



LEAD-VOLUTION 2025 - REDEFINING CA LEAD SAFETY STANDARDS

David S. Beadle, CIH, CSP, MA

WHERE DO WE FIND LEAD?

TIME FOR A CHANGE

1992–1999–2025

1. IMPROVED UNDERSTANDING OF HEALTH RISKS

1. Lower Thresholds for Health Effects
2. Vulnerability of Certain Populations

2. ALIGNMENT WITH UPDATED HEALTH GUIDELINES

1. CDC and OSHA Guidelines
2. International Standards

3. TECHNOLOGICAL ADVANCEMENTS

1. Improved Monitoring Techniques
2. Better Personal Protective Equipment (PPE)

4. RESPONDING TO STAKEHOLDER INPUT

1. Worker and Advocacy Group Concerns
2. Legal and Regulatory Pressures

5. ECONOMIC CONSIDERATIONS

1. Cost of Lead Exposure
2. Compliance Costs vs. Health Benefits

THE NUMBERS

Category	Current CCR Title 8 1532.1 (Pre-2025)	Revised CCR Title 8 1532.1 (2025)
Permissible Exposure Limit (PEL)	50 µg/m ³ 8-hour TWA	10 µg/m ³ 8-hour TWA
Action Level (AL)	30 µg/m ³ 8-hour TWA	2 µg/m ³ 8-hour TWA

MEDICAL SURVEILLANCE

Category	Current CCR Title 8 1532.1 (Pre-2025)	Revised CCR Title 8 1532.1 (2025)
Trigger for Medical Surveillance	Exposure at or above AL <u>on 30 or more days/year</u>	Exposure at or above AL on <u>1 or more days/year*</u>
Blood Lead Level (BLL) Trigger for Medical Removal	BLL \geq 50 $\mu\text{g/dL}$ for two consecutive tests or BLL \geq 60 $\mu\text{g/dL}$ for one test	BLL \geq 20 $\mu\text{g/dL}$ for one test or BLL \geq 15 $\mu\text{g/dL}$ for two consecutive tests

EXCEPTION: Medical surveillance is not required for an employee who is not exposed to lead at or above the action level for 10 or more days in any 12 consecutive months, and who is not exposed on any day at or above 100 $\mu\text{g/m}^3$ as an 8-hour TWA, without regard to respirator use.

MEDICAL REMOVAL/RETURN

Category	Current CCR Title 8 1532.1	Revised CCR Title 8 1532.1 (2025)
Medical Removal Protection (MRP)	Workers must be removed if BLL \geq 50 $\mu\text{g/dL}$	Workers must be removed if BLL \geq 20 $\mu\text{g/dL}$
Return to Work (After Removal)	BLL must drop below 40 $\mu\text{g/dL}$	BLL must drop below 15 $\mu\text{g/dL}$
Frequency of BLL Testing	Every 6 months (if exposed at or above AL)	Every 2 months until BLL $<$ 15 $\mu\text{g/dL}$, then every 6 months

Category	Current CCR Title 8 1532.1 (Pre-2025)	Revised CCR Title 8 1532.1 (2025)
Exposure Monitoring	Initial monitoring unless previous data shows below AL; periodic monitoring required	Initial and periodic monitoring required if exposure at or above AL ($\geq 2\mu\text{g}/\text{m}^3$)
Worker Notification of Results	Within 5 working days after receipt of monitoring results	Within 2 working days after receipt of monitoring results

EXPOSURE
MONITORING/NOTIFICATION

RESPIRATORY PROTECTION & PPE

Category	Current CCR Title 8 1532.1 (Pre-2025)	Revised CCR Title 8 1532.1 (2025)
Respiratory Protection	Required if PEL exceeded or as interim protection	More restrictive, required for any exposure at or above AL
Protective Clothing and Equipment	Required when exposed above PEL	Required when exposed above AL

HOUSEKEEPING

Category	Current CCR Title 8 1532.1	Revised CCR Title 8 1532.1 (2025)
Housekeeping Requirements	Maintain clean surfaces, reduce accumulation of lead dust	More stringent cleaning protocols, use of HEPA vacuums mandatory



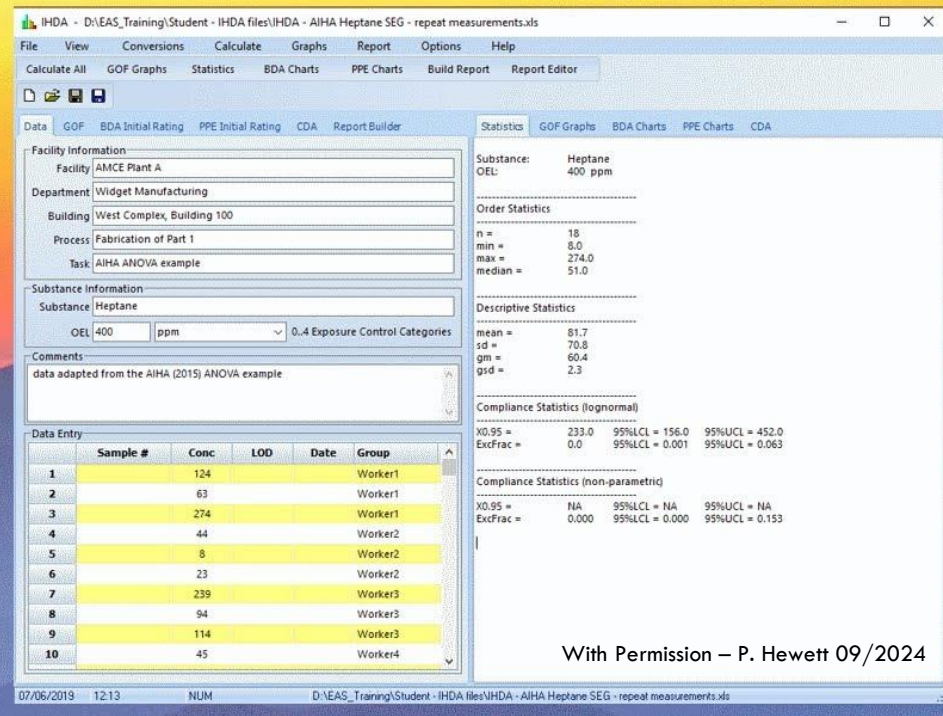
TRAINING

Category	Current CCR Title 8 1532.1 (Pre-2025)	Revised CCR Title 8 1532.1 (2025)
Training Requirements	Annual training if exposure at or above AL	Expanded training content and frequency, focusing on new standards and medical risks

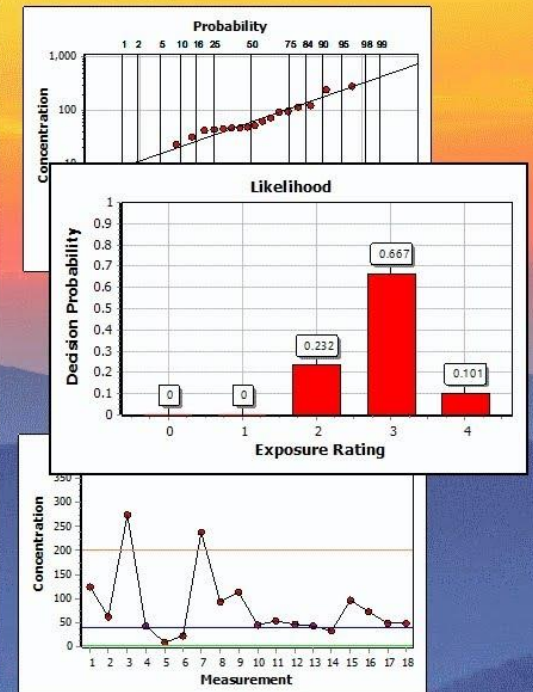
© 2024 Safety Management Systems, LLC. All Rights Reserved. Unauthorized reproduction or distribution of this material is prohibited.

EXPOSURE ASSESSMENT

IH Data Analyst (IHDA)



With Permission – P. Hewett 09/2024



CASE STUDY – CA DEPT OF WATER RESOURCES



- **Top-Down Approach – Early Implementation 06/2024**
- **Early Introduction to Managers/Supervisors**
- **Air BZ samples by ICP NIOSH 7300M/7303 not AAS. >\$ increase X4.4 – Needed to achieve the LOD < AL 2 ug/m3.**
- **Identify all potential Pb exposure categories/locations. Welding, forklift, automotive, brass machining, legacy sandblast sites, paint booths**
- **Organize all Pb air monitoring for past 10 years. Formalize Negative Exposure Assessment process and keep NEA as living documents**
- **Full implementation before 1/1/2025**



Thank you for your time and attention!

QUESTION & ANSWERS

David S. Beadle, CIH, CSP, MA

**IH Business Development Manager
Safety Management Systems, LLC**

(661) 699-9375

david.beadle@acadian.com



DISCLAIMER:

The information presented in this document is provided for informational purposes only and does not constitute professional advice. While every effort has been made to ensure the accuracy and completeness of the content, David S. Beadle/Safety Management Systems, LLC makes no guarantees, express or implied, regarding the information's accuracy, timeliness, or completeness, and expressly disclaims liability for any errors or omissions. This presentation is subject to updates, and David S. Beadle/Safety Management Systems, LLC is not obligated to notify recipients of any such updates.

The user assumes all responsibility for the interpretation and implementation of the information provided. David S. Beadle/Safety Management Systems, LLC will not be held liable for any harm, loss, or damages, whether direct or indirect, arising from the use or misuse of the material presented. No other warranties, express or implied, are provided.