

**U.S. DEPARTMENT OF LABOR** 

**Occupational Safety and Health Administration** 

DIRECTIVE NUMBER: 21-08 (CPL 04)	<b>EFFECTIVE DATE:</b> December 31, 2021	
SUBJECT: Regional Emphasis Program for Cranes used in Construction, General Industry		
and Maritime Employment		
<b>REGIONAL IDENTIFIER:</b> Region 10		

### ABSTRACT

Purpose:	This instruction renews a Regional Emphasis Program (REP) for safety inspections of workplaces where employees are exposed to the operation of cranes in the Construction, General Industry and Maritime industries.
Scope:	This instruction applies to all work sites in Region X that are under OSHA jurisdiction.
Reference:	OSHA Instruction CPL 04-00-002, Procedures for Approval of Local Emphasis Programs, dated November 13, 2018.
	OSHA Instruction CPL 02-00-164, Field Operations Manual, dated April 4, 2020.
	OSHA Instruction CPL 02-00-051 (CPL 2-0.51J), Enforcement Exemptions and Limitations under the Appropriations Act, dated May 28, 1998.
	OSHA Instruction CPL 02-00-155, Inspection Scheduling for Construction, September 6, 2013.
	OSHA Memorandum for Regional Administrators, Subject: "Guidance to Compliance Officers for Focused Inspections in the Construction Industry," dated September 20, 1995, Revision.
	OSHA Memorandum for Regional Administrators, Subject: "Establishment-Targeting Lists for Emphasis Programs," dated November 13, 2014.

	OSHA Memorandum for Regional Administrators, Subject: "Procedures for Local and Regional Emphasis Programs," dated December 3, 2014.
	Bureau of Labor Statistics. Fatal Occupational Injuries Involving Cranes (2011-2017). May 2019. Available from: <u>https://www.bls.gov/iif/oshwc/cfoi/cranes</u>
Cancellation:	OSHA Regional Instruction 19-13 (CPL 04), dated December 31, 2018.
Expiration:	This instruction will expire December 31, 2026, but may be renewed.
State Impact:	None.
Significant Changes:	None.
Action Offices:	Region X Area Offices and Seattle Regional Office
Originating Office:	Office of Enforcement Programs
Contact:	Assistant Regional Administrator Office of Enforcement Programs

By and Under the Authority of:

Patrick J. Kapust

Acting Regional Administrator

# **Executive Summary**

The purpose of this instruction is to renew procedures for addressing the hazards associated with cranes, which include, but are not limited to, struck by, electrocutions, crane tip-over, caught in or between, and falls within Region X.

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### I. <u>Purpose</u>.

The purpose of this instruction is to renew an enforcement initiative for the inspection of cranes used in construction, general industry and maritime employments with the goal of reducing serious and fatal injuries to employees working on and around cranes.

### II. <u>Scope</u>.

This instruction applies to all work sites in Alaska, Idaho, Oregon and Washington that are under OSHA jurisdiction.

### III. Action Offices.

Region X Area Offices.

### IV. <u>References</u>:

OSHA Instruction CPL 04-00-002, Procedures for Approval of Local Emphasis Programs, dated November 13, 2018.

OSHA Instruction CPL 02-00-164, Field Operations Manual, dated April 4, 2020.

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## V. <u>Cancellation</u>.

OSHA Regional Notice 19-13 (CPL 04), dated December 31, 2018.

### VI. <u>Expiration</u>.

This instruction expires December 31, 2026, but may be renewed.

### VII. <u>Background</u>.

This REP supports the Occupational Safety and Health Administration (OSHA) Fiscal Year 2022 Agency Management Plan, Agency Theme 1, Assure Safe and Healthful Workplaces, to secure safe and health workplaces, particularly in high-risk industries, including the agency's theme to protect the most vulnerable workers in high hazard industries, by targeting industries with higher than average illness and injury rates.

This REP originated because during the period of October 2007 to October 2012, OSHA Region X (Alaska, Idaho, Oregon, and Washington) investigated thirteen (13) fatal accidents under their jurisdiction that involved cranes. As those involved in this type of work can be observed from the public way and some of the hazards often can be identified by OSHA compliance officers, major improvements can be achieved through a regional emphasis program that focuses on the hazards associated with the operation of all types of cranes used in construction, general industry and maritime employment.

Research conducted by the Crane Inspection & Certification Bureau, concluded that "crane accidents are often the direct result of negligence of the crane-related professional, or the lack of adequate operator training or experience" (2011). Their data analysis concluded that:

- 90% of crane accidents occur due to human error.
- 80% of all crane upsets are attributed to operators exceeding the crane's operational capacity.
- 54% of these incidents are the result of swinging the boom or making a lift without the outriggers fully extended.
- 45% of all mobile crane accidents involve electrocution that results from the crane contacting a power source during operation.
- 40% of the victims were struck by an object (such as an uncontrolled hoisted load or crane part).
- 50% of U.S. crane accidents that had injuries in 2009 resulted in fatalities.
- 80 lift and material handling equipment workers are killed each year on average.

As depicted in the figure below, from 2011 to 2017, just over 50% of fatalities involving cranes in all industries were caused by a worker being struck by an object or equipment. In the same period, 43% of fatalities involving cranes occurred in the private construction industry compared to heavy civil construction, manufacturing and other industries (4).



#### Fatal occupational injuries involving cranes by type of event, 2011-17

This emphasis program is intended to identify such hazardous conditions and supplement existing OSHA targeting programs, focusing additional resources as necessary to monitor job sites, promote voluntary compliance and promote awareness of safety and health hazards during all work activities involving cranes.

OSHA will employ a number of tools to address this issue, including enforcement, training, on-site consultation, partnerships, alliances, and the Voluntary Protection Program (VPP).

The provisions of OSHA Instruction CPL 02-00-051 (CPL 2-1.51J), Enforcement Exemptions and Limitations under the Appropriations Act, Section XI, and Enforcement Guidance for Small Employers shall apply where appropriate.

### VIII. Enforcement.

### A. Hazards

The purpose of this instruction is to address the hazards associated with cranes, which include, but are not limited to, struck by, electrocutions, crane tip-over, caught in or between, and falls. Past inspection evidence indicates these hazards are the leading cause of death where cranes are used in the targeted industries (construction, general industry and maritime).

Click legend items to change data display. Hover over chart to view data. Source: U.S. Bureau of Labor Statistics.

This instruction is provided because of the immediate need to address unsafe working conditions during the use of cranes that contribute to workplace fatalities and, more importantly, to minimize or entirely eliminate these conditions.

### B. Outreach Program

This REP has been in place for several years and outreach is a continual effort through programs such as Safety Fests and meetings with local industry organizations. The Area Offices will continue to provide updated information to employers on topics such as the OSHA standards that apply to cranes, how to implement a safety and health program, and details about the REP. The Boise Area Office disseminates information electronically to employers and industry representatives.

### C. Procedures

All compliance personnel shall be instructed on this procedure within 15 days of the issuance of this directive. Compliance personnel shall be instructed to report (where practical) observed crane hazards. Every observation of such operations shall be handled as follows:

- 1. When a compliance officer observes or receives notice of a crane operation with suspected serious or imminent danger hazards (including non-formal complaints, other government agency referrals and reports from members of the public), the compliance officer shall document conditions as required by the FOM.
- 2. All crane operations having suspected hazards brought to the attention of the area office shall be inspected (resources permitting) as follows:
  - a. Referrals shall be inspected in accordance with the FOM. If the exposed employee is not considered to be in imminent danger, the Area Director or supervisor shall assign for immediate inspection unless available resources will not allow for immediate inspection. These inspections will normally be conducted within 5 working days.
  - b. Non-formal complaints shall be evaluated by the Area Director or supervisor and handled in accordance with current non-formal complaint procedures.
- 3. An inspection assigned under this REP does not necessarily need to be inspected by the person making the original observation.
- 4. Inspections will not be initiated as a specific search to find crane hazards. Inspections will be initiated when jobs and hazards are noticed during normal travels by the compliance officer, other referrals, or non-formal complaints.

- 5. Documentation of the events leading up to the observation of the reporting of the potential hazard(s) shall be maintained by the area office in case of denial of entry.
- 6. The compliance officer initially observing a serious crane hazard in plain view shall contact the area office supervisor or Area Director for a decision as to whether an inspection is required. However, if it is not possible to contact the Area Director or supervisor at the time, an inspection shall be conducted and the supervisor informed as soon as practicable after the inspection is completed.

### D. Scope of Inspection

Inspections under this emphasis program will be limited to the crane, its operation (including appropriate records review), and the workers who are working within the zone of danger of the crane and any other hazards which are in plain view including those which may have caused the CSHO to identify the work site. If the CSHO's evaluation indicates that a more comprehensive inspection should be completed at the work site, they will request authority to expand the inspection from the Area Director or supervisor. CSHOs will make appropriate entries into their case file regarding the scope of the inspection.

The CSHO will evaluate employers who have employees working within the danger zone of the crane through inspection, observation, photographs, video footage, measurements, and interviews of management and employees.

E. Citations

Citations for violations shall be issued in accordance with the FOM.

F. Interface with Unprogrammed Activity

Reports of imminent danger, fatalities, catastrophes, complaints, and referrals from outside OSHA shall be scheduled as unprogrammed inspections, and shall be inspected in accordance with the applicable provisions of the FOM.

G. Inspection Resources

Only qualified CSHOs shall be assigned to conduct inspections under this instruction. All OSHA personnel participating in inspections must be familiar with the policies and procedures described in this notice.

### H. CSHO Personal Protective Equipment (PPE)

CSHOs will use personal protective equipment suitable for the targeted industry. PPE will include, at a minimum, a high visibility apparel/vest, hard hat, safety glasses with side shields, safety shoes/boots (with metatarsal guards as necessary), hearing protection and personal flotation device (as necessary).

I. <u>Relationship to Other Programs</u>

Area Offices will continue to schedule work sites for inspection from the Construction Inspection, Federal Agency and Maritime Targeting Systems that maximize the best utilization of area office resources. These inspections will be conducted according to the FOM and the OSHA Instruction for Inspection Scheduling for Construction, General industry and Maritime work sites.

# IX. OIS Coding.

- A. Enforcement inspections completed under this initiative will be coded on the Inspection Form as follows:
  - Inspections conducted under this program shall be coded as "Programmed Planned" with the REP designation "CRANE". Unprogrammed inspections (i.e., Complaints, Referrals from Outside OSHA, Fatalities/Catastrophes, Employer reported hospitalization or amputation) shall also be classified as "Unprogrammed" and coded under this local emphasis program designation of "CRANE".
  - 2. REP will be coded as CRANE for all programmed and unprogrammed inspections.
- B. Compliance assistance activities under this initiative, including partnerships, alliances, Voluntary Protection Programs, and other interventions, will be coded CRANE.

## X. <u>Partnerships and Alliances</u>.

In the event compliance assistance efforts result in the interest in developing an alliance or partnership, the Area Director will work with the Region's Office of Cooperative and State Programs t to ensure that these efforts conform to current National and Regional Policy.

### XI. <u>Evaluation</u>.

This instruction will be evaluated in accordance with OSHA Instruction CPL 04-00-002, Procedures for Approval of Local Emphasis Programs, dated November 13, 2018.

The Area Director may be asked to provide input concerning special problems that may have surfaced during the year; recommendations to improve the REP; and recommendations to renew or not renew the REP/Notice.

The Office of Enforcement Programs shall review the input and prepare an evaluation to be submitted to the Regional Administrator for review at the midpoint, and at the completion of the program.