# **Hazard Identification**



# Implement Inspections and Other Hazard Identification Processes

### Ready for Level 2?

	YES (✓)	NO (X)
You have done an initial inspection of all work areas with your workers		Visit Inspect the Workplace for Hazards (1HI_2)
You have made checklists and a schedule for regular inspections		Visit Inspect the Workplace for Hazards (1HI_2)
You have followed up to correct hazards and hazardous situations		Visit Prioritize Hazards for Control (1HI_5)

To-Do
Go beyond easy-to-find sources of hazard information.
Identify the hazard identification processes you use now.
□ Assess their effectiveness. Determine how to improve them and what processes to add.
□ Use new, updated processes to continue hazard identification, especially for high-risk jobs.
As your hazard identification processes evolve, you'll look beyond quick-to-find sources of hazard information

As your hazard identification processes evolve, you'll look beyond quick-to-find sources of hazard information and hazards visible during inspections. You'll also search for:

- Less visible safety and health hazards such as unusual or infrequent hazards, airborne contaminants that could cause long-term health effects, and near misses.
- Hazardous situations. Circumstances in your workplace's environment or organization such as short staffing issues or production pressures might make incidents worse or more likely. These may make your controls ineffective.
- New or unreported hazards resulting from workplace changes. Examples might include automation of a manual process, changes in machinery, introduction of new hazardous materials, reward systems that discourage reporting, reporting systems that don't work well, adding or eliminating a shift, or production pressure.

This is a test version of this worksheet; the content has not been fully reviewed and approved by OSHA and is subject to change. https://www.osha.gov/safety-management/step-by-step-guide#disclaimer Hazard identification can include informal processes, such as:

- Workers looking for hazards as they work.
- Supervisors and workers looking for hazards when they put controls in place.
- Feedback on hazards from people attending training.

The box below lists hazard identification and evaluation processes that many organizations have found helpful. But, as Figure 1 shows, no single process can find all hazards. Your organization should choose a combination of processes that can identify hazards, to the extent possible, and evaluate their risks.

Some of the processes need to be carried out by people who have professional training, have attended professional seminars or conferences, or are working with safety and health professionals. Reliable resources are

### Pro Tip: Limits of Inspections and Audits

Inspections and audits are important, but they have limits:

- They take snapshots in time. You need to do them continually to chart your progress.
- They often only look at a small percentage of jobs.
- They don't necessarily assess all jobs or varying conditions (weather, time of day, etc.).
- If there is advance notice, conditions might be different than typical day-today conditions.
- Results depend on the experience and knowledge of the inspector/auditor.
- This means audits and inspections on their own won't find all hazards.

available, both online and in-person, to help people get these needed skills. Examples include:

- Training offered by industry and trade associations
- National safety professional organization webinars, training, and publications
- Insurance company programs
- OSHA's <u>On-Site Consultation</u> program
- OSHA 10- and 30-hour training programs
- OSHA Training Institute (OTI) Education Centers courses

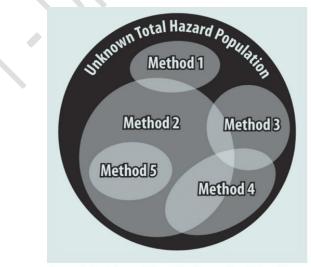


Figure 1: Each hazard identification method identifies some, but not all, system hazards.

### Common Sources of Information and Processes Used for Hazard Identification

- Inspections and observations (daily, weekly, compliance); see "Walk-Arounds for Safety Officers"
- Audits
- Incident investigations
- Toolbox meetings
- Tabletop exercises
- Developing and updating JHAs (see Identifying Hazard Control Options: Job Hazard Analysis)
- Workers' incident reporting
- Supervisors observing work
- Worker involvement focusing on how jobs (including maintenance) are actually done
- Surveys and interviews
- Occupational health assessments for recognized exposures such as noise, air contaminants, biological agents, ergonomic risk factors, and contractor activities
- Safety committee meetings
- Engineers or planners redesigning jobs or purchasing new machinery or equipment
- Pre-job or task review
- Post-job or task review
- Feedback from training
- Insurance carrier assessments
- Fire inspections
- Involvement of experts, consultants, and voluntary compliance personnel
- Review of:
  - o Safety Data Sheets (SDSs)
  - Exposure monitoring results, industrial hygiene assessments, and medical records (edited for privacy)
  - Injury and illness records (see "<u>That Was No Accident: Using Your OSHA 300 Logs to</u> <u>Improve Safety and Health</u>")
  - o Operating and maintenance manuals for machinery and equipment
  - o Relevant OSHA and state regulations
  - Most frequently cited OSHA standards and regulations
  - Standards and guidance from OSHA, the National Institute for Occupational Safety and Health (NIOSH), the American Society of Safety Professionals, and the National Safety Council (for example, on heat illness, fall prevention, lockout/tagout)
  - American Conference of Governmental Industrial Hygienists (ACGIH) Threshold Limit Values (TLVs) and Biological Exposure Indices (BEIs)
  - Voluntary consensus standards (e.g., fall protection, confined space, lockout/energy control)
  - Proposed changes in equipment, machinery, methods, and organization

## Activity: Improving the Hazard Identification Process

## Part 1: Identify new hazard identification processes and improvements needed

### Instructions:

- 1. Convene a small, diverse group (safety champions, workers, supervisors, managers) to brainstorm a list of the current hazard identification processes (column one of the table below).
- 2. Discuss the current effectiveness of each process. Indicate in column two whether it is effective. Describe why or why not.
- 3. In column three, brainstorm new processes or improvements needed. Refer to the list of common processes in the box above if needed.

### Pro Tip: How Effective Are Your Hazard Identification Processes?

Each time you find a hazard—using a process such as an inspection, worker interview, or incident investigation—find out if your organization had already identified it through current hazard identification processes. If not, you might need to improve the processes or put a new one in place. If the hazard *was* known, it's critical to understand why it hasn't been addressed.

Current and core	Is the process working?	
Current process Observations by supervisors	Why or why not? No: Supervisors might be overlooking issues that would take too much of their time and resources to address.	<ul> <li>Possible new processes or improvements</li> <li>Periodically have someone other than the supervisor of a work area conduct observations.</li> <li>Set up a system for all workers in the work area to provide input.</li> </ul>
Toolbox meetings	<b>Yes</b> : Weekly toolbox meetings are conducted, and concerns raised are addressed promptly.	<ul> <li>Post the changes made in response to the concerns in a public space.</li> </ul>
Weekly inspections of each job area	<b>No:</b> We are inspecting only on first shift. That means we are missing hazards at other times, when different work is done.	• Conduct weekly inspections of each job area on every shift.

Current process	Is the process working? Why or why not?	Possible new processes or improvements

### Part 2: Continue hazard identification

### Instructions

On the next two pages, you'll find a table where you can list hazards in an area or department at your workplace. (Before the blank table, there's a filled-in sample table.)

- If you worked on the table in Collect and Review Hazard Information (1HI\_1b), you can use the information there as a starting point.
- Include any possible new processes or improvements you found you need from part 1 of this activity (the third column of the table), as well as any other new processes that apply, such as those in the box on page 6.
- Also update the hazards/hazardous situations and potential injuries or illnesses as needed. Include health information, hazardous situations, work environment, and organizational deficiencies. Emphasize high-risk jobs: the jobs and tasks you've identified as the most dangerous by talking with workers and reviewing injuries, illnesses, and incidents.
- Be sure to include potential emergencies and emergency situations you've identified (see Identify Potential Emergencies [1HI\_4a] and Update and Improve Your Emergency Action Plan [2HPC\_2]).

Identifying hazards is something you'll need to continually do. Return to this inventory of hazards as you keep improving your safety and health program.

		Information sources/hazard		Potential injury
Work area	Task/job/activity	identification processes	Hazards/ <i>hazardous situations</i> found	or illness
Examples:				
Shipping and Receiving	Fork trucks unloading incoming materials	<ul> <li>Worker observations of the area, in addition to supervisor observations</li> <li>Reports of past injuries</li> </ul>	Fork trucks striking pedestrians in the area People unfamiliar with warehouse operations walking through the warehouse Untrained/inexperienced drivers Supervisors inspect too infrequently to observe these hazardous situations	Crushing injuries
Battery charging station	Electric fork truck battery charging	<ul> <li>Inspections expanded to second shift</li> <li>Operating and maintenance manual</li> <li>Safety data sheet</li> </ul>	Contact with sulfuric acid Proper gloves and face shield not available on second shift	Chemical burns
Your list:				-
		$\mathcal{N}$		
		1		
	OV,			