Lead In Construction Stats and Facts

FACTS

1. Lead poisoning common is common in construction. Particles of lead are most likely to be released during demolition, salvage, renovation, and cleanup. The welding and cutting of some metal alloys can shed particles of lead, contaminating a worker's clothes, hair, tools, or even the food they eat. Employees who are not properly protected or work on an unsafe construction site could also inhale toxic quantities during the application or removal of lead-based paints.

2. Lead is responsible for one of the first recorded occupational diseases.

3. Lead has no known biological role. Exposure to lead can lead to its accumulation in the body and cause serious health problems. It is toxic, teratogenic.

4. When materials containing lead are processed, worked or recycled they can create dust, fume or vapour. The body can absorb lead by:

- breathing in lead dust, vapour and fumes, e.g., blast removal and burning of old lead paint; manufacture and processing of lead compounds
- ingesting lead, e.g., eating, drinking, smoking, or biting fingernails without washing the hands and face.

5. Lead is generally not absorbed through skin exposure. Any lead absorbed at work will circulate in the blood. The body gets rid of a small amount of lead each time it goes to the toilet, but some lead will stay in the body, stored mainly in the bones. It can stay there for many years without making you ill. However, if levels of lead in the body become too high, it can cause ill health.

STATS

- OSHA estimates that 804,000 workers in general industry and an additional 838,000 workers in construction are potentially exposed to lead.
- Lead levels varied widely, from 20 to 8,300 parts per million (ppm), but construction workers generally had more than twice the levels as the other workers, with an average of 775ppm compared to 296ppm.
- 5 of the construction workers had lead levels over the US government's recommended limit for outdoor child play areas, 400ppm, similar to levels observed in previous studies of homes near Superfund sites and lead smelters.
- The Institute for Health Metrics and Evaluation (IHME) estimated that in 2019, lead exposure accounted for 900 000 construction workers deaths and 21.7 million years of healthy life lost (disability-adjusted life years, or DALYs) worldwide due to long-term effects on health.

- IHME estimated that in 2019, lead exposure accounted for 62.5% of the global burden of developmental intellectual disability whose cause is not obvious, 8.2% of the global burden of hypertensive heart disease, 7.2% of the global burden of the ischaemic heart disease and 5.65% of the global burden of stroke.