

Identify Hazards Associated with Nonroutine Situations

Ready for Level 2?

	YES (✓)	NO (X)
You have identified possible rare and nonroutine tasks at your facility	<input type="checkbox"/>	Visit Identify Nonroutine Activities (1HI_4b)
You have identified the hazards that workers could face during these tasks	<input type="checkbox"/>	Visit Identify Nonroutine Activities (1HI_4b)

To Do

- Use in-depth processes to identify rare and nonroutine tasks and the hazards that come with them.
- Ask workers to identify and anticipate dangerous nonroutine jobs and tasks.

Challenges in identifying hazards of nonroutine or infrequent activities

Traditional hazard identification processes (inspections, audits, etc.) may not account for tasks that happen:

- Rarely
- During lulls in regular work
- In remote, isolated places
- In places that people involved in the hazard identification process seldom, if ever, access

It's tempting to think that workers know the hazards of nonroutine tasks, are trained to

Examples of Nonroutine Activities and Situations

- Working on high-pressure overhead steam lines
- Working on top of equipment without fall protection after a malfunction or breakdown
- Work during extreme weather
- Work during utility disruptions
- Startup and shutdown of certain equipment
- Emergencies
- Tasks inside machinery or equipment and confined spaces
- Adding biocides to coolant systems periodically
- Servicing combustion systems during a cold shutdown

perform them safely, and will stop and ask for help if unsure how to proceed. However, once assigned to the job, workers have limited capacity to control hazards and risks. They are likely to make every effort to complete tasks with the personnel and equipment available to them. For this reason, it's critical to think through the task to anticipate what hazards could arise and how to minimize or eliminate those hazards. Consider a structured hazard identification method, such as a [job hazard analysis](#) (JHA), to help plan for nonroutine tasks and their risks.

NONROUTINE TASK EXAMPLE: A piece of equipment is 10 feet above the floor. Every now and then, it needs to be repaired. The only way to reach it is a portable ladder. This means a worker might do the repair while on the ladder. The worker has to carry tools and materials up the ladder. They might need to hold tools or parts with both hands while balancing on the ladder. This violates the three-point contact rule—two hands and one foot or two feet and one hand on the ladder to ensure stability. It's very dangerous. If the job and hazard were anticipated, safer access could be provided (e.g., with a scissor lift).

Nonroutine tasks come up in all jobs and workplaces. They're more common, though, in jobs like maintenance, installing security systems, construction, public safety, health care, and fire service. Be sure you include these activities in your inspections, audits, plans, and equipment reviews. Remember that changes in processes, equipment, machinery, and staffing can make routine tasks nonroutine. For example, manual loading and unloading might become rarer when a company starts using a conveyor belt. (It might also become more hazardous if the conveyor belt is now in the way.) Meanwhile, a job that is routine for a highly experienced worker may be nonroutine for a newer worker.

Many nonroutine tasks are high risk

Your list of nonroutine tasks might also be mostly a list of high-risk ones. This is because these tasks might:

- Have time constraints due to production pressure
- Have minimal supervision
- Not have had JHAs (or other hazard assessments) done beforehand, resulting in minimal or low-level controls
- Be done in isolated parts of the facility

Activity: Identifying nonroutine tasks through toolbox talks

You can collect information on nonroutine tasks and jobs in a variety of ways, such as during safety committee meetings, inspections, and incident investigations. A toolbox talk can also be an effective way to tap into workers' knowledge. See an example script for a toolbox talk with options for an activity on page **Error!**

Bookmark not defined..

You can use the table on page **Error! Bookmark not defined.** as you add to your inventory of nonroutine tasks, hazards, and potential injuries/illnesses. These should become part of your overall inventory of hazards for control (see Implement Inspections and Other Hazard Identification Processes [2HI_1]).

Department or work unit	Tasks	Hazards/hazardous situations	Potential injury/illness
Example: Construction work	Welding in a confined space	Lack of oxygen, airborne toxic chemicals, fire	Suffocation, poisoning, burns
Example: Maintenance	Deenergizing equipment with more than one energy source	Unexpected energization or movement of machinery or equipment	Crushing, electrocution, arc flash

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Interactive Toolbox Talk: Identifying Nonroutine Tasks and Jobs Supervisor Script

Why is it important to identify nonroutine tasks and jobs?

Safety programs usually focus on the routine work—the way things normally operate, the way jobs are usually done, and the duties most commonly performed. This is important because routine work produces the most injuries and illnesses, but nonroutine tasks and jobs can also be dangerous. While they might result in a small number of incidents, they can cause severe injuries and illnesses.

By definition, nonroutine tasks and jobs don't happen often. They can be so rare that the organization "forgets" about them. Workers are the best at identifying them, particularly those of you who have been here for a long time. You're also best at developing a plan to anticipate the hazards and consequences that go with these risks.

It's easy to get into the mindset that there are no nonroutine tasks or jobs. Everything seems to be the same every day. But this is never the case. Nonroutine tasks are more likely in some jobs than others, but they exist in every workplace.

Let's take a few examples:

- Most days may be the same for a clerk working alone in a convenience store. But what if there's an attempted robbery or an incident in the parking lot?
- Warehouse workers might feel that every day is the same. But what if something is leaking from a container when they open a box of parts? Cleaning it up would be a nonroutine task.
- *[Provide examples relevant to the business as appropriate.]*

Activity

We need your help to identify nonroutine tasks and jobs. Then we can develop a plan for the hazards that go with them, and we can put controls in place to protect everyone, including the public.

In this activity, we'll identify the nonroutine tasks and jobs. Then we'll think about how the hazards can be anticipated and minimized, and finally, how they can be controlled.

[Below are instructions for two very effective methods. Review each method's strengths and weaknesses, then choose one for your group.]

Flipchart method

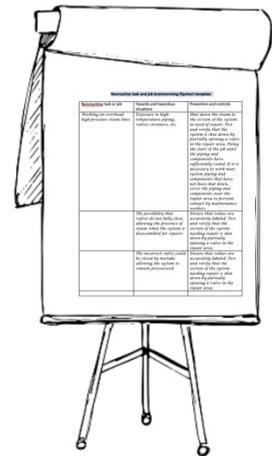
This is a way for a group to brainstorm nonroutine tasks, jobs, hazards, hazardous situations, and possible controls. It lets workers discuss their experiences, knowledge, and suggestions. It also enables group members to think deeply about hazards and hazardous situations.

This method works well when some workers cannot easily write responses. (They may be concerned about their handwriting, spelling, grammar, etc.) Its downside is that some workers may have ideas they are afraid to bring up in front of the whole group. If you think this might be the case, consider the more anonymous index card method (described later).

Remember, it's important for the supervisor and workers to be non-judgmental. Brainstorming is most effective in an open environment where there is no fear of criticism. All ideas need to be taken seriously.

Steps in this method:

- Make a flip chart based on the example below.
- Brainstorm nonroutine tasks and jobs and list them in the first column of the flip chart. Walk through the area(s) first if that would be helpful.
- In the middle column, list the hazards and hazardous situations that might arise while the nonroutine task or job is being done.
- Begin brainstorming controls that can be applied to each of the hazards and hazardous situations and list them in the third column. (You will continue to work on controls in the Hazard Prevention and Control element of your program.)



Nonroutine task or job	Hazards and hazardous situations	Prevention and controls
Working on overhead high-pressure steam lines	Exposure to high-temperature piping, valves, strainers, etc.	<p>Shut down the steam to the section of the system that needs repair.</p> <p>Test whether the system is shut down by partially opening a valve in the repair area.</p> <p>Delay the start of the job until the piping and components have cooled enough.</p>
	The wrong valve could be closed by mistake, allowing the system to stay pressurized	<p>Make sure valves are accurately labeled.</p> <p>Test whether the section of the system needing repair is shut down by partially opening a valve in the repair area.</p>

3-by-5 index card method

This method works well with a large group that doesn't have time to review each job and task, hazard and hazardous situation, and potential controls. It is also effective if some workers are hesitant to share their ideas publicly or speak in front of a group.

Steps in this method:

- Hand out 3-by-5 index cards. Ask workers to list one nonroutine task or job on each card. Give them as many cards as they need. The goal is to identify as many tasks and jobs as possible.

1. After workers have listed nonroutine tasks on their cards, ask them to add the hazards and hazardous situations that could arise during each nonroutine task or job they've listed.
2. Give a few examples for this activity—see the example card to the right.
3. Have workers share what they've written, if they wish to.
4. Collect the cards.
5. If time permits, or during the next toolbox meeting, ask workers to identify potential controls for the hazards and hazardous situations.

Nonroutine task/job:

Changing end trucks on overhead cranes above the storage yard

Hazards or hazardous situations:

Fall hazard due to the need to work near overhead crane rails, at times leaning over the edge while removing the old end truck and aligning/installing replacement end truck

What to do with this information

Add the nonroutine tasks and jobs, hazards and hazardous situations, and controls to your organization's hazards and controls inventory. The organization should consider creating JHAs for all or some of the jobs.

Remind your crew:

- Because these jobs aren't routine, it's important to assign experienced, knowledgeable workers to them.
- Workers may not have done them for a long time. That means it's important to stop and think before starting the job.
- Review the JHA or job procedures. Or conduct a new JHA if the nonroutine task wasn't identified before or if the job has changed. See [Identifying Hazard Control Options: Job Hazard Analysis](#).
- The team should discuss the way to do the job, the anticipated hazards, and controls to protect workers.
- While performing the job or task, if at any time you are not sure what to do, stop and contact your supervisor or another knowledgeable person.

Thank the participants

Thank the group—they've made a major contribution to safety and health in their organization. Encourage them to reach back out if they think of anything more.