WORKPLACE HAZARD ALERT

New Health Dangers from Lead

Levels of lead once thought harmless now shown to be toxic

If you work with lead you need to:

- Find out how much lead is in your blood.
- Talk to your doctor about lead and your health.
- Take steps to protect yourself at work.

What health damage can low levels of lead cause?

Studies in recent years show that low levels of lead in adults can:

- **increase blood pressure**— may increase your chances of having a heart attack or stroke.
- **decrease brain function**— making it more difficult to think, learn, and remember.
- **decrease kidney function**— making it more difficult to get rid of toxic waste products through your urine.
- **harm the physical and mental development of your baby** before it's born.
- **increase chances of having a miscarriage.**

Health damage from lead:

- **Can be permanent.**
- **Can be occurring even if you have no symptoms.**
- **May not show up until many years later.**

You may work with lead if you:

- Make or repair radiators
- Make or recycle batteries
- Recycle scrap metal or electronics
- Melt, cast, or grind lead, brass, or bronze
- Make or glaze ceramics
- Work at a shooting range
- Remove paint or coatings
- Remodel homes and buildings
- Tear down buildings, bridges, or tanks

This is not a complete list. If you are unsure if you work with lead, ask your employer.

California Department of PublicHealth

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Occupational Lead Poisoning Prevention Program

How does lead get into my body?

Lead gets into the body through the air you breathe. You can also swallow lead without knowing it if lead dust gets onto your hands or face or on food you eat.

How do I know how much lead is in my body?

Get a blood lead level test. This test measures the amount of lead in a person's blood. Blood lead test results are reported as micrograms of lead per deciliter of blood (µg/dL or mcg/dL). The typical blood lead level for adults in the U.S. is less than 2 µg/dL. Even if you feel fine, you should get tested.

✱ Know your number.

What level of lead is harmful?

Some of the harmful effects of lead have been seen at very low levels. Scientists and doctors now recommend that blood lead levels be kept below 10 µg/dL. Pregnant women or women considering pregnancy should not have a blood lead level above 5 µg/dL.

✱ Blood lead levels should be kept below 10.

Will my health be damaged?

No one can predict for sure whether your health will be damaged at a low blood lead level. Your risk (chance) of suffering from health damage increases with the amount of lead in your blood and the length of time you have been exposed. It will also depend on whether you have any health conditions that place you at higher risk of damage from lead.

If your blood lead level has been above 10 µg/dL for more than a year, the most important thing you can do is take steps to lower your exposure in the future. Information on how you can protect yourself is on pages 4 and 5.

You should also talk to your personal doctor about whether you have any medical conditions that may make you more sensitive to the harmful effects of lead.

✱ Can lead at work harm my family?

YES. You take lead dust from your job to your family when you wear your work clothes and shoes home. Lead dust can get in your car. It can get on furniture, floors, and carpets. Your child can swallow this lead dust and be poisoned. The steps you take to protect yourself will also keep you from bringing lead home to your family. See pages 4 and 5 for more information on what you can do.

What should I tell my doctor?

Your doctor needs to know if you work with lead. Your doctor can order a blood lead level test if you need one. Also, you may have a medical condition that makes you more sensitive to the harmful effects of lead.

Tell the doctor:

- What you do at work.
- How long you have been at your job.
- Any lead jobs you've had in the past.
- If you've ever had a blood lead level test.
- If you've had to be moved to a different job or be off work because your lead level was high.
- If you think working with lead is making you sick.

Women should also tell their doctor if they are pregnant or considering becoming pregnant.

Ask the doctor if you:

- Have any medical conditions that may make you more sensitive to the effects of lead.
  - ☐ High blood pressure
  - ☐ Kidney disease
  - ☐ Brain or nerve disease
  - ☐ Other
- Need any follow-up medical tests to see if lead is affecting your health.
  - ☐ Recheck blood pressure
  - ☐ Kidney function tests
  - ☐ Cognitive evaluation
  - ☐ Other

See the attached clip-off form to fill out and take to your doctor.

My blood lead level has been high for years. Should I find other work?

Whether you continue to work with lead is a personal decision. It is often a tough decision to make. When making this decision, consider:

- Are there steps you can take to lower your exposure to lead? See pages 4 and 5 for steps you can take to protect yourself.
- Do you have any health conditions that may make you more sensitive to the harmful effects of lead?
- If you have a medical condition that places you at higher risk, can you transfer to another job without lead at the same company?
- If you change jobs will you receive the same salary and benefits? If not, can you and your family afford a lower paying job?

For industrial workers

What can I do to protect myself?

Make sure you don't accidentally swallow lead.

- **Wash your hands and face** with soap and water before eating or drinking and before leaving work.
- **Do not eat, drink, or smoke in the work area.**
- **Take a shower and wash your hair** as soon as you get home. (It's better to shower at work if you can.)
- **Change into clean clothes and shoes at work** before you go home. Keep dirty work clothes and shoes separate from clean street clothes. If you don't have a storage locker, keep your dirty clothes and shoes in a plastic bag.
- **Use wet cleaning methods.** Wet wipe surfaces and mop or HEPA vacuum the shop floor daily.

Do what you can to lower the amount of lead you breathe in.

- **If you have local exhaust ventilation, turn it on** and position it correctly while you work with lead.
- **Ask your employer for a respirator** to wear while you work with lead. If you already wear a respirator, ask whether there is another type of respirator that will protect you better. If you use a respirator, your employer has to pay for a doctor to evaluate whether you can wear one safely. Your employer must also provide you with a fit-test to make sure that the respirator fits you well.

Get a blood lead level test at least every 6 months.

- **Ask your employer for a blood lead level test.** If you have significant lead exposure at work, your employer must provide you with a test and pay for it.
- **Ask your personal doctor for a test** if your employer doesn't provide one.

✱ Get tested at least every 6 months.

For construction workers

What can I do to protect myself?

Make sure you don't accidentally swallow lead.

- **Wash your hands and face** with soap and water before eating or drinking and before leaving work. Use a portable plastic container with a spigot if running water is not available.
- **Do not eat, drink, or smoke in the work area.** Move to a clean area for lunch or breaks.
- **Take a shower and wash your hair** as soon as you get home. (It's better to shower at the job site if there are portable showers.)
- **Change into clean clothes and shoes at the job site** before you go home. Keep dirty work clothes and shoes separate from clean street clothes. Dirty clothes and shoes can be stored in a plastic bag.
- **Use wet cleaning methods.** Wet wipe surfaces and wet clean or HEPA vacuum the work area daily.

Strip back paint before cutting or welding.

Attach power tools to a HEPA vacuum.

Use a long-handled torch and stand upwind.

Do what you can to lower the amount of lead you breathe in.

- **Use work methods that keep dust and fume levels down.**
- **Ask your employer for a respirator** to wear while you work with lead. If you already wear a respirator, ask whether there is another type of respirator that will protect you better. If you use a respirator, your employer has to pay for a doctor to evaluate whether you can wear one safely. Your employer must also provide you with a fit-test to make sure that the respirator fits you well.

Get a blood lead level test at least every 6 months.

- **Ask your employer for a blood lead level test.** If you have significant lead exposure at work, your employer must provide you with a test and pay for it.
- **Ask your personal doctor for a test** if your employer doesn't provide one.

✱ Get tested at least every 6 months.

Are there any laws that protect me if I work with lead?

Yes. Your employer must follow special laws to protect you from lead hazards on the job. These laws are called the Cal/OSHA Lead Standards.

The Lead Standards contain many important requirements to protect you from lead. However, because they were written many years ago they are not based on the most recent scientific information. You can have a blood lead level above 10 µg/dL even if your employer follows the standards. That's why it's important for workers and employers to do everything they can to lower the amount of lead in the workplace.

To find out more about the Cal/OSHA Lead Standards, call the Lead in the Workplace Helpline (866/ 627-1587) or visit www.cdph.ca.gov/programs/olppp .

Talk to your employer if you think there is a lead problem at your job. If your employer does not fix the problem, you can call Cal/OSHA and ask for an inspection. Cal/OSHA will not tell your employer who made the call. Call the Cal/OSHA office in your area or call Cal/OSHA headquarters at (510) 285-7000.

RESOURCES

Toll-free to California callers.

- **For information about lead safety: (866) 627-1587**
- **For information about other workplace hazards: (866) 282-5516**
- **California Relay Service: (800) 735-2929 or 711**
- **www.cdph.ca.gov/programs/ohb**

To obtain a copy of this document in an alternate format, please contact: (510) 620-5757. Please allow at least ten (10) working days to coordinate alternate format services.

California Department of PublicHealth

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Occupational Lead Poisoning Prevention Program

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Arnold Schwarzenegger, Governor
State of California

Kimberly Belshé, Secretary
Health and Human Services Agency

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California Department of Public Health

Worksite Evaluation Form

What your employer should do to protect you

The best thing that your employer can do is to get rid of lead and lead-containing materials. If it's not possible to get rid of the lead, your employer should take steps to keep the amount of lead in the workplace as low as possible. Your employer should:

- ☐ **Train you to work safely with lead.**
- ☐ **Provide wash-up and shower facilities.**
  - ➔ If you work in construction these may be portable wash stations and portable showers.
  - ➔ Your employer should provide you sufficient time to wash up before breaks, lunch, and going home.
- ☐ **Provide clean areas for eating and changing.**
- ☐ **Provide work clothes and work shoes** that stay at the job site.
- ☐ **Provide a HEPA vacuum or tools for wet cleaning** the work area.
- ☐ **Install local exhaust ventilation** whenever possible.
  - ➔ If there is already local exhaust ventilation your employer should check it regularly to make sure it works well.
- ☐ **Provide you with the right tools to keep lead dust and fume levels down** such as power tools attached to a HEPA vacuum and long-handled torches.
- ☐ **Separate lead work areas from non-lead work areas.**
  - ➔ In construction, plastic sheeting can be used to isolate dusty work from the surrounding area.
- ☐ **Provide you with a respirator** to give you even more protection.
  - ➔ If you use a respirator, your employer has to pay for a doctor to evaluate whether you can wear one safely. Your employer must also provide you with a fit-test to make sure that the respirator fits you well.
- ☐ **Provide you with a blood lead level test** at least every six months.

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Lead Health Evaluation Form

To the worker:

Fill out the upper part of this form as completely as you can and share the form with your doctor. The lower part of the form has information for your doctor on body systems and health conditions that may be affected by lead. Talk to your doctor about any concerns you have.

Your name _____ Date of birth _____

Your employer's name _____

What job do you do now? _____ How long have you been at this job? _____

Have you worked with lead at other jobs in the past? _____

Have you had a blood lead level test done in the past? *(List the date(s) and the test results if you know them.)* _____

_____

Have you ever had to be moved to a different job or be off work because your blood lead level was high? _____

Do you think working with lead is making you sick? If yes, explain. _____

_____

To the healthcare provider:

Recent studies show that persistent low-level lead exposures are associated with an increased risk of hypertension, subtle effects on renal function, subclinical cognitive dysfunction, and adverse female reproductive outcome. Please review the following with your patient:

- ☐ Any blood pressure concerns
- ☐ Any kidney function concerns
- ☐ Any brain function concerns
- ☐ Pregnancy concerns (for female patients of reproductive age)

Follow-up recommendations:

- ☐ Recheck blood pressure?
- ☐ Test kidney function with BUN/Cr?
- ☐ Cognitive evaluation?
- ☐ Other?

For health care providers with questions about medical management of lead-exposed California workers, please call Dr. Ray Meister of the Occupational Lead Poisoning Prevention Program at (510) 620-5731.

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