

Young hospitality workers injury hotspots!



Background

In Victoria, young workers aged 15 to 24 have the highest proportion of work-related injury – 17% higher than the average across all age groups.

Young workers also have a higher rate of hospitalisation – 21% higher than other age groups. The highest injury rates for young people occur in:

- retail (especially fish shops and takeaway food)
- cafes and restaurants
- manufacturing (particularly in meat products, metal fabrication, wood and joinery sectors), and
- construction (especially plumbing, electrical and carpentry work).

Types of injuries

The most common types of injuries experienced by young people include sprains, strains and muscle tears; lacerations; fractures and burns. Young workers are also more likely to be subjected to bullying and occupational violence.

Injury hotspots

WorkSafe Victoria has produced a series of posters and flyers, *Injury hotspots*, showing the most common injuries in different industry sectors, how people get injured and what can be done to prevent these injuries. They have also produced *Injury hotspots* showing the most common injuries experienced by young workers in the retail, hospitality, manufacturing and construction industries, the industries they commonly work in. These *Injury hotspots* can be accessed at www.worksafe.vic.gov.au/hotspots The *Injury hotspots* for young workers can also be accessed on the CD Rom, *Young Workers: It doesn't hurt to speak up*.

Overview of the activity

This activity is a cooperative logic problem. Cooperative logic problems are a great way to encourage students to work together and problem solve. They also help those participating in the activity to focus on the information presented, and, in this instance, allow students to share their mathematical knowledge and language. And, students find cooperative logic problems fun.

This cooperative logic problem focuses on the injuries young workers are most likely to receive in the hospitality industry. The cooperative logic problem uses the information from the *Industry hotspots* for young workers. These can be assessed at www.worksafe.vic.gov.au/hotspots or on the CD Rom, *Young Workers: It doesn't hurt to speak up*.

Purpose of the learning activity

- To focus on the injuries that young people working in the hospitality industry are most likely to experience.
- To develop team work skills.
- To develop problem solving skills.
- To develop understanding of percentages.

Target group

Young people who have casual, part time or on-going work or are likely to begin work in the near future.

Description of activity

Preparation

Photocopy each of the pieces for the problem. The problem has:

- the problem or question to be solved
- the pieces of information to solve the problem
- clues.

This cooperative logic problem also has an extension activity which will need to be photocopied.

You need to have enough sets for students to work in groups of 4 – 6.

Cut up the pieces as indicated and store each set in an envelope or plastic clip top bag. If you intend to use the activity with other groups, you may like to laminate the pieces.

Solving the problem

- Organise students into groups of 4 – 6. Explain that the aim of the activity is to solve the problem or question by working together.
- Place the problem and the information pieces in the middle of the table face up.
- Give each student at least 1 clue card.
- Taking turns, students read out their clue and as a group, discuss the clue and, based on the clue, manipulate the information cards. Tell students they need to listen carefully to each of the clues.
- The problem is solved when students have read out all the clues (at least once) and are satisfied that the information is organised in the correct order.

A few tips:

- If some students have reading difficulties, pair them with another student who reads well and they can work together jointly on their clues.
- Some students may be tempted to take over and solve the problem themselves. This will leave the other students unengaged and not understanding how the problem was solved. This defeats the whole purpose of the problem solving activity so it's important to make sure all students are involved in reading clues and manipulating the information pieces.

After each group has solved the problem:

- check that each group has the same answer
- spend a few minutes discussing the data and how they went about solving the problem. This could also include discussion about working together and percentages.

Student roles and responsibilities in relation to the activity

Listen to each other and share in solving the problem.

Level of teacher support

Preparation of the materials.

Ensure all students are able to participate in the activity and that it is not dominated by one person in the group.

Extension activities

There is an extension activity for the cooperative logic problem in this activity. It asks students to match the causes of the injuries to the list of the most common injuries.

You will find similar activities for the construction, retail and manufacturing industries on the Safe-T1 website – www.safe-t1.net.au

Resource requirements

Activity sheet	Activity sheet: Young hospitality workers cooperative logic problem
Published material	You may like to provide students with a copy of the <i>Injury hotspots</i> poster / flyer. These <i>Injury hotspots</i> can be accessed at www.worksafe.vic.gov.au/hotspots The <i>Injury hotspots</i> for young workers can also be accessed on the CD Rom, <i>Young Workers: It doesn't hurt to speak up</i> .
Other	Scissors Envelopes or small plastic clip top bags

Assessment

This cooperative logic problem is a learning activity.

VCAL Unit and level

This activity supports the learning outcomes indicated in the table below.

	Foundation	Intermediate	Senior
Work Related Skills 1	Activity may be used to introduce and reinforce OH&S.		
Work Related Skills 2	Activity may be used to introduce and reinforce OH&S.		
Reading and Writing			
Numeracy		LO 6	
Oral Communication	LO 4	LO 4	LO 4
Personal Development Skills 1	LO 2 & 5	The activity can be used to introduce and reinforce problem solving and team work.	
Personal Development Skills 2	LO 4	The activity can be used to introduce and reinforce problem solving and team work.	

Young hospitality workers cooperative logic problem



Problem



Young hospitality workers

Match the percentage against the common injuries that young workers in the hospitality industry receive.

Information to solve problem



5%	Leg
5%	Psychological
6%	Arm
7%	Knees
11%	Forearm / wrist
16%	Back
35%	Hand and fingers

Clues



Just over 1/3 of injuries are to hands and fingers.
There are more back injuries than injuries to forearms and wrists.
Psychological injuries and injuries to legs are the same.
Cutting and preparing food or working with glassware (eg. cleaning or stacking glasses, clearing broken glass) are some of the most common causes of hand and finger injuries such as wounds, cuts and amputations.
Young workers have more injuries to their backs than to their arms.
Among young workers there are less injuries to arms than to knees.
There is 4% more injuries to forearms and wrists than there are to knees.

Extension activity

Now match the cause of the injury to the list.



Burns from hot water, hot oil and hot grills. Wounds, lacerations and amputations from broken glasses, knives and cutlery. Fractures and muscle strain from falls, trips and slips.
Work related stress or anxiety from physical and mental harassment, sexual harassment, bullying and work pressure.
Traumatic strains and muscle tears from falls, trips and slips while working in wet & oily areas. Muscle strains from heavy lifting (e.g. food preparation appliances, glassware, trolleys).
Traumatic strains and muscle injury from heavy lifting or slips, trips and falls in oily or wet areas.
Fractures from falls, trips and slips. Muscle strain from lifting heavy objects (e.g. glassware, crockery, cooking utensils) and repetitive work. Wounds, amputations from using knives and cutlery. Burns from hot oil and ovens.
Muscle strain from lifting heavy objects (e.g. buckets, rubbish bags, heavy trays and moving tables), or from falls in wet and oily areas, congested areas, or in stair ways.
Wounds, lacerations and amputations while cutting and preparing food, or working with glassware (e.g. cleaning or stacking glasses, clearing broken glass). Fractures from falls in wet or oily areas and burns from hot water or chemicals.