

JPIASource

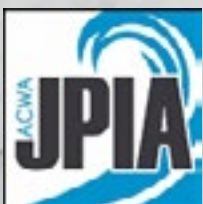
FALL 2023

VOLUME 5 ISSUE 4

ACWA JPIA Risk Management for the Water Industry



Accident/Incident or Near-Miss Investigation for California Water Agencies



The Benefits of Accident/Incident or Near-Miss Investigation for California Water Agencies

JPIA members face hazards and manage risk every day. Common accidents and near-miss incidents include vehicular incidents, theft, vandalism, damage from waterline failure, and underground utilities. These incidents are preventable.

Additionally, employees face significant hazards when operating vehicles, entering confined spaces, and working with heavy equipment in traffic and at heights, or when working with chemicals. By investigating all incidents, JPIA members can enhance their productivity, strengthen their rapport within the community, and minimize lost workdays.

- ★ A work-connected fatality or serious injury as per [Cal/OSHA §342](#)
- ★ Restricted work or transfer to another task due to a work-related injury
- ★ Loss of consciousness and other significant injuries/illnesses
- ★ Vehicle, equipment, or property damage
- ★ A near-miss event
- ★ Potential loss incurred by the public

The Benefits of Accident/Incident or Near-Miss Investigation

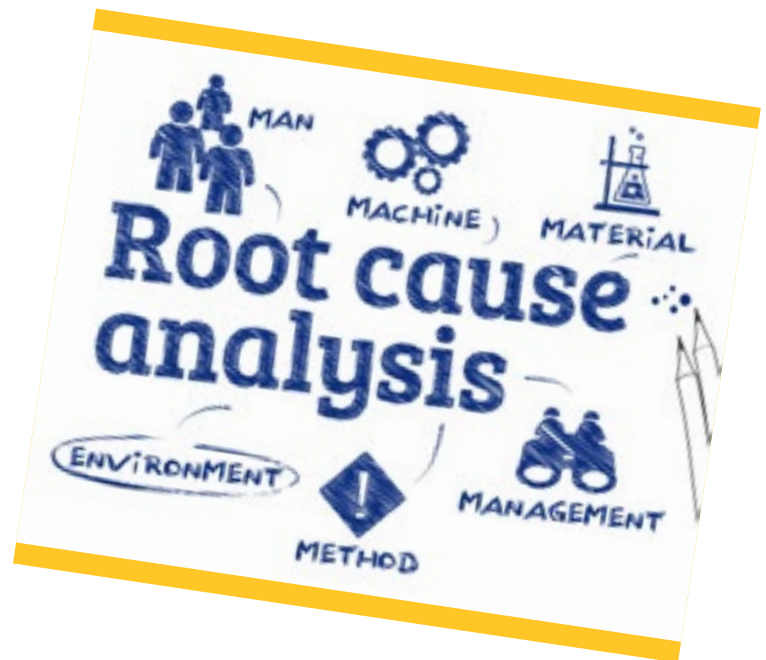
Investigations are conducted to find the root cause behind the event of a property, liability, work injury, or illness to prevent similar events from happening in the future. Conducting accident/incident or near-miss investigations can help uncover the underlying factors or root causes that led to an event, whether it resulted in a loss, injury, or a near-miss. Determining the root cause helps to identify corrective actions to prevent recurrence. Before an investigation begins, agencies should prioritize the safety and well-being of all parties involved by having a risk management program focused on risk reduction and prevention. The purpose is not to find fault or assign blame, but to determine why an event occurred.

When an Accident/Incident or Near-Miss Should be Investigated

After an event occurs, JPIA members should conduct accident/incident or near-miss investigations as soon as possible to preserve evidence and capture critical details. Generally, an event is followed by a response and then an investigation. The complexity of the investigation should correspond to the severity of the event. The following examples should lead to the initiation of an investigation:

Who Conducts the Investigation

In most cases, a supervisor should help investigate an accident/incident or near-miss because they are familiar with the work processes and may improve procedures quickly. *Section 9 of the JPIA's Risk Control Manual* includes a dedicated section on Accident and Incident Investigations and provides a Supervisor's Accident Investigation Form that includes a root cause checklist.





This document should be formatted to meet the agency’s needs. Other agency employees who may participate in the investigation process include:

- ★ Management
- ★ Employees and witnesses
- ★ A safety officer
- ★ A safety committee

How to Investigate an Accident/Incident or Near-Miss

Conducting an on-site accident/incident or near-miss investigation aims to gather information to identify the root cause. Investigations should be fact-finding and not fault-finding.

1. **Document the Scene:** Take detailed photographs of the scene, close-up and with a wide view. Make sure to take clear photos from different angles. It is recommended to refrain from video or audio recording.
2. **Obtain Witnesses Statements:** Speak with individuals who witnessed the accident. Ask them to provide a written witness statement.
3. **Fill out the Accident/Incident Investigation Form Completely:** Employees involved in the incident should provide an account of the event. Supervisors should capture the facts: who, what, when, where, and how, with a focus on root cause identification. Gather other information like weather conditions and any relevant hazards that might have impacted the event.

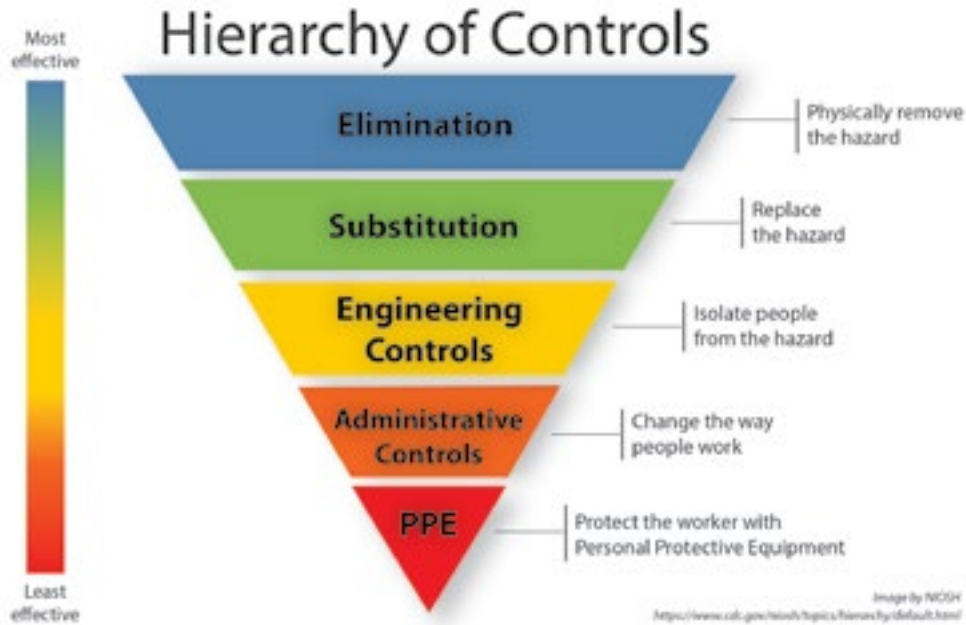
4. **Investigate and Identify Root Causes:** Analyze all the information to identify the underlying cause of the accident. Root cause identification should be met with solutions that consider the hierarchy of controls and an understanding of the regulatory and business impacts of the event.

5. **Implement Corrective Actions:** At the end of an investigation, employees, supervisors, and managers should understand the problem and how to fix it. Corrective actions that yield solutions to “be more careful” or “use common sense” will not prevent future events. To implement the recommended corrective action, agencies should work with employees to evaluate Standard Operating Procedures (SOPs), Job Hazard Analysis (JHA), and policies and procedures.

6. **Monitor and Review:** Periodically review the implemented corrective action to ensure its effectiveness. If it is found that similar situations continue, identify any gaps or barriers to the corrective actions implemented.



Incident	Description	Date	Time	Location	Severity	Status
1001	Water main break on Main St.	10/15/2018	10:30 AM	Main St. & 1st St.	Minor	Completed
1002	Employee slip and fall at office	10/16/2018	2:15 PM	Office Building	Minor	Completed
1003	Water treatment tank overflow	10/17/2018	8:45 AM	Water Treatment Plant	Major	In Progress
1004	Power outage at pump station	10/18/2018	11:00 AM	Pump Station 1	Minor	Completed
1005	Water quality issue in residential area	10/19/2018	7:30 AM	Residential Area	Minor	Completed
1006	Water main break on Hill St.	10/20/2018	9:15 AM	Hill St. & 2nd St.	Minor	Completed
1007	Water treatment tank overflow	10/21/2018	10:00 AM	Water Treatment Plant	Major	In Progress
1008	Employee slip and fall at office	10/22/2018	1:45 PM	Office Building	Minor	Completed
1009	Water main break on Oak St.	10/23/2018	12:30 PM	Oak St. & 3rd St.	Minor	Completed
1010	Water treatment tank overflow	10/24/2018	11:15 AM	Water Treatment Plant	Major	In Progress
1011	Power outage at pump station	10/25/2018	9:00 AM	Pump Station 2	Minor	Completed
1012	Water quality issue in residential area	10/26/2018	8:15 AM	Residential Area	Minor	Completed
1013	Water main break on Pine St.	10/27/2018	10:45 AM	Pine St. & 4th St.	Minor	Completed
1014	Water treatment tank overflow	10/28/2018	11:30 AM	Water Treatment Plant	Major	In Progress
1015	Employee slip and fall at office	10/29/2018	2:00 PM	Office Building	Minor	Completed
1016	Water main break on Elm St.	10/30/2018	9:45 AM	Elm St. & 5th St.	Minor	Completed
1017	Water treatment tank overflow	10/31/2018	10:15 AM	Water Treatment Plant	Major	In Progress
1018	Power outage at pump station	11/01/2018	11:00 AM	Pump Station 3	Minor	Completed
1019	Water quality issue in residential area	11/02/2018	7:45 AM	Residential Area	Minor	Completed
1020	Water main break on Cedar St.	11/03/2018	10:00 AM	Cedar St. & 6th St.	Minor	Completed



The knowledge gained from conducting accident/incident or near-miss investigations aids in building a learning atmosphere where lessons are learned and best practices are improved. This commitment helps agencies reinforce their dedication to the well-being of their employees, customers, and the community. JPIA members are encouraged to make early and complete claims reports to the JPIA and to submit completed accident/incident investigation reports once finalized.

Additional Resources

OSHA's [A Step-by-Step Guide: Incident Investigation](#)

VectorSolutions [How to Conduct an Incident Investigation](#)

National Safety Council [How to Conduct an Incident Investigation](#)

[Accident Investigation Techniques: Best Practices for Examining Workplace Incidents](#) – Third Edition (ASSP, 2022)

Alliant's [Accident Investigation: A Critical Effort to Preventing Future Events](#)

JPIASource



The *JPIASource* is not intended to be exhaustive. The discussion and best practices suggested herein should not be regarded as legal advice. Readers should pursue legal counsel or contact their insurance providers to gain more exhaustive advice.

P.O. Box 619082 | Roseville | CA 95661-9082
(800) 231-5742 | www.acwajpia.com

Photo credits: NIOSH_HOC_Main_508
Depositphotos.com@Nomadsoul1