



# Hypothetical Inc Scene Safety Awareness Campaign

## Course Design

*Note: this document describes a hypothetical project, to address a hypothetical problem for a hypothetical organization. It was created for the sole purpose of demonstrating the instructional design and related skills of the author. All project assets shown here are the product of the author. All project results described here are fictional.*

## Context

Hypothetical Inc has determined that the rate of “secondary injuries” in the workplace has risen sharply in the past year. A secondary injury is an injury to a bystander, or someone helping at the scene of a workplace accident.

Hypothetical Inc believes that all secondary injuries are avoidable if people take the time to identify and remove possible hazards before they step in to help at an accident scene.

## Methodology

This project is developed using the ADDIE model for project management. Other models from the field of instructional design are used to guide various aspects of the project. A “backwards design” approach is used to identify the desired results and work backwards to determine the necessary instruction. The ABCD model and Bloom’s Taxonomy are used to guide creation of the learning objectives and Kirkpatrick’s Four Levels model is used to plan the learning evaluation.

## Analysis

Answer these questions in plain sentences to clarify the purpose of the project and determine if training could be an effective part of the solution:

1. What is the objective of the project?

Eliminate secondary injuries related to workplace accidents

2. What do learners need to do to reach the objective?

They need to not get caught up in the urgency of a hurry-case. Instead, they need to put their own safety first by taking time to identify and avoid (or remove) potential hazards at the scene of workplace accidents.

3. What activities or experiences will help them to learn?

See examples of different objects and situations which can be hazardous in the workplace. Practice identifying potential hazards in a variety of example workplace environments. Practice deciding when a scene is safe enough to enter. Be reminded of potential hazards and of the cost/disruption of injury.

4. What information will motivate them to learn and perform?

See how easy it is to become injured at the scene of an accident. Learn how disruptive an injury can be to the victim, to the family, to the team, and to the company. See how expensive an injury can be to them, to their family and to the company.

5. Do the above steps address knowledge and/or skill gaps?

Yes

## Target Audience

The audience is all workers at Hypothetical Inc. The target learner profiles include:

- Professional: employees with advanced degrees or those considered “knowledge workers”, typical workspace is an office setting
- Manufacturing: employees who are highly skilled in a craft or trade, including those who are still learning their craft or trade such as in apprenticeship programs, typical workspace is a factory or shop setting
- Shift worker: employees with general skill sets, typical workspace is a warehouse, loading dock or similar setting
- Clerical: employees with modest skills, typical workspace is an office setting

## Delivery Constraints

Not every employee has a company-provided computer at their workstation. Initial training will be distributed via the company learning portal and will be formatted to support BYO mobile devices. This delivery approach has been used on other recent training projects at Hypothetical Inc with good success.

OTJ reinforcement is via printed material posted in workplace common spaces and via team safety briefings for some workers.

## Design

### Learner Tasks

In the context of approaching an accident scene, the individual must perform the following tasks to ensure their safety:

- Stop – do not enter an accident scene before examining the scene for hazards
- Visually examine the area to identify objects and conditions which could be hazardous to yourself and others
- Determine how to remove, eliminate or avoid each hazard

### Learning Objectives

When describing the steps for helping someone injured in a workplace accident, the employee will state that examining the scene for potential hazards comes before entering the scene or helping the injured.

Given an example workplace setting, the employee will correctly identify all of the potential hazards in the setting.

For any workplace setting where the employee has identified potential hazards, the employee is able to explain how the hazard could be removed, eliminated or avoided.

## Assessments

- At the end of each module, ask the learner to rate the module as positive, neutral, or negative. *(Kirkpatrick level 1)*
- Present the learner with several tasks or actions related to a workplace accident. Ask the learner to indicate the order in which the tasks and actions should be performed. Give positive feedback if the order specified by the learning objective has been met. *(Kirkpatrick level 2)*
- Show the learner a workplace setting and ask them to identify the potential hazards. Provide feedback for correctly identified objects. Feedback consists of positive acknowledgment and additional explanation about why the object is a hazard. *(Kirkpatrick level 2)*
- Show the learner a workplace setting with several hazards identified. Ask the learner to choose, from a list of options, the best method to remove, eliminate or avoid the hazard. *(Kirkpatrick level 2)*
- Examine workplace accident reports for the 12-month period following deployment of the training. Determine the total number of employees who report checking for hazards before entering an accident scene. *(Kirkpatrick level 3)*
- Examine workplace injury reports for the 12-month period before and after deployment of the training. Determine number of secondary injuries in each period to determine effectiveness of the training. *(Kirkpatrick level 4)*
- Calculate ROI of the training by using actual program development and deployment costs compared to representative savings. A value of \$160,000 <sup>(1)</sup> can be used as a representative cost per injury. *(Phillip level 5)*

improvement = # secondary injuries before training - # secondary injuries after training

savings = improvement x \$160,000

cost = training development cost + training deployment cost

ROI = (savings / cost) x 100

*(1) Approximate cost of a "dislocation" as calculated by <https://www.osha.gov/safetypays/estimator.html>*

## Organization

The training is organized as 3 interactive learning modules and one package of supporting materials.

Each module is designed and developed to be independent of the others so that, after the initial viewing, each module can be revisited as the user deems necessary.

LMS platform programming ensures that the modules are only available in the specified order for the first time a user views them. After the first time, modules may be viewed in any order.

### Module 1 – Cost And Disruption

**Module Length:** no more than 10 minutes

**Format:** audio, video, whiteboard animation

The module addresses the “what’s in it for me” question from users by showing the cost and disruption of a workplace injury. The user is specifically told that this cost and disruption can be avoided by being more safety-aware in the hurry-case of a workplace accident.

The module begins with 1-2 minutes of video or photo slideshow style media showing workplace injury statistics very quickly. The images are newspaper headlines, TV news headlines, people in hospital beds and other highly stimulating images. The audio is similar and not necessarily matching the video images. The intention with this portion is for the user to be slightly overwhelmed by the speed of the media but to have a clear understanding that workplace injuries are very costly and very disruptive.

Most of the module guides the user through an example injury showing the disruption (“days away from work” and lower team productivity), the insurance-paid costs and the worker’s out-of-pocket costs. The intent is to show that even a minor injury can be very costly.

The module ends with 2-3 questions confirming what was learned about the cost and disruption of an injury.

## Module 2 – Potential Hazards

**Module Length:** Varies based on speed of user input – typical should be no more than 10 minutes.

**Format:** static animation with hotspots

Introduction says we are going to look at three typical workplace settings and identify potential hazards in each.

Workplace settings will be:

- Office area with cubicles, computers, printers, copy machines, etc
- Warehouse with items stacked on the floor, items stacked on shelves, people moving around, forklifts etc
- Manufacturing area with machinery, forklifts, welding, noise etc

User is shown each setting and instructed to click on objects that are potentially dangerous. Clicking on an object that is potentially dangerous gives information (audio or text) about why that object is dangerous and how to avoid or eliminate the danger.

User can continue to the next scene (or to the end of the module) when all dangerous objects have been identified.

## Module 3 – Hazard Scenarios

**Module Length:** Varies based on speed of user input – typical should be no more than 10.

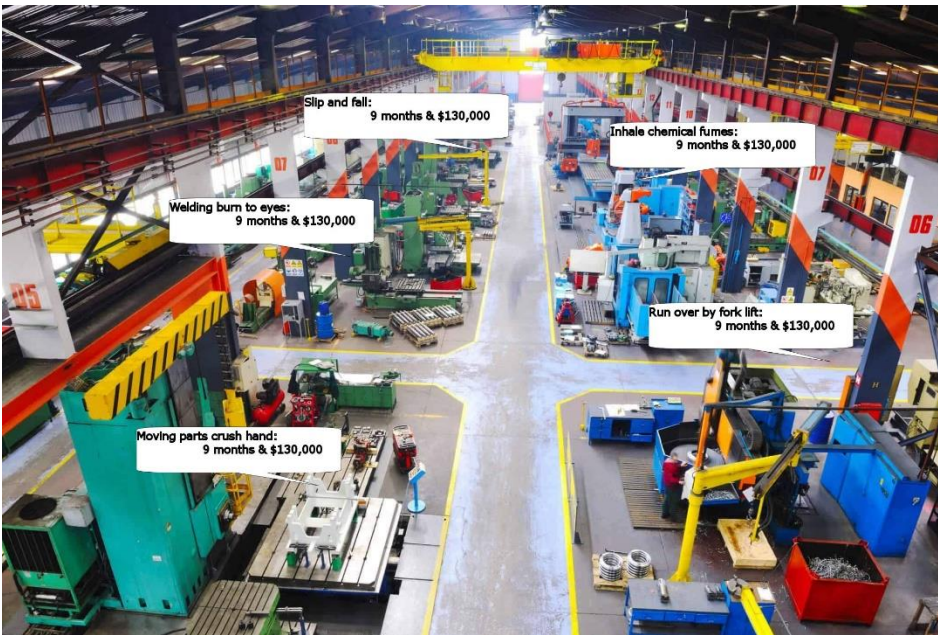
**Format:** animation

Three workplace settings as above. Each setting shows the potentially hazardous objects. User needs to indicate how to best remove, eliminate or avoid each hazard before entering the scene.

## Support Package

**Infographic** – Create a poster showing the cost and disruption info from module 1. This will be posted in common spaces, such as near timecard racks, as a general reminder of paying attention so you don't get hurt.

[example]



**Job Aids** – Create a poster for each of the 3 workplace settings. Posters will show the scenes from module 2 with a text bubble describing each hazardous object in the scene. This serves as a passive reminder to be aware of hazards in the workplace.

[example]



**Job Aid** – Create a scenario and facilitated discussion prompts to be used at a team safety meeting. Scenario is for the manufacturing workplace setting. Scenario describes a workplace accident scene with someone who appears to be injured. Material starts with a broad question

of “what do you do” and includes other questions for a facilitated discussion. Discussion prompts will review and reinforce the material of the training.

**Rollout Materials** – Several logistical artifacts are created to support rollout of the program

- A memo describing the program to employees, to be included in communication notifying employees of the requirement to complete the training.
- A memo to department managers asking them to recommend 1-2 “top performers” for the beta phase of the roll out program
- A memo notifying people they have been selected for the beta phase of the program and providing instructions for completing the training.
- A memo notifying people of the requirement to complete the training.

## Development

*Develop the assets defined by the design and storyboards above*

## Implementation

The program is to roll out in three phases

- Beta – the first group to receive training consists of approximately 12 people who collectively represent each of the 4 learner profiles and have experience working in each of the 3 workplace settings. In addition to the learning assessments defined as part of the training, these people will be asked for input regarding quality of program delivery and accuracy/appropriateness of program content.

The beta group members are selected by asking department managers to recommend 1-2 of their “top performers”. Memos for the department managers and for the selected employees are in the support package.

- Departmental – After making adjustments for feedback received in the beta phase, the training will be made available to employees on a department-by-department basis.

Training is made available to 1 department per week until it has been made available to 1/3 of the company’s departments.

Memos notifying people of the requirement are in the support package.

- Company-Wide - After the training has been made available to 1/3 of the company departments, and updates from feedback have been applied, the training is released to all remaining employees.

Memos notifying people of the requirement are in the support package.

## Evaluation

*Evaluation details are described in the course design and development sections/artifacts.*





## Notes and References

26% of the 8982,730 nonfatal work injuries resulting in days away from work in 2017 were related to slips, trips, and falls<sup>1</sup>

<sup>1</sup>Bureau of Labor Statistics (2018). [TABLE R4. Number of nonfatal occupational injuries and illnesses involving days away from work by industry and selected events or exposures leading to injury or illness, private industry, 2017](#)<sup>external icon</sup>

<https://www.nsc.org/work-safety/tools-resources/infographics/workplace-injuries>

<https://www.osha.gov/dcsp/products/topics/businesscase/costs.html>

<https://www.osha.gov/safetypays/estimator.html>

<https://business.libertymutualgroup.com/business-insurance/Documents/Services/Workplace%20Safety%20Index.pdf>