



## How to Handle Known Human Carcinogens

You must follow these procedures when handling substances regulated by the [California Occupational Safety & Health Administration](#) (Cal/OSHA) or listed by the National Toxicology Program (NTP) as "[Known to Be Human Carcinogens](#)." (PDF)

- Read [Chemical Carcinogen Program](#) to learn how to determine if your material is a known human carcinogen.

Checklist	What to do	
<input type="checkbox"/>	<b>Contact EH&amp;S for health and safety guidance.</b>	Known Human Carcinogens must be handled according to California Code of Regulations, <a href="#">Title 8 Article 110</a> , <a href="#">Title 8 Section 5191</a> , and <a href="#">National Toxicology Program (NTP)</a> requirements.
<input type="checkbox"/>	<b>Handling known human carcinogens.</b>	<ul style="list-style-type: none"> <li>• <b>Follow all procedures</b> for working with suspected human carcinogens and add the following:</li> <li>• <b>Use engineering controls</b>, such as a glove box or fume hood.</li> <li>• <b>Use personal protection equipment:</b> <ul style="list-style-type: none"> <li>○ Respiratory protection must be worn during work with Carcinogens outside of a fumehood or glovebox. Prior to respirator use, you must contact EH&amp;S for respiratory training, fit testing, medical clearance, use of appropriate respirator cartridges, etc.</li> <li>○ Gloves, safety glasses, and a lab coat are also required. Please contact EH&amp;S to ensure glove use is <b>appropriate for the chemical you are working with.</b></li> <li>○ Always wear a lab coat when working in a laboratory.</li> </ul> </li> <li>• Follow emergency procedures for exposure and spills.</li> </ul>

		<ul style="list-style-type: none"> <li>• Follow proper waste disposal procedures.</li> </ul>
<input type="checkbox"/>	<p><b>Designate regulated work areas, secure storage, sign and labels.</b></p> <p>Entrance: <a href="#">Request sign from EHS Specialist:</a></p>  <p>Containers: <a href="#">Request label from EHS Specialist:</a></p>  <p>988-132292</p>	<p>Regulated carcinogens listed in <a href="#">Title 8 Article 110</a> may require establishing a regulated area, insuring secure storage and installing signs and labels. Consult your EH&amp;S Specialist for guidance.</p> <p>A regulated area is a lab, portion of a lab, chemical fume hood, or glove box designated for use of known carcinogens.</p> <ul style="list-style-type: none"> <li>• <b>Control access</b> to regulated carcinogen work areas and storage.</li> <li>• <b>Entrances to regulated areas shall be posted with signs bearing the legend: CANCER-SUSPECT AGENT AUTHORIZED PERSONNEL ONLY</b></li> <li>• <b>Each user shall receive training prior to being authorized to enter a regulated area. <a href="#">Carcinogen Training online.</a></b></li> <li>• <b>Specific emergency procedures shall be posted in regulated areas.</b></li> <li>• <b>Store carcinogens</b> in a secure area.</li> <li>• <b>Use carcinogen stickers to label</b> storage and work areas where known carcinogens are used. <ul style="list-style-type: none"> <li>○ Containers shall display the following warning immediately under, or adjacent to, the contents identification: <b>CANCER-SUSPECT AGENT.</b></li> <li>○ Request carcinogen signs and labels from your EHS Specialist .</li> </ul> </li> </ul>
<input type="checkbox"/>	<p><b>Engineering controls and personal protective equipment.</b></p>	<ul style="list-style-type: none"> <li>• <b>Make everyone in the lab aware</b> of the hazards and the precautions to take during carcinogen use.</li> </ul>

- **Use chemical fume hood** with current certification.

Carcinogens listed in [Title 8 Section 5209](#) must be used in a fume hoods with 150 feet per minute (fpm) average face velocity.

- **Use appropriate filters** to protect lab vacuum pumps used with a carcinogen.
- **Control the spread** of powdered chemical carcinogens by using a glove box, not a fume hood.
- **If you use a glove box**, follow these guidelines:
  - Ventilate the glove box with at least two volume changes per hour.
  - Adjust the pressure inside the glove box at least 0.5 inches of water gauge lower than outside (negative pressure).
  - If vapors are released, they must be exhausted into a chemical fume hood or trapped using a method approved by your EHS Specialist.
- **Use a ducted biosafety cabinet** if a sterile work area is needed. Consult your EH&S Specialist.

**When your work with the carcinogen is completed**, follow these steps:

- Remove all PPE and immediately wash your hands, forearms, face, and neck.
- Dispose of any contaminated disposable protective apparel or equipment as hazardous waste, clearly labeled as carcinogenic.
- Thoroughly wash non-disposable apparel and equipment before removing it from the controlled area.

		Thoroughly clean all surfaces in the controlled area before removing the carcinogen warning sign.
<input type="checkbox"/>	<b>Dispose of carcinogen waste properly.</b>	<ul style="list-style-type: none"><li>• <b>Follow proper waste disposal procedure:</b><ul style="list-style-type: none"><li>○ Print waste using hazardous waste tag (HWT) from <a href="#">Online Tag Program (OTP)</a>. Include the words: <b>Cancer-Suspect Agent</b>, under composition.</li><li>○ Attach HWT to waste container</li><li>○ Store the waste in the designated location.</li><li>○ Request hazardous waste pick-up using OTP.</li></ul></li></ul> <p>Contact your EHS Specialist if you have questions about disposal of known human carcinogen waste.</p>