

## SECTION 3

# ALCOHOL AND ITS EFFECTS (PHYSICAL AND SOCIAL)

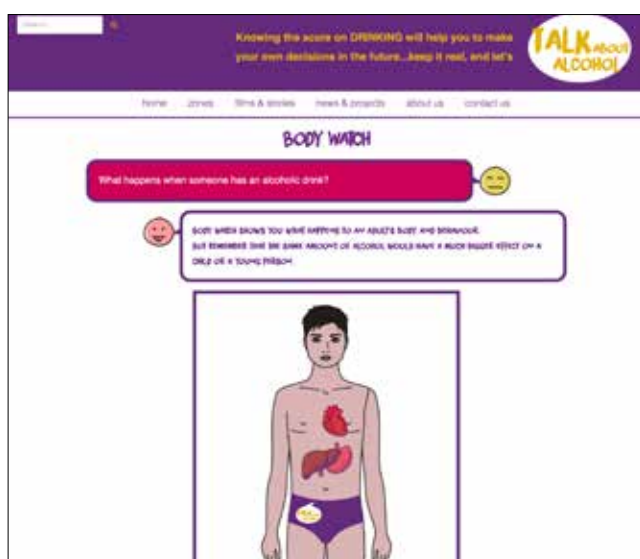
In this section you will find a blank worksheet for students to fill in their ideas about alcohol's effect on different parts of the body, plus the answer sheet for you to work through with them.

If you have internet access, there is an interactive body that pupils can scroll over and find out the answers in the **body zone** of our Online Learning Zone, [talkaboutalcohol.com](http://talkaboutalcohol.com)

You will also find lesson plans on:

- o The short-term effects of alcohol on the body
- o What happens to alcohol in the body
- o The long-term effects of alcohol in the body
- o You, friends and strangers
- o A series of lesson plans built around BBC films 'Just a few drinks'
- o Alcohol and the community

You may wish to use some of the film clips on the Alcohol Education Trust website. As well as the four 'Just A few drinks' BBC films on [our youtube channel](http://ouryoutubechannel). We also suggest that you use the UK government public information films about binge drinking 'You wouldn't start an evening like this' (there are 2 versions, one featuring a boy and the other a girl). These are all available at [alcoholeducationtrust.org/teacher-area/effects-physical-and-social/](http://alcoholeducationtrust.org/teacher-area/effects-physical-and-social/).



Interactive Body on [talkaboutalcohol.com](http://talkaboutalcohol.com)



Just A Few Drinks activity on [talkaboutalcohol.com](http://talkaboutalcohol.com)

# MODEL LESSON PLAN 3

## ALCOHOL AND ITS EFFECTS: PHYSICAL AND SOCIAL



This selection of activities is important to help students to understand the effect alcohol has on the body, including the short term and long term physical effects and the social implications. It also explores the consequences of too much alcohol and how to make more responsible decisions. Using film clips and the interactive learning zone students will be able to discuss the possibilities of different outcomes.

*The PowerPoint offers the facilitator a choice of activities in this lesson. Slides/activities can be taken out of the PowerPoint when the activities have been selected.*

**AGE RANGE: 12-14**

**LESSON LENGTH: 50 minutes**



[alcoholeducationtrust.org/pilot\\_lp3\\_alcohol\\_and\\_effects\\_final/](http://alcoholeducationtrust.org/pilot_lp3_alcohol_and_effects_final/)

### LEARNING OBJECTIVES:

- To learn about how alcohol affects the body.
- To explore the consequences of drinking to excess for both the drinker and others around them.

### INTENDED LEARNING OUTCOMES:

Students will be able to

- Explain the short and long-term effects of alcohol on bodily functions.
- Explain potential consequences of drinking to excess for both the drinker and others around them.
- Explain the responsibilities people have towards others when they choose to drink.

### PREPARATION:

See [Getting started notes](#), [Facts and figures](#) and [Commonly asked questions](#).

Look at instances in the lesson plan that offer options for alternative activities and select the ones that are most appropriate for the age and abilities of your class.

If you are choosing to use the 'Just a few drinks' film:

ensure that you can access the film clip either from the USB or online (see "resources referenced within the PowerPoint").

Make sure you have adobe flash player loaded to be able to watch the film via the link.

Before the lesson, decide at which point you want to pause the film in order to give the pupils the opportunity to present their thoughts.

### RESOURCES:

For this lesson you will need:

- Details of where students can go for support for alcohol-related concerns both within school and locally.
- An empty box for students to leave confidential questions in (the 'ask it basket') see 'Getting Started' chapter.
- For the 4 hoop activity, you will need 4 hoops and the statements written out in them (alcohol is a depressant, alcohol is a stimulant etc. See PowerPoint).
- Internet for the students to access the body zone of [talkaboutalcohol.com](http://talkaboutalcohol.com). (If you don't have internet access, prior to the lesson, create print outs with screenshots of each part of the body and the detailed information for students to work from).
- Pens
- Blank versions of the [body worksheet](#) for students to fill in or draw a body on a flip chart (with heart and liver etc.).
- Copies of the completed body sheet - either the [full version](#) or the more [simple version](#).
- If you choose to do the consequences activity, print out the consequences - number of drinks sheet and the consequences grid. It is also great to have actual empty cans/drinks to represent drinks – from attractive looking soft drinks to a messy group of empties representing 6+ drinks.
- Printed or photocopied copies of 'You, friends and strangers' worksheet for students to complete in the small group activity.

**RESOURCES REFERENCED WITHIN THE POWERPOINT:**

Talk About Alcohol Interactive body (Accessed via the Body Zone)

[talkaboutalcohol.com/interactive-body](http://talkaboutalcohol.com/interactive-body)

**Body worksheets**

Blank version

[alcoholeducationtrust.org/wp-content/uploads/2014/11/bodybws.pdf](http://alcoholeducationtrust.org/wp-content/uploads/2014/11/bodybws.pdf)

Completed detailed version

[alcoholeducationtrust.org/wp-content/uploads/2014/11/bodyfws.pdf](http://alcoholeducationtrust.org/wp-content/uploads/2014/11/bodyfws.pdf)

Simple version

[alcoholeducationtrust.org/wp-content/uploads/2018/04/body\\_SEN.pdf](http://alcoholeducationtrust.org/wp-content/uploads/2018/04/body_SEN.pdf)

**Anna – film clip and lesson plan**

The film clip can be played from the Talk About Alcohol resources USB included in our full resource pack or via

[youtube.com/watch?v=8QHWVJMx9MY](https://www.youtube.com/watch?v=8QHWVJMx9MY)

[alcoholeducationtrust.org/wp-content/uploads/2014/11/Anna-LPI.pdf](http://alcoholeducationtrust.org/wp-content/uploads/2014/11/Anna-LPI.pdf)

**Consequences**

Number of drinks sheet

[alcoholeducationtrust.org/wp-content/uploads/2015/08/Number-of-drinks-sheet.pdf](http://alcoholeducationtrust.org/wp-content/uploads/2015/08/Number-of-drinks-sheet.pdf)

**Consequences cards**

[alcoholeducationtrust.org/wp-content/uploads/2015/08/grid.pdf](http://alcoholeducationtrust.org/wp-content/uploads/2015/08/grid.pdf)

Match the numbers game on TAA (Accessed via the Challenge Zone)

[talkaboutalcohol.com/match-numbers/](http://talkaboutalcohol.com/match-numbers/)

**You, friends and strangers worksheet**

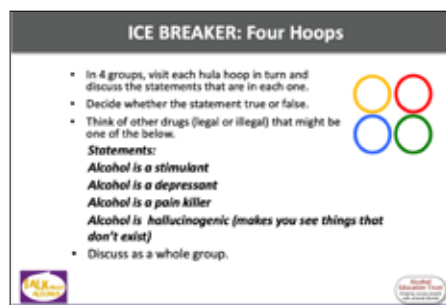
[alcoholeducationtrust.org/wp-content/uploads/2014/11/You-friends-and-strangers.pdf](http://alcoholeducationtrust.org/wp-content/uploads/2014/11/You-friends-and-strangers.pdf)

**Want to learn more**

[talkaboutalcohol.com/body-zone-want-to-learn-more/](http://talkaboutalcohol.com/body-zone-want-to-learn-more/)

**ICEBREAKER ACTIVITY: (5 mins)**

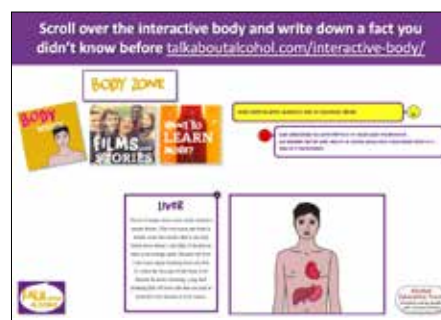
**Four hoops**



This activity allows students to discuss misconceptions and build knowledge in an exploratory way. The learning outcome of the activity is for students to realise that alcohol is a legal drug and is a depressant. See further information in the PowerPoint notes.

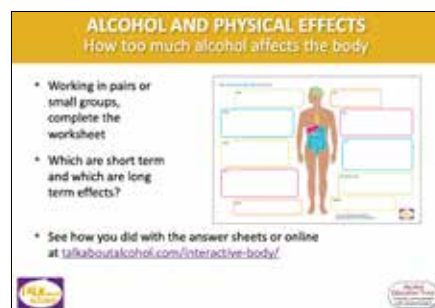
If necessary, replace the questions on the slide with your own questions. Alternative statements could be different types of drinks and the number of units in them or different laws related to the sale and consumption of alcohol. See the guidance on p16.

**ACTIVITY 1 - ALCOHOL AND THE PHYSICAL EFFECTS OF ALCOHOL: (15 mins)**



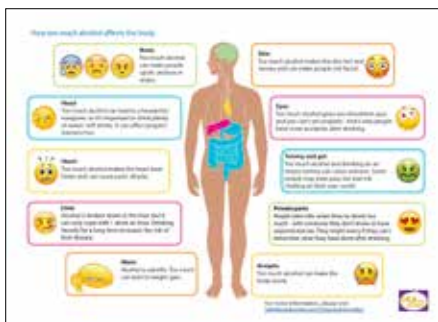
**The Body Zone**

Using either the Body Zone of the Interactive Learning Zone ([talkaboutalcohol.com](http://talkaboutalcohol.com)), or the screenshots prepared earlier, allow students to explore what facts they already know and those they don't about alcohol and health.



**How too much alcohol affects the body**

- Handout the blank version of 'How too much alcohol affects the body'
- Students can work in pairs or small groups to complete the sheet, thinking about the short term and long term effects. They could use the interactive body to help them complete the sheet.
- Allow students to compare their output with one of the chosen completed sheet and encourage them to update their own version in a different colour pen to finish and add refinements.



**ALCOHOL AND PHYSICAL EFFECTS**  
What happens to alcohol in the body short term?

- Most of the alcohol in our body is broken down by the liver (90%), but it can only metabolise one unit an hour.
- If someone drinks quickly or heavily, too much alcohol accumulates in their blood stream and organs, it also rushes to their brain and affects signals to their body.
- A little alcohol can make someone feel relaxed and happy, but this will change as they drink more.
- Teenagers are far more likely to hurt themselves or someone else after drinking.

**ALCOHOL AND PHYSICAL EFFECTS**  
What happens to long term health if someone regularly drinks a lot of alcohol?

- Increased risk of becoming addicted to alcohol
- Increased risk of:
  - Liver disease
  - Some cancers
  - Heart problems
  - Adversely affected brain function and mental state.

**ALCOHOL AND PHYSICAL EFFECTS**  
When should adults not drink at all?

- When planning to drive
- When working at heights, with electrical equipment or in other positions of responsibility
- While on certain medications – it's always best to check with a doctor if unsure
- When pregnant
- Before or after energetic sport (alcohol is dehydrating)

**What happens to alcohol in the body, short term and long term? PowerPoint slides**

Proceed with the PowerPoint presentation covering what happens to alcohol in the body, short term and long term, and highlight the circumstances in which adults should not drink at all using the presenter notes.

**ALCOHOL AND PHYSICAL EFFECTS**  
What happens to alcohol in the body?

- When someone swallows alcohol, it goes into their tummy. It is then absorbed into the bloodstream.
- How quickly alcohol travels into the blood stream depends on:
  - The amount of alcohol and type of drink
  - How quickly the person is drinking
  - Whether they have a full or empty stomach
  - Body size and weight
  - Whether they're male or female
- The amount of alcohol in someone's blood stream is measured as 'blood alcohol concentration' (BAC). This is what the police measure to see if someone has drunk alcohol and driven a car.



## ACTIVITY 2 - THE CONSEQUENCES OF TOO MUCH ALCOHOL (20 minutes)

*OPTION - Choose either A) the "Just a Few Drinks" film clip and discussion or B) the Match numbers activity*

A) "Just a Few Drinks" film clip, and discussion (default)



Play the film clip up to 4:05 and then ask one half of the class to anticipate how the situation could end well, depending on the choices Anna makes. Ask the rest of the class to think about what less positive outcomes could happen. Complete the film clip\* .



As a class, go through the questions on the slide. Highlight in the discussion how being resilient and resisting peer pressure might affect the outcome. There are prompts on the lesson plan listed in the resources section. This is also an opportunity to discuss the implications of posting unsuitable and embarrassing things on social media.

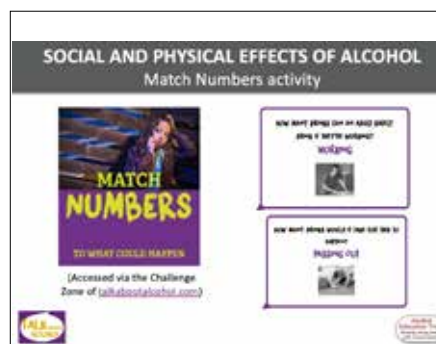
In groups, plan an alternative scenario where Anna uses strategies for resist peer pressure and enjoys herself without getting drunk.

Each group can act or read out the scenario to the class.

\* An alternative would be to split the class in half before watching the full film clip. Ask one half to think about and write down what else could have happened, and how things could have been worse. Ask the rest of the class to think about and write down alternative decisions Anna could have made during the evening.

B) Match numbers activity

This activity could be substituted if the story line in the film clip (Option A) is considered be unsuitable for the class. e.g., if they are a very young class and they are not likely to relate to it.



*Choose either option i) Interactive Learning Zone version 'Match Numbers' or option ii) the class-based activity. The interactive version is likely to take less time and would provide and opportunity to dedicate more time to the extension activity.*

i) Class based activity (default)



As a class, match each consequence to the number of drinks. Follow the questions on the slide and the detailed explanation in the presenter notes. There are no right or wrong answers, but students should think about how more alcohol would affect outcomes profoundly. As an alternative to the grid, you can use empty bottles and cans to represent the number of units - you can make non alcoholic alternatives look inviting and 6+ drinks look crushed and messy.

ii) Interactive Learning Zone version 'Match Numbers'

This short activity involves just 5 questions but makes students think about what is an appropriate amount to drink to have an enjoyable time socialising and how much would lead to problems.



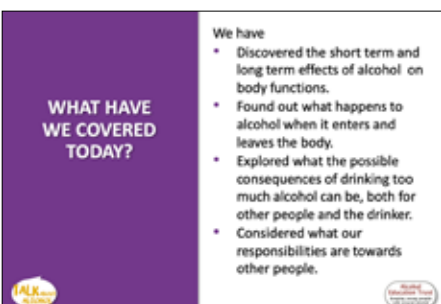
**EXTENSION ACTIVITY: YOU FRIENDS AND STRANGERS (optional)**



If you have time, Activity 1 and 2 of the worksheet "You, friends and stranger" can be completed in small groups.

Use the questions on the slide to explore how harmful drinking affects more than just the drinker.

**PLENARY: (5 mins)**



Briefly recap what has been covered in the lesson based on the Learning Objectives.

Signpost students to staff in school and external agencies where they can go for additional support around alcohol issues.

Promote [talkaboutalcohol.com](http://talkaboutalcohol.com) as a source of further information, resources and activities.

**ASSESSMENT FOR LEARNING: (5 mins)**



Ask students to:

- Explain 2 short term and 2 long term effects of too much alcohol on the body?
- State which organ breaks down alcohol in the body
- Name 2 possible risky consequences of drinking too much alcohol.
- Name 2 things you could do to help someone who has drunk too much alcohol.

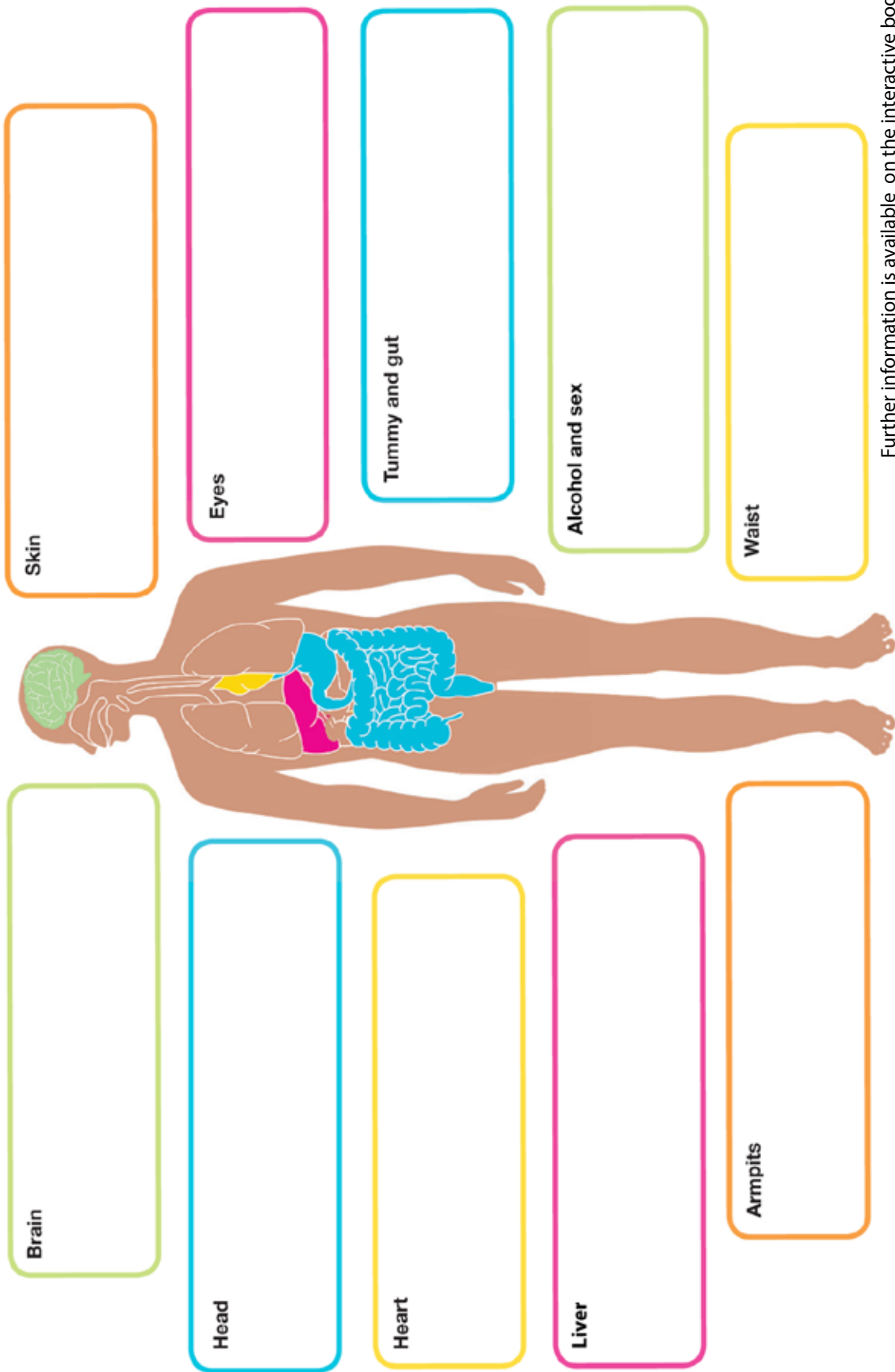
**EXTENDED PROJECTS:**



Go to the Interactive Learning Zone [talkaboutalcohol.com](http://talkaboutalcohol.com) - Complete the 'Want to Learn More' activity in the Body Zone.

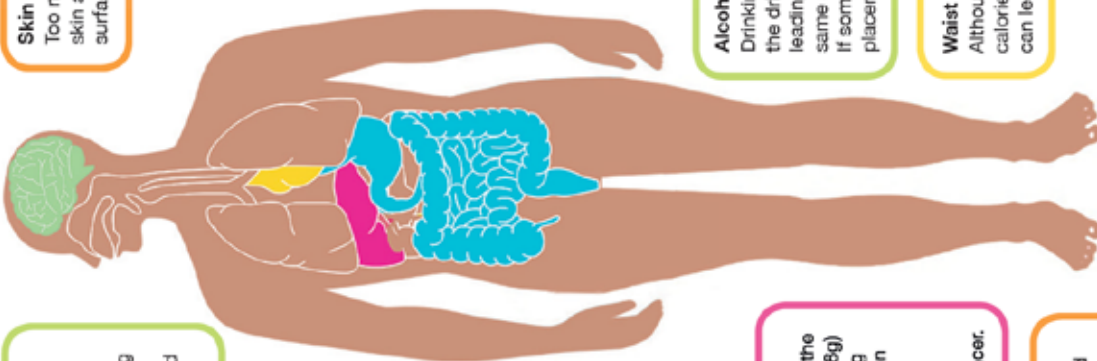
Make a poster showing the physical and social effects of drinking too much alcohol or design an online campaign.

# HOW TOO MUCH ALCOHOL AFFECTS THE BODY



Further information is available on the interactive body at [talkaboutalcohol.com/interactive-body/](http://talkaboutalcohol.com/interactive-body/)

## HOW TOO MUCH ALCOHOL AFFECTS THE BODY



### Brain

Too much alcohol acts as a depressant on the brain, the control centre of the body. It can make the drinker feel happy for a little while, but any improvement in mood is temporary and people usually feel worse after drinking too much. Alcohol can depress the central nervous system leading to slurred speech, unsteady movement, disturbed perceptions, and an inability to react quickly. Long-term drinking can kill off brain cells and lead to memory loss and mental problems as well as alcohol dependency.

### Head

After a few drinks, behaviour changes. The person drinking may feel more relaxed, emotional and uninhibited, but they also lose control. Their judgement is affected too. They might make a fool of themselves, get into trouble, cause an accident or do something they regret later. Every year, 18-22% of accidental deaths are alcohol-related.

Alcohol draws water out of the brain. So, as the body starts to break down alcohol, the drinker may feel dizzy and be in for a throbbing headache if they drink too much.

### Heart

Drinking large quantities of alcohol over a short period can cause irregular heart beats and shortness of breath, leading to panic attacks and illness. Moderate drinking, that is 1 or 2 units a day, may offer some protection from heart disease in men over 40 and in post-menopausal women, but it is not advised that an adult takes up drinking if they don't already. It is more important to be physically active, eat a healthy, balanced diet and to avoid smoking.

### Liver

The liver breaks down most of the alcohol a person drinks (the rest leaves the body in breath, urine and sweat). But it can only break down about 1 unit (8g) of alcohol an hour in an average adult. More than that, and it stops working properly. If the body can't cope with all the alcohol in its system, the person falls into an alcoholic coma (which can be fatal).

Long-term heavy drinking kills off liver cells, leading to a disease called cirrhosis. It's a 'silent' disease – symptoms may not be noticeable until the disease is advanced. Long-term excessive drinking can also lead to liver cancer.

### Armpits

Excess alcohol is also excreted as smelly body odour and bad breath - not great for attracting partners.

### Skin

Too much alcohol dehydrates the body, which is bad news for the skin and complexion. It also dilates the blood vessels under the surface of the skin, leading to ugly veins on the nose and cheeks.

### Eyes

Too much alcohol dilates blood vessels in the eyes, so they can look red and bloodshot. It also affects the signals sent from the eyes to the brain - vision becomes blurred, and distances and speeds get harder to judge. Many road accidents involve drivers or pedestrians who have alcohol in their blood.

Too much alcohol also suppresses REM (Rapid Eye Movement) sleep. It's the most important phase of sleep so drinking heavily can ruin the chance of a good night's rest.

### Gut

Alcohol is absorbed from the stomach into the bloodstream. The body's ability to process alcohol depends on various things, like age, weight and sex. Alcohol breaks down in the body at a rate of roughly one unit per hour and therefore drinking more than one unit of alcohol an hour will build up the blood alcohol concentration (BAC) and it may be many hours before it is safe to drive. After a night of heavy drinking a person risks being over the drink drive limit the next morning. Learn more at [morning-after.org.uk](http://morning-after.org.uk)

### Alcohol and sex

Drinking too much alcohol can affect performance in the bedroom because the drinker is not fully in control of their body. Alcohol affects judgement too, leading to unsafe sex. 40% of 16-24 year-old girls and 31% of boys of the same age group reported having had unprotected sex after binge drinking. If someone is pregnant, they shouldn't drink because alcohol crosses the placenta directly to the baby and can cause Foetal Alcohol Spectrum Disorder.

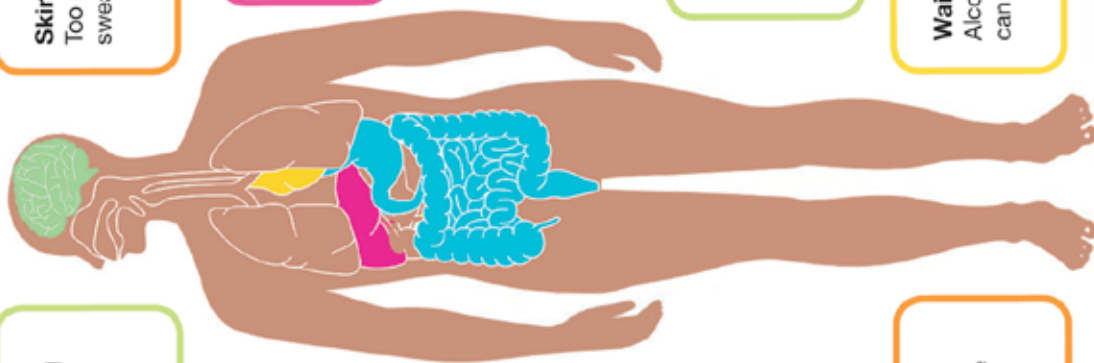
### Waist

Although alcohol is fat free, it is very calorific (only fat contains more calories per gram) and increases your appetite, so excess drinking can lead to weight gain.

Further information is available on the interactive body at [talkaboutalcohol.com/interactive-body/](http://talkaboutalcohol.com/interactive-body/)



# HOW TOO MUCH ALCOHOL AFFECTS THE BODY



**Brain**  
Too much alcohol can make people upset, anxious or angry

**Head**  
Too much alcohol can lead to a headache/hangover, so it's important to drink plenty of water/ soft drinks. It can affect people's memory too

**Heart**  
Too much alcohol makes the heart beat faster and can cause panic attacks

**Liver**  
Alcohol is broken down in the liver, but it can only cope with 1 drink an hour. Drinking heavily for a long time increases the risk of liver disease

**Armpits**  
Too much alcohol can make the body sweat

**Skin**  
Too much alcohol makes the skin hot and sweaty and can make people red-faced

**Eyes**  
Too much alcohol gives you bloodshot eyes and you can't see properly - that's why people have more accidents after drinking

**Tummy and gut**  
Too much alcohol and drinking on an empty tummy can cause sickness. Some people may even pass out and risk choking on their own vomit

**Alcohol and sex**  
People take risks when they've drunk too much - with someone they don't know or have unprotected sex. They might worry if they can't remember what they have done after drinking

**Waist**  
Alcohol is calorific - too much can lead to weight gain

For more information, please visit [talkaboutalcohol.com/interactive-body/](http://talkaboutalcohol.com/interactive-body/)

**TEACHER NOTES****Short-term effects of alcohol on the body  
(Science/environmental studies 11-16  
worksheet 3)**

Target age group: 11 - 16 year-olds

Structure: 1 written lesson

ICT opportunity: Internet research

Preparation: Download/photocopy [The short-term effects of alcohol on the body](#) sheet

Internet access to [talkaboutalcohol.com/interactive-body/](http://talkaboutalcohol.com/interactive-body/)

Objectives

- o To show that the abuse of alcohol affects a person's health.
- o To show the short-term effects of alcohol on body functions.

Notes

Internet research could be done at home.

**What happens to alcohol in the body?  
(Science/environmental studies 11 - 16  
worksheet 2)**

Target age group: 11 - 16 year-olds

Structure: 1 written lesson

ICT opportunity: Internet research

Preparation: Download/photocopy [What happens to alcohol in the body](#) sheet (at least 1 between 2)

Internet access to [talkaboutalcohol.com/interactive-body/](http://talkaboutalcohol.com/interactive-body/)

Objectives

- o To show what happens to alcohol when it enters the body.
- o To show how alcohol leaves the body.

Notes

Internet research could be done at home.

**Long-term effects of alcohol on the body  
(Science/environmental studies 11 - 16  
worksheet 6)**

Target age group: 11 - 16 year-olds

Structure: 1 written lesson

ICT opportunity: Internet research

Preparation: Download/photocopy [The long-term effects of alcohol](#) sheet/ [How too much alcohol affects the body](#) sheet.

Internet access to [talkaboutalcohol.com/interactive-body/](http://talkaboutalcohol.com/interactive-body/)

Objectives

- o To show that the abuse of alcohol affects a person's health.
- o To show the long-term effects of alcohol on body functions.

Notes

Internet research could be done at home.

**You, friends and strangers  
(PSHE 11 - 14 worksheet 3)**

Target age group: 11 - 14 year-olds

Structure: 1 or 2 lessons depending on student ability

Preparation: Download/photocopy [You, friends and strangers](#) sheet.

Objectives

- o To highlight the likely effects of alcohol on young people, physically and behaviourally.
- o To highlight the possible consequences of drinking.
- o To understand that drinking alcohol, especially too much, can easily have consequences for other people as well as the drinker.
- o To help young people consider their responsibility towards others.

N.B. A series of short 4 films, BBC2 Learning zone Just a few drinks film clips, can be used as part of Alcohol and it's effects teaching. See [pages 95-99](#).

### Alcohol and the community (PSHE 14 - 16 worksheet 7)

Target age group: 14 - 16 year-olds

Structure: 1 to 3 lessons

Preparation: Download /photocopy [Alcohol and the community - What is the impact?](#) sheet.

Access to the Internet for research if possible.

#### Objectives

- o To consider the contribution of a product to a market economy from different angles, including the effects on individuals as well as the wider community.
- o To recognise the difference between social, 'sensible' drinking and excessive 'drinking to get drunk'.
- o To distinguish between fact and opinion
- o To form opinions through reasoned argument and debate.
- o To take an informed, objective viewpoint on what constitutes sensible drinking.

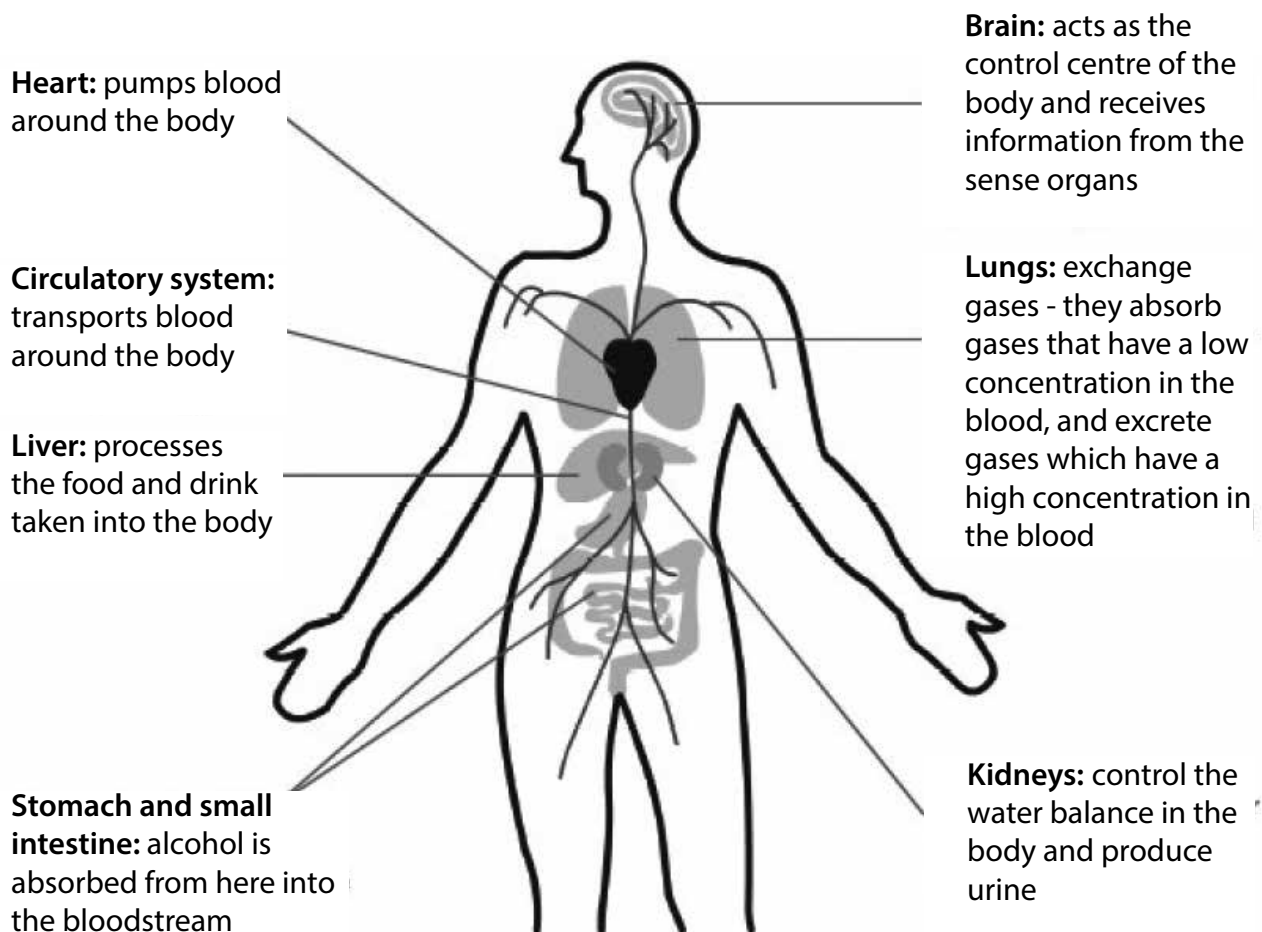
#### All tasks

Direct students to our Online Learning Zone [talkaboutalcohol.com](http://talkaboutalcohol.com), especially the Fact Zone.

**SHORT-TERM EFFECTS OF ALCOHOL ON THE BODY****SCIENCE/ ENVIRONMENTAL STUDIES 11 - 16 WORKSHEET 3**

When alcohol is swallowed, how does it affect the body in the short term? The effect depends on the person - their gender, size and weight, what they've been drinking and whether they've eaten anything first.

Because it depends on weight and size, the person's age is important too. The same amount of alcohol will have a much greater effect on the body of a child or young person than on an adult, because their bodies are still growing and developing.

**ACTIVITY ONE**



**SHORT-TERM EFFECTS OF ALCOHOL ON THE BODY****SCIENCE/ ENVIRONMENTAL STUDIES 11 - 16 WORKSHEET 3**

Draw a line to connect the parts of the body below with short term effects experienced after someone has drunk alcohol.

	Slurred speech
	Difficulty standing up or walking
<b>Brain</b>	Looking flushed
<b>Kidneys</b>	Feeling sick
<b>Liver</b>	Needing to urinate more (less anti-diuretic hormone secreted)
<b>Heart</b>	Loss of self-control
<b>Lungs</b>	Slow reactions
<b>Stomach</b>	Dehydration leading to a 'hangover'
	Blurred vision

**ACTIVITY TWO**

1. After drinking a lot of alcohol in the evening, can someone avoid a hangover by drinking a glass of water before they go to bed? Give reasons for your answer.
2. Can someone get rid of the effects of alcohol quickly by drinking a cup of coffee? Give reasons for your answer.
3. How would having a meal before alcohol affect the concentration of alcohol in someone's blood? Give reasons for your answer.
4. Why is cirrhosis of the liver called a 'silent disease'?

There is information to help you at [talkaboutalcohol.com/interactive-body/](http://talkaboutalcohol.com/interactive-body/)

**WHAT HAPPENS TO ALCOHOL IN THE BODY****SCIENCE/ ENVIRONMENTAL STUDIES 11 - 16 WORKSHEET 2****How alcohol enters the body**

When someone swallows alcohol, it travels to the stomach and small intestine. The alcohol is absorbed through the lining of the stomach and intestine and passes into the bloodstream. It circulates to other parts of the body including the brain.

How quickly the alcohol is absorbed, and how much goes into the blood, depends on a number of factors including:

- the amount and type of alcohol in the drink
- how quickly the person is drinking
- whether they have a full or empty stomach (food slows down the absorption of alcohol into the bloodstream)
- body size and weight (the same amount of alcohol will have a larger effect on a smaller person)
- male or female (alcohol is distributed around the body in water - the female body has more body fat and less water than the male body so alcohol concentrations tend to be higher in females).

The amount of alcohol in someone's blood is measured by their BAC (blood alcohol concentration). BAC is usually measured as the number of milligrams (mg) of alcohol in 100 millilitres (ml) of blood.

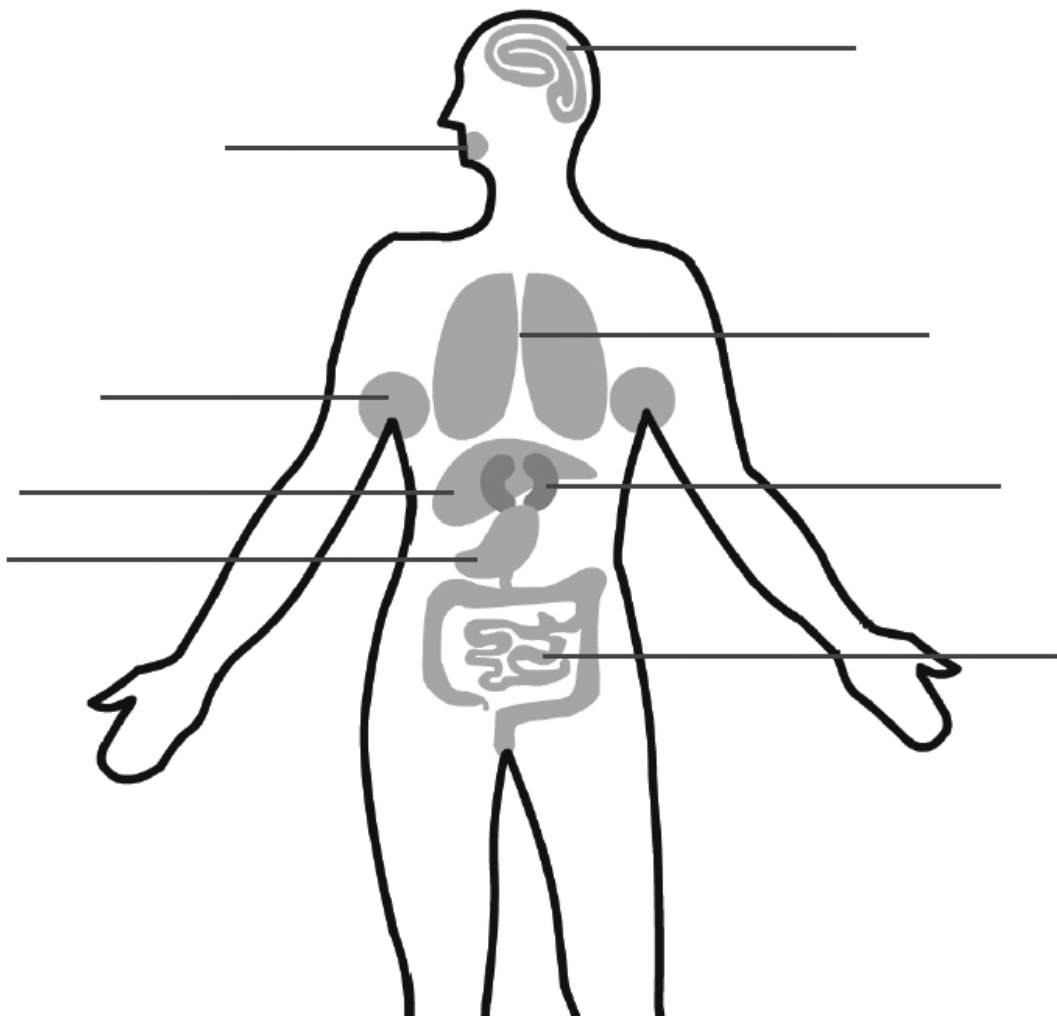
Most of the alcohol a person drinks is metabolised (broken down) by the liver. It can break down about 8g of alcohol an hour in an average adult - that's around 1 unit an hour. Because the liver is the main organ breaking down alcohol, it's also one of the first parts of the body to be harmed by heavy drinking. Long term drinking kills off liver cells, leading to a disease called 'cirrhosis'. Long term excessive drinking can also lead to liver cancer.

**How alcohol leaves the body**

- Liver: about 90% of the alcohol is broken down by the liver
- Kidneys: 2-4% leaves the body in urine made by the kidneys
- Sweat glands: 2-6% leaves in perspiration from sweat glands
- Lungs: 2-4% is expired in the breath
- Mouth: 1-2% leaves in saliva

**WHAT HAPPENS TO ALCOHOL IN THE BODY****SCIENCE/ ENVIRONMENTAL STUDIES 11 - 16 WORKSHEET 2****ACTIVITY ONE**

1. On the diagram of the adult human body, add a label to the two areas of the body from which alcohol is absorbed after swallowing. The lines from each area have already been added for you.
2. Alcohol is carried in the bloodstream to the main organs of the body. Label the organ which is affected by alcohol leading to blurry vision and lack of coordination.
3. Label the organ which metabolises most of the alcohol in the body.
4. Around 2-4% of alcohol leaves the body in urine. Label the organs which make urine.
5. A small percentage of alcohol also leaves the body in sweat, breath and saliva. Label the three areas of the body involved.



**LONG TERM EFFECTS OF ALCOHOL ON THE BODY**

**SCIENCE/ ENVIRONMENTAL STUDIES 11 - 16 WORKSHEET 6**

Drinking alcohol has short term effects on the body (Worksheet 3). However, drinking excessive alcohol over a longer period of time can have serious effects on a person's health.

**ACTIVITY ONE**

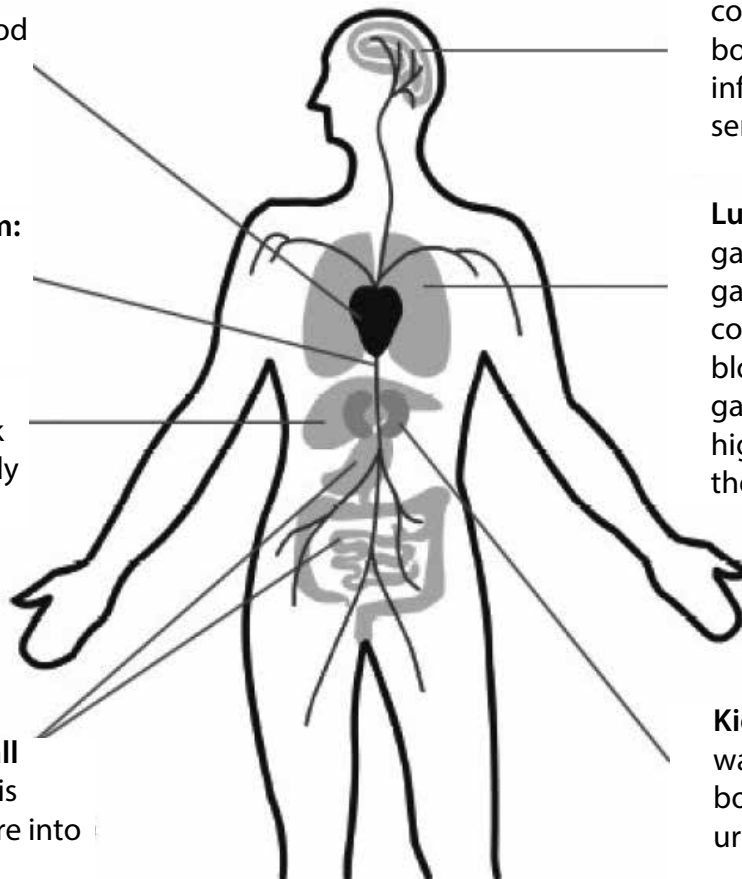
Look at the diagram below:

**Heart:** pumps blood around the body

**Circulatory system:** transports blood around the body

**Liver:** processes the food and drink taken into the body

**Stomach and small intestine:** alcohol is absorbed from here into the bloodstream



**Brain:** acts as the control centre of the body and receives information from the sense organs

**Lungs:** exchange gases - they absorb gases that have a low concentration in the blood, and excrete gases which have a high concentration in the blood

**Kidneys:** control the water balance in the body and produce urine



**LONG TERM EFFECTS OF ALCOHOL ON THE BODY****SCIENCE/ ENVIRONMENTAL STUDIES 11 - 16 WORKSHEET 6**

Draw a line to connect the parts of the body with the long-term effects of drinking heavily.

There is information to help you at [talkaboutalcohol.com/interactive-body/](http://talkaboutalcohol.com/interactive-body/)

**Brain****Liver****Heart****Circulatory system****Lungs****Stomach and small intestine****Kidneys**

Cirrhosis and cancer

Ulcers

Depression and mood swings

Urinary infections

Memory loss

Bloodshot eyes

High blood pressure

Mental illness

Flushed complexion

Rapid pulse

Vomiting and diarrhoea

Dehydration

**ACTIVITY TWO**

1. How can alcohol affect someone's facial appearance?
2. Why can drinking alcohol lead to weight gain?
3. Why is the liver particularly at risk from long-term drinking?
4. Why should pregnant women avoid alcohol?

**YOU, FRIENDS AND STRANGERS****PSHE 11-14 WORKSHEET 3****ACTIVITY ONE****Cause and effect**

Here are some common effects of drinking too much alcohol, especially for young people. In the grid, tick the boxes to say to who each one may affect.

	<b>Does this affect the drinker?</b>	<b>Does this affect the drinker's friends?</b>	<b>Does this affect other people as well?</b>
<b>vomiting</b>			
<b>blurred vision</b>			
<b>can't stand or walk straight</b>			
<b>being louder than normal</b>			
<b>saying things you wouldn't normally say</b>			
<b>causing an accident</b>			
<b>arguing and fighting</b>			
<b>making a fool of yourself</b>			
<b>ending up in hospital</b>			
<b>having a hangover</b>			
<b>unable to go to school the next day, or poor school performance</b>			

In small groups, compare your answers. Do you agree with each other? If not, discuss your reasons for the choices you've made.

In general, does getting drunk affect just the drinker or other people?

**YOU, FRIENDS AND STRANGERS****PSHE 11-14 WORKSHEET 3****ACTIVITY TWO****Who is the victim?**

Stephen is 15 and was out with three mates in the town. They met up in the shopping centre and had a few drinks and a laugh. Stephen had quite a bit of cash and he drank a few cans of extra-strength cider. He soon became drunk.

It got pretty late and the group was hanging about waiting for the last bus home. Ben started fooling around and teasing Stephen for not being able to handle his alcohol.

The drink had begun to hit Stephen's judgement and he started to get dizzy. He playfully lunged forward and hit Ben in the face... then lost his balance, fell over, hit his head, and lost consciousness.

Ben and the two other friends panicked and tried to wake Stephen up. The two others then ran off, not wanting to get involved. Fortunately an ambulance was driving past and Ben flagged it down. Stephen and Ben were taken to hospital where Stephen recovered, but the hospital staff rang Stephen's parents, as he needed to be picked up from hospital and to be carefully monitored at home in case as he had been concussed.

Stephen's parent's also talked to Ben's parents about the incident when they dropped Ben home as they were sorry that Ben had also been injured and were concerned that the evening could have turned out a lot worse.

Read the case study above. It was not only Stephen who was affected by what happened that night - several people were involved in his 'story'. Do the following activity in groups or as a whole class.

'Hot-seat' some of the other characters in the story to find out what they thought. Choose someone to take on the role of the following:

**Stephen****Ben****Stephen's other two mates****Ambulance crew****Stephen's mum or dad****Ben's mum or dad**

Ask questions to find out what each person felt about the evening's events. What did they do wrong? What did they do right? How might the events of the evening affect their attitude to alcohol?

**ALCOHOL AND THE COMMUNITY - WHAT IS THE IMPACT?****PSHE 14-16 WORKSHEET 7**

In this activity, you will be looking at the impact of alcohol in the community and on individuals, and then holding a debate on the subject in class.

**ACTIVITY ONE****Your community**

Think about your local community and the nearest town or city that you, your friends and family visit regularly. Work with a friend, or in a small group, to discuss and answer these questions.

- Who in your community drinks alcohol?
- When do they drink alcohol?
- Where do they drink alcohol?
- Who do they drink with?
- Who serves them alcohol?

**ACTIVITY TWO****Balancing act**

Now it's time to consider the ways in which alcohol and social drinking can make a positive and/ or negative contribution to your local community and to individuals. Split your group in two, so that part of the group looks at the positive effects, and the other looks at the negative effects. Remember to consider the effects on individuals as well as the community as a whole. Use the ideas box below to help you.

You may want to develop a presentation to show your ideas. You could use Powerpoint or a similar software. Follow the steps below to help you put together your ideas.

Supermarkets	Hospitals	Alcoholism
Off licences	Police	Schools
Restaurants	Local Council	Price
Bars	Lively city centres	Going out for lunch
Drinks industry	Drivers and pedestrians	Fights
Jobs	Agriculture	Celebrating with friends
Transport	Local economy	Glass/bottle manufacturers

**ACTIVITY THREE****Debate**

Now that you have looked at the positive and negative effects of alcohol in a community and on individuals, split the class into two groups: one group should explain the positive and negative effects of alcohol on individuals and the other group should explain the positive and negative effects on the community.

Then have a vote on the following question:

Are the negative effects of alcohol on the community and the individual greater than the positive effects?