.)
- Compared the performance of two SARS-CoV-2 tests (molecular and antigen) used in the investigation of horse racetrack workers.
- Completed data collection and began analyzing interview responses of 450 working Californians who were tested for COVID-19.
 These activities were part of a NIOSHsponsored multi-state callback survey to understand workplace contributors to infection.
- Assisted CDPH infectious disease epidemiologists, local health departments, and academic partners conducting surveillance for COVID-19 with the collection and analysis of occupational data.
- Examined occupational characteristics of working-age Californians who died of COVID-19. Activities included ongoing surveillance to track new worker deaths and closer examination of worker deaths that happened in 2020 to compare mortality rates among occupational groups.

Outbreak at a racetrack

From October 2020 to January 2021, a horse racetrack experienced an outbreak of COVID-19 among its staff. HESIS staff assisted the local health department with outbreak investigation and management. Workers who lived offsite were quarantined at home and workers who lived onsite in employerprovided housing were quarantined in hotel rooms. Workers deemed essential for care of the horses were permitted to return onsite for work but were required to wear N95 filtering facepiece respirators. Mass testing revealed widespread infection, with 62% of the more than 500 workers ultimately testing positive for SARS-CoV-2. Use of antigen testing allowed for more rapid isolation of infected workers and whole genome sequencing confirmed that transmission was related to the racetrack.



Statewide Emergency Response to COVID-19

PROTECTED

- Provided subject matter expertise to Cal/OSHA for the original Emergency Temporary Standards (ETS) for COVID-19 Prevention, subsequent ETS revisions, and the proposed permanent standard. These activities included reviewing draft materials for consistency with public health orders and recommendations and participating in advisory committee meetings.
 - Reviewed the evidence for COVID-19 transmission via aerosol and prepared a letter to Cal/OSHA in support of proposed revisions to their Aerosol Transmissible Diseases Standard.
 - At the request of a local health department, provided handson training to 24 skilled nursing facility nurses in two shifts on respirator fit test methods. Prepared training materials/supplies for trainings in two other counties.



- Helped develop a contract to provide medical surveillance and respirator fit testing for CDPH staff deployed statewide.
- In conjunction with the Department of General Services, continued to review vendors' offers of personal protective equipment items such as gloves and respiratory protection to replenish the state stockpile with items that protect health care workers against COVID-19.
- In collaboration with the Chief of Border Operations, developed an Aerosol Transmissible Diseases Exposure Control Plan and checklist for three state facilities located near the international border with Mexico that were providing services to migrants. The plan included recommendations on types of personal protective equipment to wear during health care, transport, and other activities; isolation of COVID-positive persons; and vaccination and testing of health care workers.



- In collaboration with our Healthcare-Associated Infections
 Team, responded to questions from health care facilities'
 staff and local health departments regarding building
 ventilation, respiratory protection, and other exposure
 reduction measures.
- Participated in the COVID-19 response as the safety officer
 in the CDPH Medical and Health Coordination Center
 (MHCC) for deployed staff and contractors. In this role,
 participated in the CDPH Staff Health & Safety Workgroup to
 offer expertise on qualifications and activities needed for a
 new, expanded employee health and safety function in
 CDPH. Also advised on personal protective equipment for
 responders to wear when deployed to health care,
 correctional, or industrial settings; or to shelters, vaccination
 clinics, laboratories, or homes, during the pandemic.

WHAT'S NEXT FOR HESIS?

Preventing exposures to hazardous materials

HESIS will

Support Cal/OSHA

- Provide research, technical assistance, and support to HEAC when it considers recommendations of new PELs for benzophenone and PCBTF and revised PELs for turpentine, sulfur dioxide, 1-bromopropane, and titanium dioxide (ultrafine).
- Continue to provide technical support to Cal/OSHA for rulemaking on antineoplastic drugs administered in the workplace and on surgical plume and smoke.
- Complete analysis of records from Cal/OSHA inspections of countertop fabrication facilities and share summary findings of silica exposures in this industry.

Provide reliable information

- Develop and disseminate educational materials on alternatives to the hazardous solvent and cleaning chemical 1-bromopropane. Identify employers to prioritize for educational outreach to assist them in switching to safer alternatives and improving their work practices.
- Enhance efforts to evaluate product Safety Data Sheet (SDS) quality for communicating health hazards of workplace chemicals.
- In collaboration with colleagues from Cal EPA's OEHHA, develop educational outreach and information about chemicals used in the workplace that are listed as causing cancer or reproductive and/or developmental toxicity under Proposition 65.



WHAT'S NEXT FOR HESIS?

Preventing exposures to hazardous materials

HESIS will:

Develop strategies for prevention

- Continue NIOSH-sponsored collaboration with the California Cancer Registry for rapid identification and outreach to newly diagnosed mesothelioma patients. Summarize findings and provide feedback to NIOSH on the feasibility of developing a mesothelioma patient registry using these methods.
- Plan and implement the California Artificial Stone and Silicosis (CASS) Project activities aimed at increasing awareness in the countertop fabrication industry about the risks and prevention of silicosis among workers using artificial stone; facilitating medical monitoring of silica-exposed workers in this industry; and enhancing public health surveillance of silicosis.
- Select a new workplace chemical to focus on for SB 193 safer alternatives activities and hazard communication improvement.

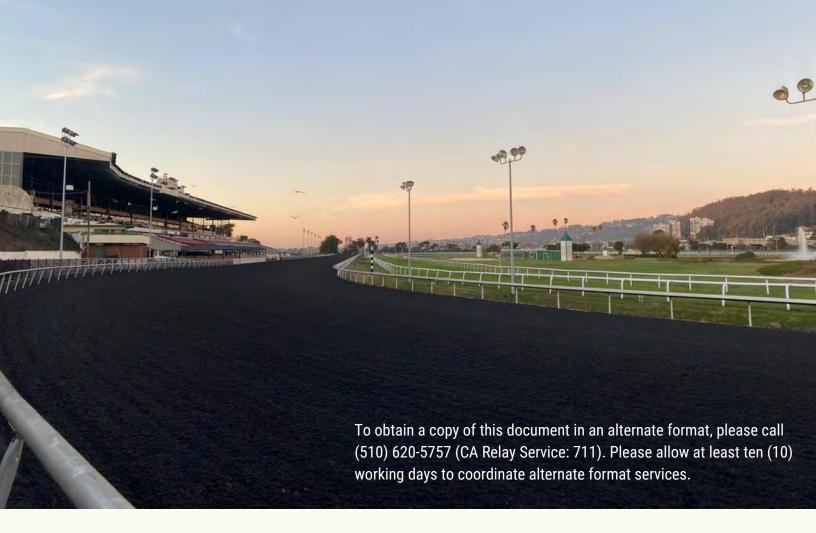
Preventing COVID-19 on the job

HESIS will

- Complete data analysis of interview responses of 450 working Californians who were tested for COVID-19 to understand workplace contributors to infection and collaborate with NIOSH and other state partners on multi-state analysis.
- Continue to monitor patterns of industry and occupation among Californians who died from COVID-19 to inform prevention efforts.
- Continue to enhance OHB's COVID-19 and the Workplace website and informational tools and collaborate with partners to promote their use.



HAZARD EVALUATION SYSTEM AND INFORMATION SERVICE



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NOVEMBER 1, 2020 - OCTOBER 31, 2021



