

Keeping children safe around trucks

trucks & child safety teachers' guide

PHUMation

Delivering a better future

8 children are killed or seriously injured on our roads everyday

"Even if we can prevent 1 child being killed on the roads by giving these TACS demonstrations, then the whole thing is worth it."

Ned, TACS trainer

Welcome to the Trucks and Child Safety (TACS) Teachers' Pack

TACS is a national road safety programme aimed at raising awareness of large vehicles and their associated dangers among children aged 7 to 11.

Run by the DHL UK Foundation and DHL employees, TACS teaches children how to avoid getting injured or killed by trucks and other large vehicles.

Taking trucks into schools or other nearby open spaces, the programme is delivered via live, interactive on-site demonstrations. These demonstrations are intended to deliver vital road safety messages and information to children. The objectives are to bring home to children the size and weight of large vehicles, and to raise awareness of how little truck drivers can see or hear in their cabs. The demonstrators* talk about potential the dangers of trucks and teach children how to stay safe around them.

This pack is intended to help you get the most out of your TACS demonstration. Full of quizzes, games, information and ideas, it builds on the key messages delivered during a demonstration, enabling you to carry the lessons back into the classroom. It also suggests ways in which you can reinforce the TACS road safety messages and maximise the learning experience for your pupils.



*All TACS demonstrators receive training from the DHL UK Foundation, undergo a Criminal Records Bureau check and display an ID card at all times. Health and safety assessments are also carried out at each demonstration site before a truck arrives.

Key messages

The TACS messages are divided into three areas: **Sight**; **Sound**; and **Safety**.

When discussing **Sight**, TACS demonstrators explain to children how a truck driver's view is restricted. They point out a truck driver's blind spots and make children aware that if they stand in these spots, drivers won't be able to see them.

The **Sound** messages focus on the noise produced by a truck, and on how this noise prevents drivers from hearing what's going on outside.

The **Safety** messages, meanwhile, centre on the size and weight of a truck. Demonstrators explain how a truck's dimensions can make it such a dangerous vehicle, and provide road safety advice to help children avoid getting injured or killed.



General facts

- The size and weight of a truck can make it a very dangerous vehicle. If you are hit or run over by a truck, you could be seriously injured or killed
- Every day, eight children are killed or injured on our roads
- Driving a truck is very different to driving a car. Because of the size of a truck and the noise it makes, truck drivers can't see or hear as much as car drivers can. This means there are certain things you need to know about how to stay safe around trucks and other large vehicles

Key learning outcomes

Following a TACS school visit and demonstration, the definitive learning outcomes and messages children should take away with them are:

- Never stand in a truck driver's blind spot
- If you can't see a driver in his mirrors, he can't see you
- Stay as far away from the kerb as possible
- Never run out in front of a truck and never run into the road after a bike or ball
- Don't think that shouting will make you safe: truck drivers can't hear you from their cabs
- Stay away from the front, sides and backs of all trucks and other large vehicles



- **Blind spots:** truck drivers have blind spots at the front, back, left side and right side of their vehicles. If you stand in a driver's blind spot, he won't be able to see you and could run you over
- **Mirrors:** truck drivers can only see so much in their mirrors. A good rule to remember is: if you can't see a driver in his side mirrors, he can't see you
- **Reversing:** because truck drivers can't see what's directly behind them, trucks give out warnings when they are going backwards (white lights, beeping or voice recording). If you see or hear any of these things, get out of the way

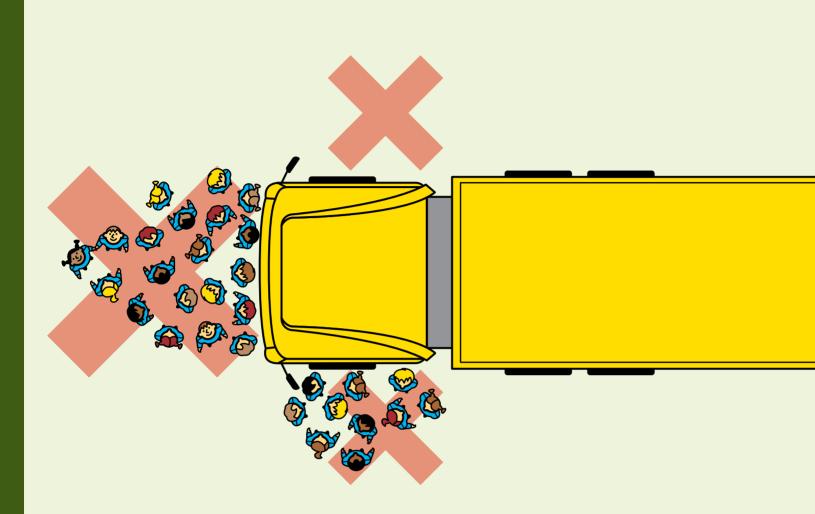


- **Truck noise:** the noise produced by a truck's engine, wheels and the wind means that truck drivers can't hear what's going on outside their cabs
- **Other factors:** truck drivers may also have their radios on and their windows shut, making it even harder for them to hear anything
- You can shout all you like: with all this noise, if you shout at a driver to stop because you or a friend is behind their truck, they won't be able to hear you



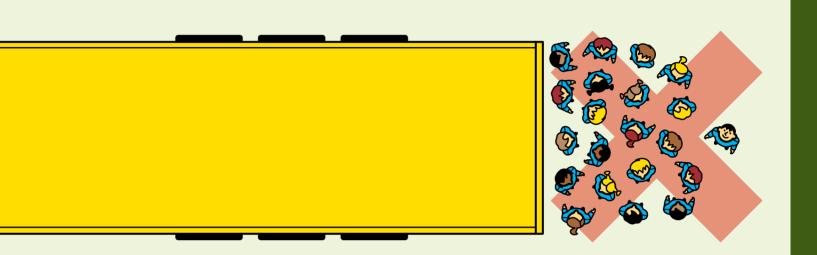
- **Dimensions:** a 44 tonne truck is as long as a whale, as tall as a giraffe and as heavy as 7 elephants
- **Stopping distance:** when it brakes, a fast-moving truck needs to travel almost the length of a football pitch before it can come to a stop
- Stay out of the road: even if your bike or ball goes into the road, don't go running after it a bike or ball can be replaced. You can't
- **Stay away from the kerb:** when a truck turns left at a junction, the driver can't see anything at the left side of the cab. To avoid getting crushed, stay as far away from the kerb as possible
- Keep your distance: never go near the front, sides or back of a truck or any other large vehicle

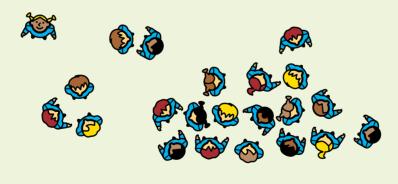
Diagram of a truck



This diagram is intended to convey the size and scale of a truck, and to show a cluster of children in proportion to the vehicle.

The diagram also highlights a truck's 4 main blind spots, at the front, back, left side and right side. The left side is a particularly dangerous spot when a truck is turning left at a junction. Use this diagram to remind children that they should NEVER stand in a truck driver's blind spots, and that they should keep their distance from trucks and other large vehicles at all times.





TACS Sight Quiz



Use this quiz to drive home the key TACS messages around sight and visibility.

- 1. What do you call an area where a driver can't see anything?
- 2. On a truck, where are the driver's main blind spots?
- 3. Where can you stand and not be seen at the front of a truck?
- 4. What don't trucks have at the back that makes it difficult for driver's to see what's behind them?
- 5. Which blind spot can make turning left at a junction so dangerous?

- 6. Fill in the blanks: 'If you can't see a _____ in his mirrors, he can't see __.'
- 7. Why do trucks give out warnings when they are going backwards?
- 8. What's another word for 'going backwards'?
- 9. What warnings can trucks give when they are going backwards, or reversing?
- 10. What should you do if you are behind a truck and you see or hear any of these warnings?

Use the following scenarios to launch a discussion about road safety, sight and visibility:

- "You're walking home from school. You see a large truck parked in the road ahead. As you approach the truck from behind, you see two white lights come on at the back and you hear a loud beeping sound. What does this mean, and what would you do?"
- "You and a group of friends are walking along a pavement. Up ahead you see a truck at a junction about to make a left-hand turn. What would you do? Where would you stand to make sure you don't get crushed as the truck turns? Where would you most definitely not stand?"



TACS Sound Quiz



Use this quiz to drive home the key TACS messages around sound and noise. You could also link to components of the science curriculum on noise-levels, friction and speed.

- 1. What three things create noise when a truck is moving?
- 2. What is noise measured in?
- 3. How many decibels does the engine of a large moving truck produce?
- 4. This level of noise is like sitting in the cab with what?
- 5. Where do truck drivers sit that makes the engine noise even worse?

- 6. How many wheels does a truck have?
- 7. What part of a truck produces most wind noise?
- 8. What can make it even harder for a driver to hear what's going on outside their cab?
- 9. With all this noise, what will happen if you shout at a driver to stop?
- 10. With the engine running and the windows shut, how many children can shout outside a truck and still not be heard?

Use the following scenario to launch a discussion about road safety and sound:

"It's a cold and windy day. You're walking to school and you see a truck coming down the road. As the truck approaches you drop your football and it bounces into the road. You know that you shouldn't run out after it, so you shout at the truck driver to stop. Do you think he will hear you? Do you think he will stop? Do you think he would stop if it was you in the road, and not just a ball?"



TACS Safety Quiz



Use this quiz to drive home the key TACS messages on how to stay safe around trucks. You could also link to components of the science and maths curriculum on weight and measurement. Citizenship and peer pressure messages could also be brought out here, with a focus on being 'truck safe' and 'road responsible'.

- 1. Fill in the blank: 'the size and __ of a truck can make it a very dangerous vehicle'.
- 2. A truck can weigh up to 44 tonnes. That's the weight of how many fullgrown male elephants?
- 3. Elephants can weigh up to 6 tonnes. So, what's the weight in elephants of an 18 tonne truck?
- 4. A 44 tonne truck is about 16 meters long. That's the same length as which sea creature?

- 5. Some trucks are around 3.9 or 4.6 metres tall, which is the same height as which long-necked land animal?
- 6. When it brakes, how far does a fullyloaded, fast-moving truck need to travel before it can come to a stop?
- 7. What would happen if you ran out in front of a truck?
- 8. What should you NEVER do if a bike or ball belonging to you runs out into the road?
- 9. When you are on the pavement, what should you stay as far away from as possible?
- 10. Why is it dangerous to stand on or near the kerb?



Use the following scenarios to launch a discussion about keeping 'truck safe':

"You're riding your new bike along the pavement. Suddenly you hit a loose paving-stone and you fall off. Your bike falls into the road. You look up and see a truck coming your way. Your bike will be crushed if it stays where it is. What would you do?"

"You want to cross a road. The road is clear in front of you, but some way off you can see a truck coming at high speed. Would you cross or would you wait? If you crossed and the truck had to brake, do you think it could stop in time?"

TACS Quiz Answers

Answers to Sight Quiz

- 1. A blind spot
- 2. At the front, back, keft-side and right side
- 3. Directly under the windscreen
- 4. A rear window
- 5. The blind spot at the driver's left side cab door and wheels
- 6. Driver, you
- 7. Because truck drivers can't see what's behind them
- 8. Reversing
- 9. White reverse-lights come on; a loud beeping sound is made, or a recorded voice says: 'This vehicle is reversing'
- 10. Get out of the way

Answers to Sound Quiz

- 1. A truck's engine, wheels and the wind
- 2. Decibels
- 3. Around 70
- 4. A powerful vacuum cleaner or similar
- 5. Right above the engine
- 6. Up to 12
- 7. The trailer
- 8. Radio might be on, windows might be shut
- 9. The driver won't hear you
- 10. A class-full; around 30

Answers to Safety Quiz

- 1. Weight
- 2. 7
- 3. 3
- 4. Humpback whale
- 5. Giraffe
- 6. The length of a football pitch
- 7. The driver wouldn't be able to stop in time and would probably run you over
- 8. Run after it
- 9. The kerb
- 10. Truck drivers can't see anything at the left side of their cab when turning left at a junction; trucks can also cut corners/mount the kerb when turning

End note: it may be possible that pupils in your class have lost a friend or relative in a road accident. If this is the case, these quizzes and discussions could give rise to certain sensitivities and bereavement issues. You may be in a good position to deal with these situations should they arise, but if you need further help, guidance or information in this area, the following links could prove useful:

Child Bereavement Charity

T: 01494 446 648 E: enquiries@childbereavement.org.uk W: www.childbereavement.org.uk

Brake: the road safety charity

T: 0845 603 8570 (helpline for road crash victims) E: brake@brake.org.uk W: www.brake.org.uk

"You cannot put a price on a child, and that is the main importance of the scheme: the child's safety at the end of the day, in and out of school." Chris, TACS demonstrator

TACS Activities

Here we provide some ideas for classroom activities based around the key messages delivered during your TACS demonstration.



1. The Goggles Game

Using the reduced visibility goggles included at the back of this pack, put your pupils in the 'driver's seat' and let them experience just how little truck drivers can actually see.

Choose pupils to come forward one at a time. Put the goggles on them and sit them in a chair. Then select another pupil to stand in one of their 'blind spots' and creep up on them.

Use this game to remind pupils of the 4 main blind spots on a truck: at the front, back, left side and right side. Reiterate the key messages around sight, and talk about the dangers associated with reduced driver visibility. Remind your pupils to keep a safe distance from trucks at all times.

The goggles can be adjusted to fit different ages.

2. Play Your Trucks Right

To help reinforce the key messages, use the Play Your Trucks Right cards to get children engaged with the TACS facts and information.

Set 4 cards out in a row with the first card facing outwards (displaying its answer/number), and the other 3 facing inwards (displaying their questions). Divide your class into 2 teams, **Team A** and **Team B**. Point to the second card and read out the question on the back. Ask Team A whether they think the answer is **higher** or **lower** than the number shown on the first card. Once Team A has given you an answer, turn over the card to reveal whether this is right or wrong.

For example: the question on the back of **Card 2** is, 'How many blind spots are there on a truck?' The answer is **4**, which is **lower** than the answer on the front of **Card 1**. If Team A gets the answer right, they get a point. If they get it wrong, the question goes over to Team B. After 4 questions have been read out and 4 cards turned over, set out another 4. There are enough cards for three rounds of Play Your Trucks Right. Alternatively, you could use all 12 cards at once.

Throughout the game, challenge your pupils to think back to the demonstration they have seen, the quizzes you have done and the discussions you have had.



3. Topple Trucks

Using a skipping rope, bamboo cane or metre ruler, create a 'human truck' using two of your pupils. This exercise is intended to bring to life the length and rigidity of a truck's trailer, and to demonstrate how tight turning angles can present such dangers to pedestrians and passers-by.

With each pupil holding one end of the rope/cane/ ruler (if you are using a rope, it must be kept taut at all times), instruct your human truck to negotiate an obstacle course of cones, chairs or other pupils.

Whenever an obstacle is knocked by the human truck, stop and talk about why this has happened, and what this would mean if someone was standing at this collision point. Bring in the key demonstration messages around safety and trucks turning left at a junction, and get your pupils to think back to what they have learned about a truck's length, size and scale.

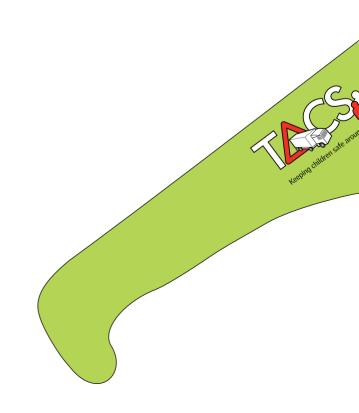
To add another dimension to this game, the 'driver' of the human truck could wear the reduced visibility goggles.

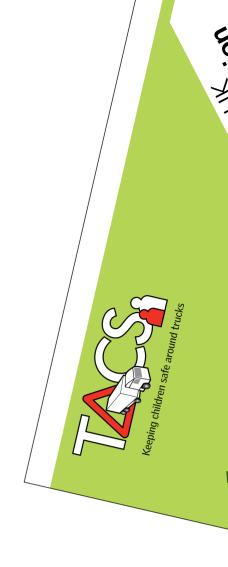


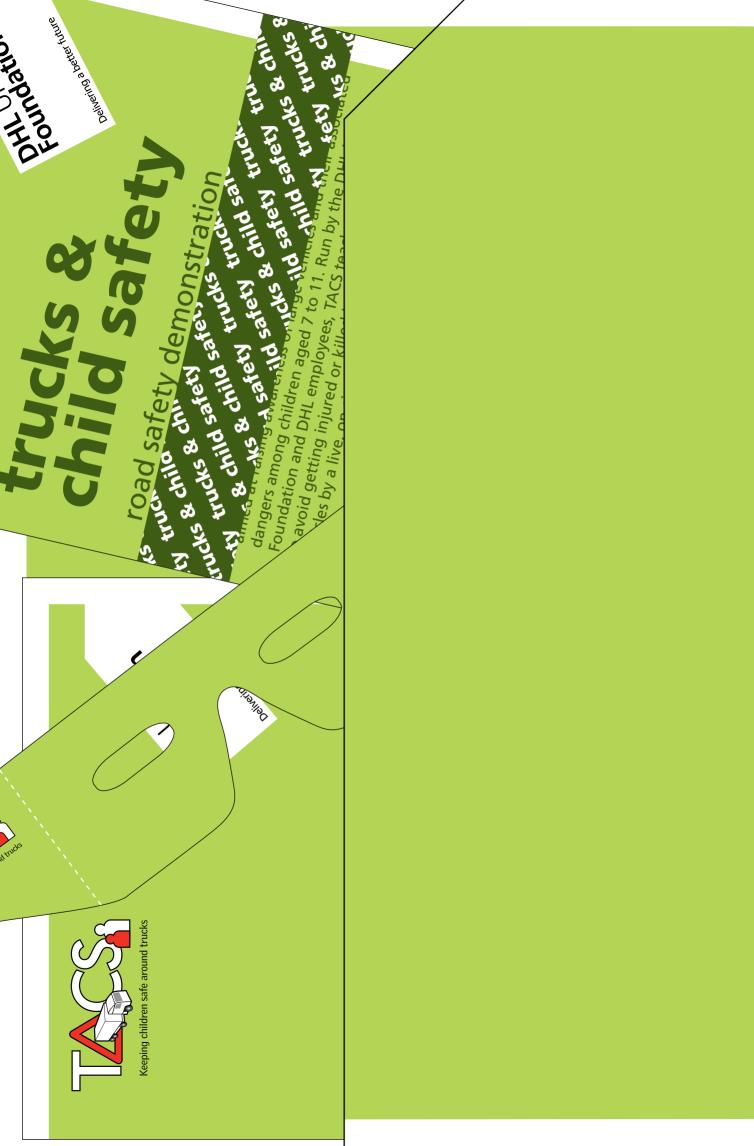
"You can talk about road safety in assemblies and classrooms, but there is no substitute for a live demonstration." Julie Millard, head teacher, Westlands School, after seeing a TACS demonstration "I liked going into the lorry and hearing from the demonstrator that most lorry drivers like to have the radio on, and it might be a cold day with the window shut meaning that you wouldn't be able to hear a child shout while behind the lorry. I've also learnt about blind spots now and I know not to stand on the edge of the kerb."

Janine, pupil









www.dhlukfoundation.org helpline: 01285 841 914



The DHL UK Foundation is a Company Limited by Guarantee registered in England No. 2223373, Registered Office Ocean House, The Ring, Bracknell, RG12 1AN, United Kingdom, Charity Registration No. 327880