

# Proposed changes to Cal/OSHA regulations for lead exposure

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# Background

- Current Cal/OSHA standard is 40 years old
- Public hearing April 20, 2023 to receive comments
  - CSO:
    - 8 CCR 1532.1
  - GISO:
    - 8 CCR 5198.1
    - 8 CCR 5155
    - 8 CCR 5198

## Lead

CONSTRUCTION SAFETY ORDERS,  
1532.1

GENERAL INDUSTRY SAFETY ORDERS,  
Sections 5155 and 5198

### Status

Public hearing:	Apr. 20, 2023
45-day comment period:	Mar. 3, 2023 - Apr. 20, 2023
Filed with Secretary of State:	
Effective date:	

<https://www.dir.ca.gov/OSH/Lead.html>

# Reminder: Why is lead bad?

- When absorbed into the body, lead is a toxic substance
  - absorbed into your body by inhalation and ingestion
  - lead is stored in organs and body tissues
- Though lead can be excreted, it tends to build up in the body.

**Even without immediate symptoms, stored lead can slowly cause irreversible damage.**

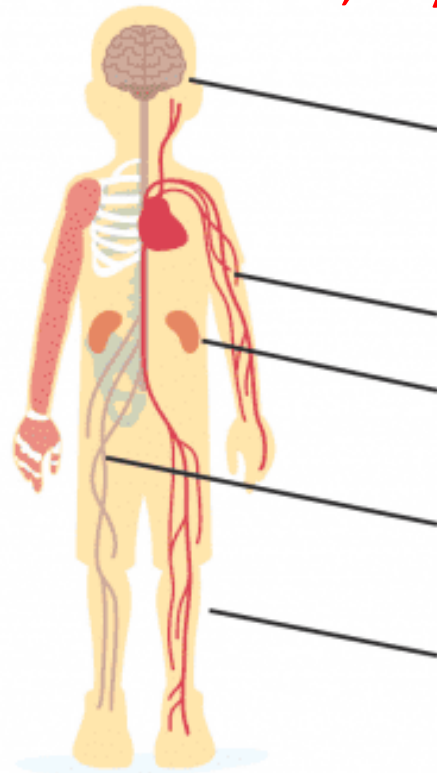


# Some of the damaging effects of lead exposure

There is no safe level of lead for children or adults. Symptoms of lead exposure may not appear, but damage can still occur. Lead poisoning can cause a coma, seizure or death, although that is rare.

Other systems:

Endocrine, thyroid, immune, HPA axis



## EFFECTS ON CHILDREN

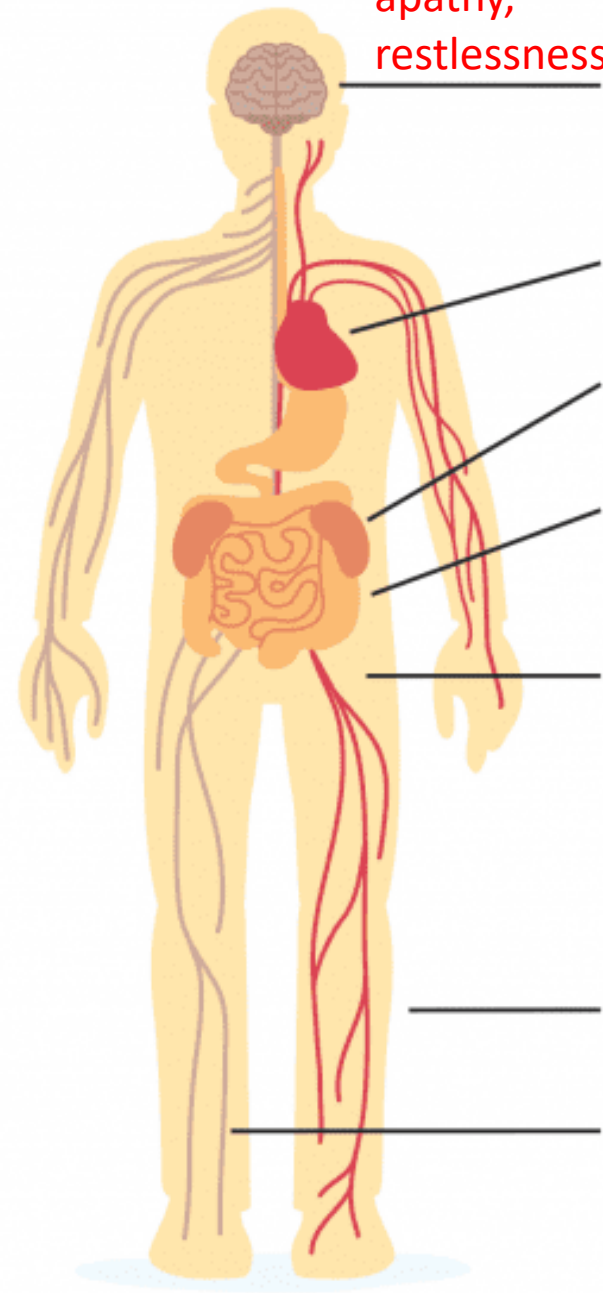
**Brain:** Behavior problems, lower IQ, hearing loss, learning disabilities

**Blood:** Anemia

**Kidneys:** Damage to the kidneys

**Nervous system:** Damage to the nervous system

**Body:** Decreased bone and muscle growth



Insomnia, apathy, restlessness

## EFFECTS ON ADULTS

**Brain:** Memory loss, lack of concentration, headaches, irritability, depression

**Cardiovascular:** High blood pressure > Heart disease > stroke

**Kidneys:** Abnormal function and damage At low levels, chronic

**Digestive system:** Constipation, nausea and poor appetite 5-10mg/dl Abdominal pain, diarrhea

**Reproductive system**  
Men: Decreased sex drive and sperm count, sperm abnormalities  
Woman: Spontaneous miscarriage Birth defects

**Body:** Fatigue, joint and muscle pain

**Nervous system:** Damage including numbness and pain in the extremities

# Proposed changes include:

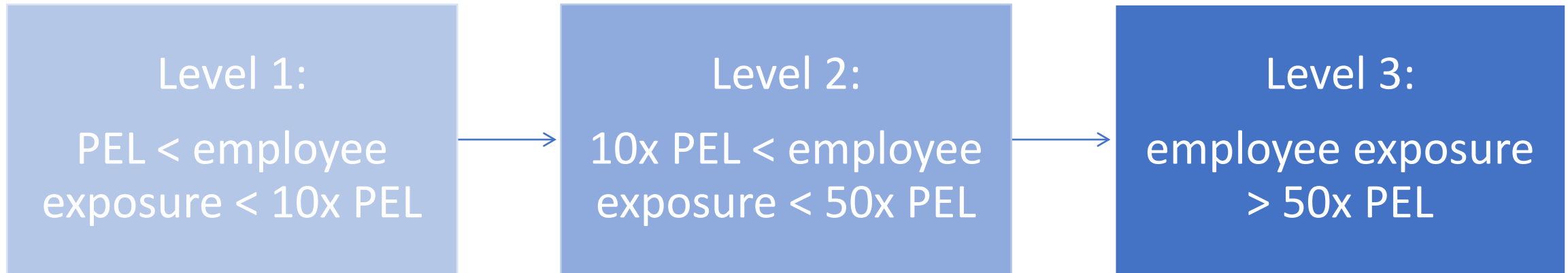
	Existing	Proposed
Blood Lead Levels (BLLs)	40 $\mu\text{g}/\text{dl}$	10 $\mu\text{g}/\text{dl}$
Permissible Exposure Level (PEL)	50 $\mu\text{g}/\text{m}^3$	10 $\mu\text{g}/\text{m}^3$ 8hr TWA
Action Level for protective measures	30 $\mu\text{g}/\text{m}^3$	2 $\mu\text{g}/\text{m}^3$ 8hr TWA
8-hr TWA PEL for lead/inorganic compounds	0.05 $\text{mg}/\text{m}^3$	0.01 $\text{mg}/\text{m}^3$ TWA

# “Trigger Tasks”

8CCR 1532.1(d)(2)(A-D)

- Occupational tasks where it is presumed an employee exposure > PEL
- Employers must either:
  - perform an exposure assessment prior to task, take protective actions based on the results, or
  - treat every employee performing these tasks as exposed to the 10-50x PEL (depending on the level # of the trigger task) and take prescribed actions.

# Trigger Task Levels



# “Trigger Tasks”

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- Lead-containing coatings: manual sanding, power tool cleaning, grinding, or sanding with dust collection systems
- Spray painting with lead paint

Level 2

- Lead-containing mortar or lead burning
- Lead-containing coatings or paint are present
  - Rivet busting
  - Power tool cleaning, grinding or sanding without dust collection systems
  - Cleanup activities where dry expendable abrasives are used
  - Abrasive blasting including enclosure movement and removal
  - Welding
  - Torch cutting/burning
- Anything else the employer believes may lead to exposure > PEL

Level 3



# What will this likely mean for employers?



Exposure  
monitoring



Medical surveillance  
/monitoring



Training



Notification



Record keeping

