

Beryllium is a strong, lightweight metal frequently used in metal alloys because it is non-magnetic and non-sparking. It can also strengthen other metals alloys and improve their properties (such as conductivity). Beryllium has a very low exposure limit so even very small exposures to beryllium dust can be hazardous.

Health Effects

Exposure to beryllium can cause someone to be sensitized, which may give them an allergic-type reaction. This reaction may progress to Chronic Beryllium Disease, which is lung inflammation in response to beryllium exposure.

Beryllium can also cause:

- Skin rashes or lesions
- Lung Cancer



Exposure Control Plan



Workplaces where beryllium exposure are greater than the OSHA PEL of $0.2 \mu\text{g}/\text{m}^3$ will need an exposure control plan with a list of tasks or jobs that may be exposed. The plan must also include:

- Procedures to minimize beryllium cross-contamination,
- Required controls (like ventilation, restricted access, or respirators)
- Required PPE when working in beryllium areas, and
- Procedures for cleaning contaminated PPE and equipment.

Medical Surveillance

Employees who are exposed to beryllium at or above the OSHA Action Level ($0.1 \mu\text{g}/\text{m}^3$) for more than 30 days per year must be included in a medical surveillance program. Employees who are showing signs or symptoms of Chronic Beryllium Disease or were exposed in an emergency release must also be included. An initial health exam should be conducted within 30 days of an employee's assignment to beryllium work and follow up exams should occur every two years. Based on the worker's history and the exam, a physician or other licensed healthcare professional will issue an opinion on fitness for work.

If an employee is diagnosed with Chronic Beryllium Disease or receives a medical report recommending removal from beryllium work, the employee may choose to use respiratory protection or to be transferred to a comparable job with no loss of earnings, seniority or other rights.