

Lead Rule 3rd Draft

June 28, 2019



Washington State Lead Rulemaking Status



Purpose

- Background lead levels are significantly lower since original adoption of the lead rule
 - Average adult blood lead reduced from ~20 $\mu\text{g}/\text{dL}$ to <2 $\mu\text{g}/\text{dL}$
 - Studies have demonstrated adverse effects at any blood lead level
 - Significant permanent impairment is now documented at below 40 $\mu\text{g}/\text{dL}$

Purpose

- Primary focus of the rulemaking is to reduce occupational blood lead
 - Several existing recommendations for action at lowered levels
 - ACOEM recommendation selected as the general model

Purpose

- To achieve the lower blood lead levels the current draft uses multiple strategies
 - Greater emphasis on hygiene and housekeeping
 - Broad criteria for requiring blood lead testing
 - Revised permissible exposure limit
 - Requiring review and correction when there are elevated blood lead levels, before medical removal

3rd Draft Revisions

- Revised structure
 - Labelled sections based on criteria
 - General, Basic, Action, PEL, SPEL
 - Identifies applicable sections
 - If there are no exposures above criteria, then the section does not apply
- Like requirements together
 - Housekeeping, hygiene, controls, ...

3rd Draft Revisions

- Added information for low exposure situations
 - Retail and building management safe harbor sections
 - Building inspection safe harbor guidance
- Clarified multi-employer requirements apply to employers who own facilities

3rd Draft Revisions

- Revised triggers for blood lead testing based on action level exposure
 - 10 days or more of action level exposure
 - Airborne action level, 10 $\mu\text{g}/\text{m}^3$ TWA_{8e}
 - 30 minutes of PEL or SPEL rule work
 - 1 hour of work with contact action levels
 - Ends when worker can doff PPE and wash off lead

3rd Draft Revisions

- Reworked expected exposure tables
- Providing additional information on assumptions
- Give presumed rule coverage
 - Not lead work
 - Basic, Action, PEL, or SPEL rules

Proposed Blood Lead Criteria

- Advisory level 5 µg/dL
- Control level 10 µg/dL
- Multi-test removal level 20 µg/dL repeated
- Single-test removal level 30 µg/dL
- Return to work level 15 µg/dL repeated

Blood Lead Testing

- Blood lead testing *available* for all workers covered by the rule—3rd draft revision
 - Primarily to address spills, unexpected exposures
- Action levels require regular monitoring
- Reporting required for elevated blood lead levels
 - Employer reports ≥ 10 $\mu\text{g}/\text{dL}$
 - Same manner as an amputation or loss of an eye

Proposed Action Levels

- Airborne lead 10 $\mu\text{g}/\text{m}^3$ TWA_{8e}
- Surface contamination 1000 $\mu\text{g}/\text{dm}^2$
- Metals 20 %
- Non-metals 0.5 %
- Welding/Grinding/Blasting 1000 $\mu\text{g}/\text{g}$ – 3rd Draft

Proposed Permissible Exposure Limit

- The current draft establishes two permissible exposure limits
- PEL, $20 \mu\text{g}/\text{m}^3 \text{TWA}_{8\text{e}}$
 - Control plan, regulated areas, hygiene facilities, half-face respirators, work practice, and tool controls
- Secondary PEL, $50 \mu\text{g}/\text{m}^3 \text{TWA}_{8\text{e}}$
 - All feasible controls, respiratory protection APF

Lead Definition

- Current draft covers all lead exposures
- Exemption for some organic compounds is removed
- Exemption for minimal exposure situations
 - Such as working in a building with undisturbed lead paint or working with packaged materials.

DOSH Lead Rule Proposal

DRAFT

Not Covered
Lead Work

Basic Rules

- Training—Poster
- Housekeeping
- Hand/face Washing
- Blood lead requests

Action Rules

- Training
- Blood lead monitoring
- Air monitoring
- Voluntary Respirator

PEL Rules

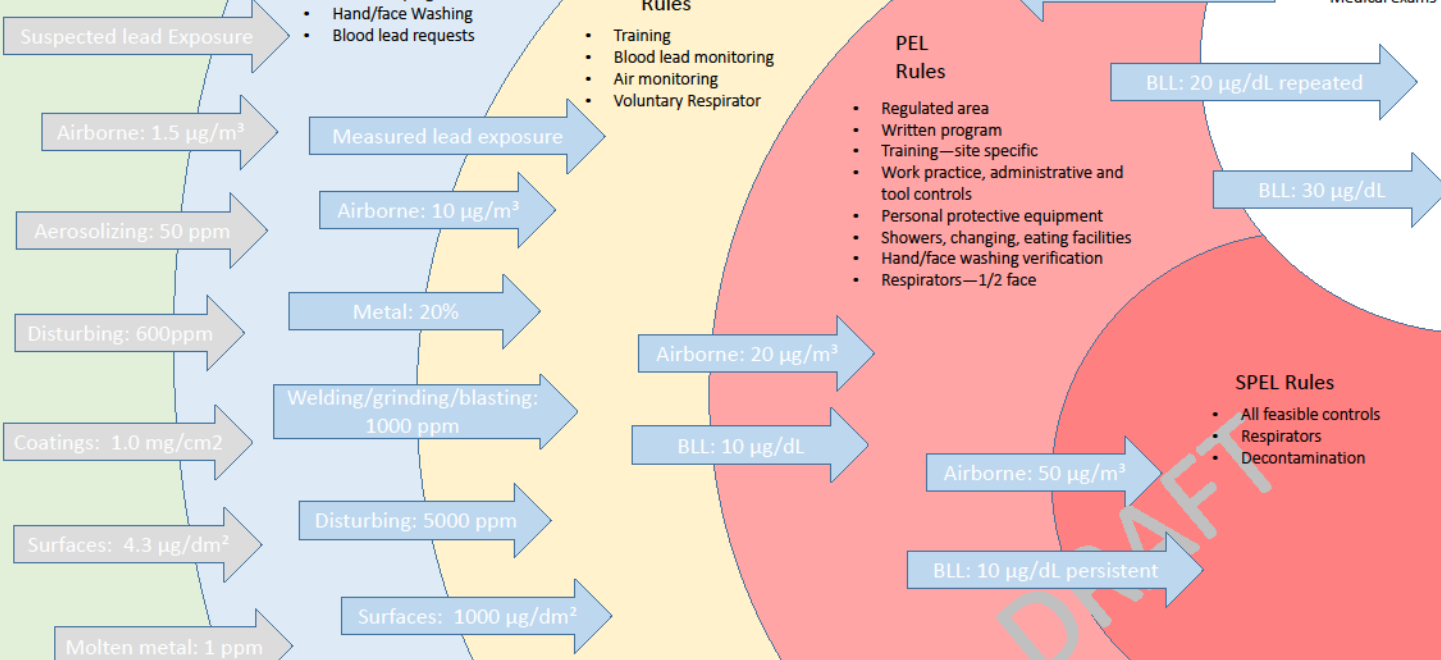
- Regulated area
- Written program
- Training—site specific
- Work practice, administrative and tool controls
- Personal protective equipment
- Showers, changing, eating facilities
- Hand/face washing verification
- Respirators—1/2 face

Medical Removal

- No action-level exposure
- Economic protection
- Medical exams

SPEL Rules

- All feasible controls
- Respirators
- Decontamination



Third Discussion Draft Rule Explanation Graphic: 5/14/2019

Initial Classification of Work

- Expanded direction for pre-work assessments
- Safe harbor initial exposure levels
 - Trigger tasks from current construction rule
 - Additional tasks for construction and other industries
- Clear expectation for providing protections at start of work

Rule Structure Revised

| | | Rule Classification | | | |
|--------------|--------------------|---|---|---|--------------------------------|
| | | Basic Rules | Action Rules | PEL Rules | SPEL Rules |
| Requirements | Monitoring | -- | 20040 | 20050 | |
| | Blood lead testing | 30010 | 30020 | | |
| | Cleaning practices | 40010 | | 40030 Based on control plan | |
| | Training | 41010 Awareness | 41020 Workplace Specific | | |
| | Hygiene | 42010 Hand/Face washing | | 42020 Shower, changing, eating Facilities | 42030 Decontamination required |
| | PPE | 43010 Hazard assessment, prohibitions | | 43030 Weekly change out | 43040 Daily change out |
| | Control Area | -- | | 44020 Post and regulate | |
| | Respirators | -- | 45020 Voluntary use | 45030 Half face | 45040 Exposure based |
| | Control Plan | 46010 Respond to high blood lead levels | | 46030 Control plan (tools, work practices), periodic review | |
| | Exposure Controls | -- | 47020 Respond to high blood lead levels | 47030 Tool and work practices | 47040 All feasible controls |

Worker Choices

- Employers required to allow voluntary use of respirators
 - above the airborne action level, $10 \mu\text{g}/\text{m}^3$
- Added protection available at PEL
 - Worker may request respirator upgrade
 - Worker may use decon facilities
 - Employer required to oversee decon at SPEL

Employer Managing Blood Lead Levels

- Employer must develop written plan
 - Requirement at blood lead control level, 10 µg/dL
 - Must assess and improve hygiene and work practices
- Persistent elevated blood levels require further review of PPE and controls

Compliance Protocols

- Industry and task specific
 - Give directions for clearly compliant work practices
 - Offer reductions in monitoring requirements
- Handling lead containing articles in retail settings
 - 3rd Draft addition
 - Work practice specification
 - Limits coverage of workers

Compliance Protocols

- Work in office and residential buildings
 - 3rd Draft addition
 - Limits coverage of workers
- Incidental lead paint work (EPA RRP)
 - Handling lead paint in residential and light commercial construction
 - Specifications for work and PPE
 - Employer can use presumed exposure levels

Compliance Protocols

- Gun ranges
 - Added direction on work practices and controls
 - Allows using presumed exposures for some tasks
- Clean areas
 - Protocols for verifying minimal lead in work area
 - Employer may exclude employees in some areas from training and other requirements of the rule

Compliance Protocols

- Well managed blood lead levels
 - Reduced requirements for employers demonstrating that worker blood lead levels are kept below 10 µg/dL
 - DOSH will not conduct scheduled inspections
 - DOSH will not enforce PPE, work practice, or control requirements below the Secondary PEL
- Maintenance and repair work
 - Alternate protocols for tasks performed sporadically