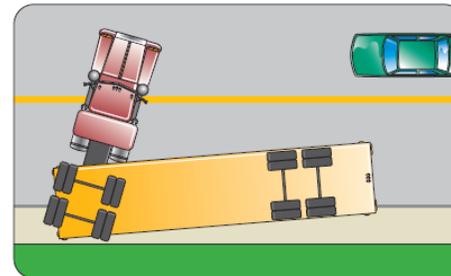


MELT Class 1 Driver Training

Handling emergencies



Lesson overview

- Handle emergency incidents in a professional manner.
- Emergency equipment and its use.
- Keeping yourself safe.
- Importance of workplace practices, policies and procedures.
- What to do in specific emergency situations.
- What to do if you're in a crash.
- Incident reporting.

General emergency steps

- Turn on your 4-way flashers.
- Ensure no danger to self.
- Wear personal protective equipment as needed.
- Deploy warning devices.
- Locate emergency contact information.

Question - Why is it important to follow your workplace practices, policies and procedures?

- Know what needs to be reported to your employer, police and other agencies.

Emergency supplies – activity

Imagine you are in a crash or stranded for a day or two when the road gets closed due to avalanche...

What supplies might you need?



Discuss in your groups and be prepared to share your ideas.

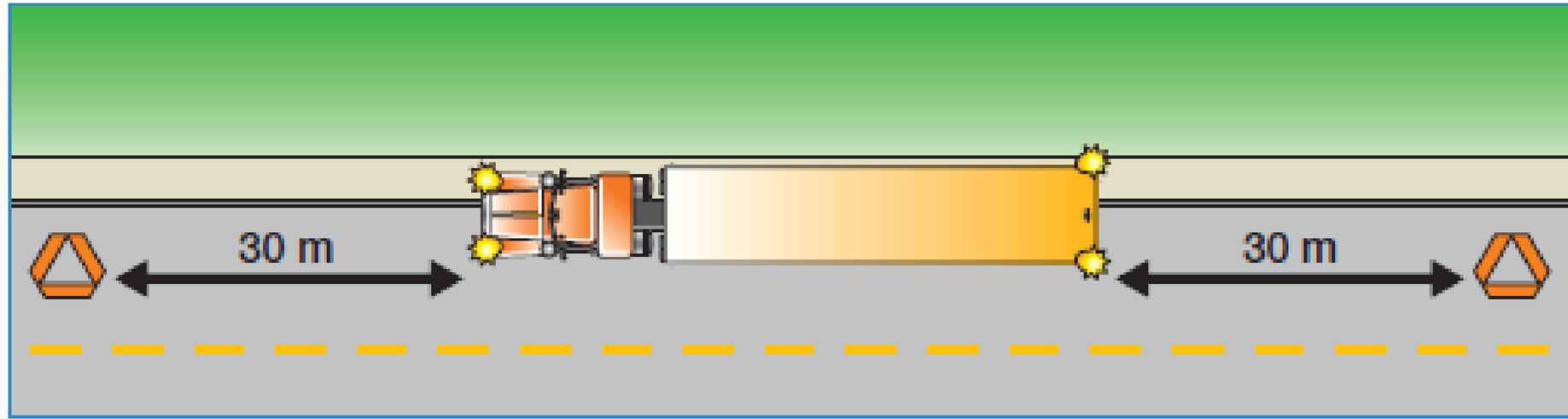
Warning devices

During daylight hours, the minimum for approved warning devices is:

- two red flags that measure at least 30 cm by 30 cm, or
- two warning devices that have been approved for daylight use — including flares, fuses and reflectors.
- At night use flares, fuses, reflectors and red lanterns.



Warning device deployment

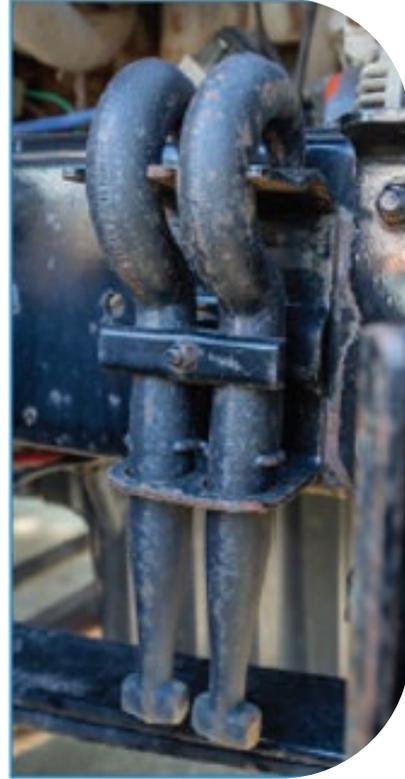


Emergency situations

In the next section, we're going to discuss:

- Getting stuck
- Mechanical failure
- Needing a tow
- Tire failure
- Personal medical distress

Towing



Anti-lock braking systems (ABS)

- Mandatory in Canada on all trucks and buses over 4,560 kg manufactured since April 1, 2000 and on all commercial trailers equipped with air brakes.
- Adjusts air or hydraulic pressure in the brake chambers to prevent wheel lockup.
- Allows the driver to steer while applying continuous hard brake application.
- Doesn't allow you to drive faster or stop sooner.
- On some surfaces such as gravel, braking distance with ABS may be longer.
- May help prevent jackknifing.

Threshold braking

- Requires a sensitive touch on the brake pedal.
- Do not “pump the brakes” – this will only extend the stopping distance and reduce air pressure.
- Apply brake pressure up to the point of almost locking the wheels, then backing off just enough to prevent the skid.
- Constantly adjust pressure on the brake pedal throughout the stop to keep it at that point.
- If the brakes lock, immediately ease up and reapply.
- Once mastered, will stop you faster than any other technique.

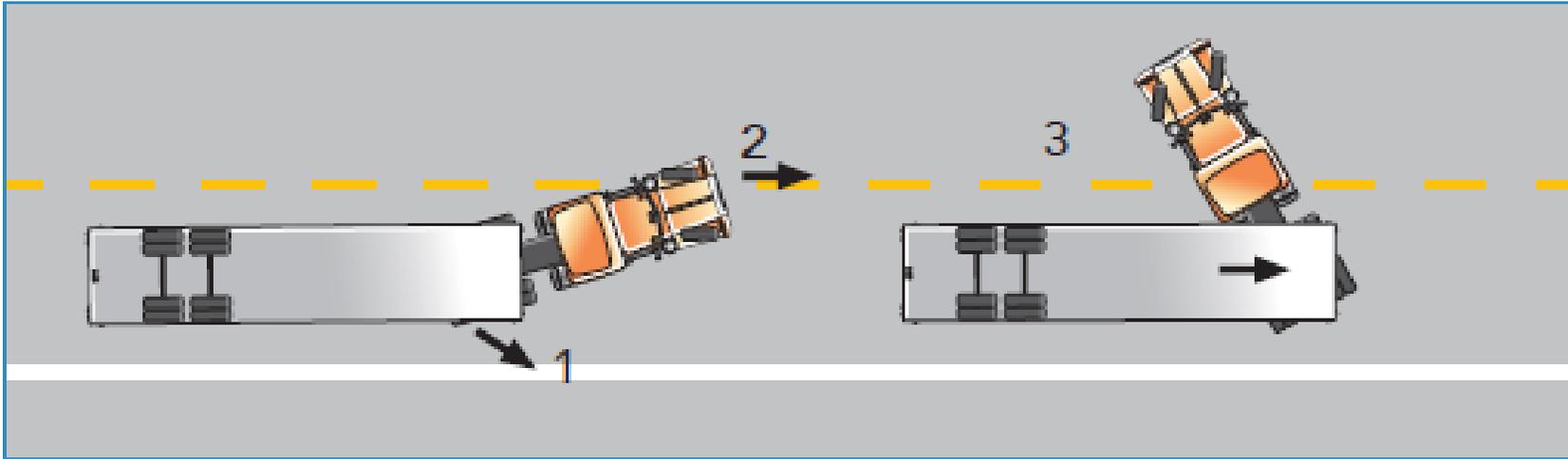
Skid avoidance and control

What can cause loss of traction?

How can you anticipate and react to a skid?



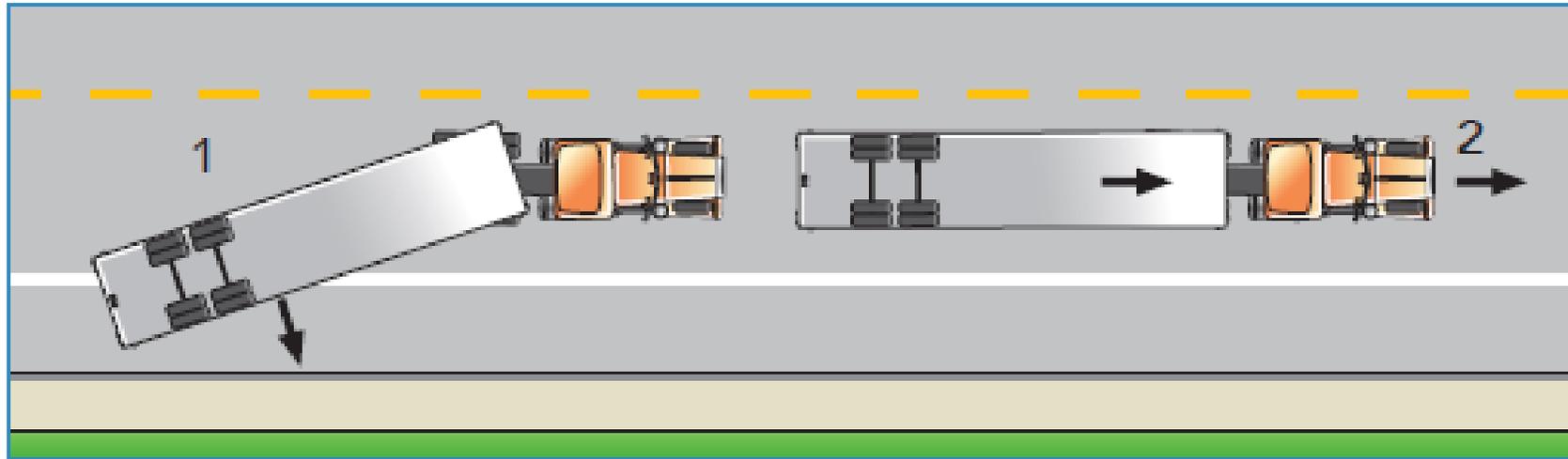
Jackknife



Jackknife

- 1 — the tractor begins to skid
- 2 — the driver steers into the skid, corrects it and drives on
- 3 — if the skid is not corrected, the trailer will push the tractor around until the cab hits the trailer

Trailer swing



Trailer swing

- 1 — the trailer skids while braking on a slippery surface
- 2 — the driver releases the brakes and drives forward, pulling the trailer back in line

Tire failure



Blowouts can cause tremendous steering and wheel vibration, but don't be alarmed.

- Don't immediately apply the brakes.
- Take your foot off the gas pedal to slow down and steer the vehicle firmly in the direction you want to go.
- Bring the vehicle to a stop off the road.
- Turn on 4-ways.

Flooded roadway

If you're going to drive through:

- slow to a crawl as you approach the water,
- place a slight drag (a light constant pressure) on the brakes while you drive through,
- the drag will reduce the amount of water on the brakes, and
- after driving through the water, apply the brakes for a short distance to dry them out.

Emergency actions

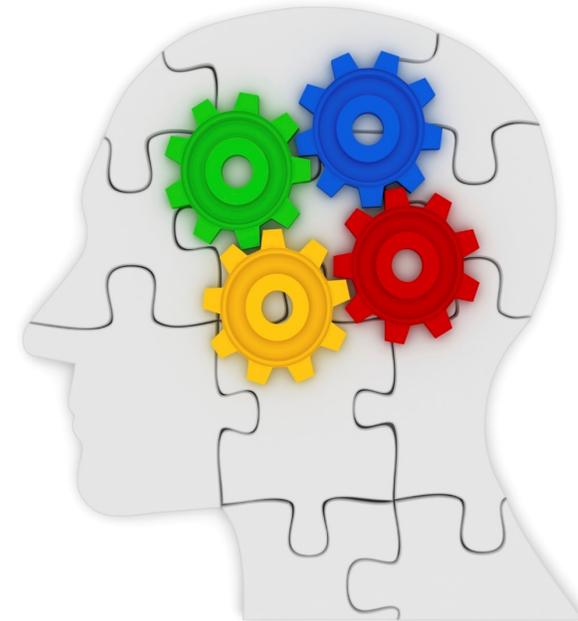
Wildlife- moose, deer, elk, caribou, bighorn sheep, cattle and horses.



Emergency actions – activity

Oncoming vehicle in your lane.

- In groups, discuss possible scenarios and options.



Emergency actions to avoid a crash

- Reduce speed – brake hard.
- Select alternative path.
- Perform emergency steering.
- Glancing blow better than head on.
- Watch your clearance.
- Try to avoid going right off the road.
- Look where you want to go.

Emergency actions

Gravel shoulder recovery

- Reduce speed gently.
- Keeping one set of tires on the pavement.
- Turn back gentle when road is clear of traffic.
- Don't brake while turning.
- Don't oversteer!

Loss of brakes

News story – Anarchist Mountain fire

Read the story in your groups and discuss these questions:

- What could've caused the brakes to overheat?
- What could've caused the rig to overturn?
- What were the consequences?
- How could this crash have been prevented?

Loss of brakes continued



- Often caused by too much heat – overdriving the ability of the brakes.
- **This is driver error.**
- Use a gear that will hold the vehicle back without using the service brakes.
- Engine brake failure – stop! Use low gear until safe place to pull over – do not continue down the hill until engine brake is repaired.

Runaway lanes

If it feels like you have no brakes... don't chance it – take action.



Gravity bed runaway lane

This is the type of runaway lane that leads a truck up a slope.

It uses a combination of gravity and a bed of gravel to slow the truck down and keep it from sliding backwards.

You'll notice these runaway lanes on the Coquihalla Hwy.



Arrester bed with gravel bed



- Remember where runaway lanes are on your regular routes.
- Never park in or in front of a runaway lane.

Arrester bed with cable nets



Loss of visibility – what to do



- Headlights fail
- Mud, slush, snow on windshield
- Fog or whiteout
- Glare

Fire – common causes

- Running with a soft tire.
- Overheated brakes, either from misuse or maladjustment.
- Leaking fuel system, pump, filter, tanks or lines.
- Unequal distribution of load, causing trailer to lean and rub on tires.
- Careless smoking.
- Carelessly placed flares, lamps or fuses used in an emergency.
- Short circuits in the electrical system.
- Spontaneous combustion may occur in a van or trailer - know the nature of your cargo.
- Stopping on dry grass during drought – heat from the truck ignites the grass.
- Failures or overheating of the after treatment system.

Fire – what to do

- Stop in a safe position away from buildings and other vehicles.
- Call 911 and give your location and any critical information regarding your cargo.
- Ensure your safety and the safety of others nearby.
- If it is a combination unit, uncouple the unit if possible.
- Take all possible steps to extinguish it.
- If the fire might be due to a short-circuit, turn off the battery switch if equipped or remove battery cables if possible.
- If the cargo is of an explosive nature, stop traffic and warn people to stay back.
- If carrying live animals, release them if possible.
- Call your supervisor.

Fire extinguishers

Remember the word PASS:

- P – Pull the pin
- A – Aim low
- S – Squeeze lever
- S – Sweep from side to side



Forest fires

Within B.C., report forest fire sightings to:

1-800-663-5555

Cell: *5555

Crashes and incidents

Procedures and responsibilities



Crash procedures - activity

Imagine you're in a crash or arrive at the scene of a crash.

- What should you do for a minor vs a major crash?
 - Minor crash – minor vehicle damage or injuries only
 - Major crash - serious damage, injuries or death to others
- What reporting would you need to do?

You have 15 minutes to discuss.



Loss of load and spills

Any spill that threatens the environmental quality of water, land or air must be reported.

Possible threats include gas leaks, oil, diesel or chemical spills and any other release of hazardous material to the environment.



Report a spill: 1-800-663-3456

Legal reporting requirements

- Exchange of information.
- When to report to police.
- Reporting to ICBC.

**KNOW THE
RULES!**

A hand holding a red marker, underlining the text 'KNOW THE RULES!'.

Near misses

A near miss is an event that did not result in injury, illness, or damage – but had the potential to do so

- Follow company procedures.
- Can occur when driving or at other times such as loading/unloading, during vehicle inspections or other workplace activities.