



STAGE 1 SESSION 1

PREPARING TO CYCLE

AIMS & OUTCOMES



The focus is on control of speed and all-round observation as central to safe cycling. Also covering the checks to be made before getting on the bike – helmet, clothing, bike and conditions – and other key aspects of general safety on the road.

The session covers:

- Speed and its impact on safety for cyclists.
- Controlling speed.
- The environment, weather, safe speed, bike handling and riding conditions.
- Surface conditions and how these may affect the bicycle.
- The importance of observation and awareness.
- Helmet and clothing checks – how to ensure proper fit and to prevent clothing or equipment getting caught in the moving parts of the bicycle.
- A basic M-check and the adjustments needed to prepare the bike for safe and comfortable cycling.
- Appropriate clothing for riding a bicycle in daylight and night-time hours.
- Parts of the bicycle.
- The benefits of having lights and a bell on a bike.
- What colour light goes on the front and what goes on the rear.
- Flashing bike lights.

Speed

Travelling at a safe speed, appropriate to the environment, is key to safety on the road.

- **The risks of speed**
 - Loss of control
 - Impaired stopping ability
 - Delayed reaction time
 - Not allowing for unexpected situations on the road
- **The feel of speed**
 - Speed wobble
 - Spinning legs
 - Wind in the face etc.
- **Judging speed** – it takes experience to judge the speed of other vehicles – observing traffic on roads of differing traffic volumes can help develop a sense of approaching speed before going on the road for the first time
- **Safe speed** – a changing feature made up of a number of factors
 - **the road** – big, small, straight, twisted, good or bad condition – is there a path for people to walk on – are there trees or hedges blocking the cyclist's view or hiding the rider from other road users
 - **the weather** – in wet weather it can take three to four times longer to stop, in icy weather up to ten times
 - **the traffic** – is it light or heavy, vehicular or pedestrian traffic
 - **the line of travel** – straight, or round bends and corners where it is easy to skid or drift
 - **expecting the unexpected** – in the environment, with pedestrians, animals or other road users



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Awareness

When travelling on the road, it is vital to know what is happening all round – in front, to the sides and behind on the road, and also on the pathways.

- **Scanning** – continuous looking across the surroundings for any issues that may cause problems
- **All around observation** – shoulder checking regularly
- **Looking, listening and acting** to avoid potential problems
- **Riding prepared to act to avoid danger**
- **Expecting** traffic ahead to pull in or out, or stop suddenly
- Traffic **approaching from behind**
- Traffic **cutting across in front**
- **Pedestrians** stepping out



Helmet Check



The helmet check is one of four checks that every cyclist should complete before getting on the bike – any one of the checks could prevent serious injury or save a life, yet all together take moments to complete.

- A helmet can **reduce the chance of head injury** including brain damage, by absorbing the force of an impact and reducing trauma to the brain.
- **Helmet fit**
 - **Level** from the forehead to the back of head
 - **Two-finger space** above eyebrows
 - **V straps** sitting just below ears – adjust as necessary
 - **Thumb space** between **chin and buckle**
 - Keep thumb between chin and buckle when fastening to **avoid pinch**
 - **Helmet should stay** on the head without buckle being fastened on bending over – adjust frame as necessary



- **Treat a helmet gently** – it is designed to break and if it gets a hard knock it should be replaced, even if damage is not obvious
- **Check the helmet** for fit and signs of damage at the start of every session
 - **Cracks or breaks** in the **shell**
 - Cracks or breaks in the **lining**
 - **Missing or broken parts** – frame, buckle, v-straps



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Clothing Check

The clothing check is one of four checks that every cyclist should complete before getting on the bike – any one of the checks could prevent serious injury or save a life, yet all together take moments to complete.

- **Light, bright coloured clothing** (hi-viz jackets and vests, Sam Browne belt and reflective bag covers etc.) promotes safety by increasing **visibility**
- **Clothing** needs to be **appropriate to conditions**
 - **Gloves, mufflers and shoe covers** for **cold weather**
 - **Thermal layers** for **cold weather**
 - **Waterproof clothing** for **wet weather**
 - **Windbreaker** for **blustery weather**
- Wear **reflective clothing**, especially after daylight
- **Clothing can get caught in the moving parts** of the bike – check for
 - **Shoelaces** – are they tied and tidied away
 - **Jacket toggles** – is there a loop that may catch the saddle
 - Flared **trousers** or flowing **skirts** which could catch in the chain
 - **Long scarves**
 - **Never** hang, or balance, **anything on the handlebars** as there is a risk of getting caught in the bike and unbalance the rider
 - Carry **baggage** carefully – a carrier, panniers, a basket or a backpack over both shoulders are all ideal
- Wearing **earphones** compromises hearing



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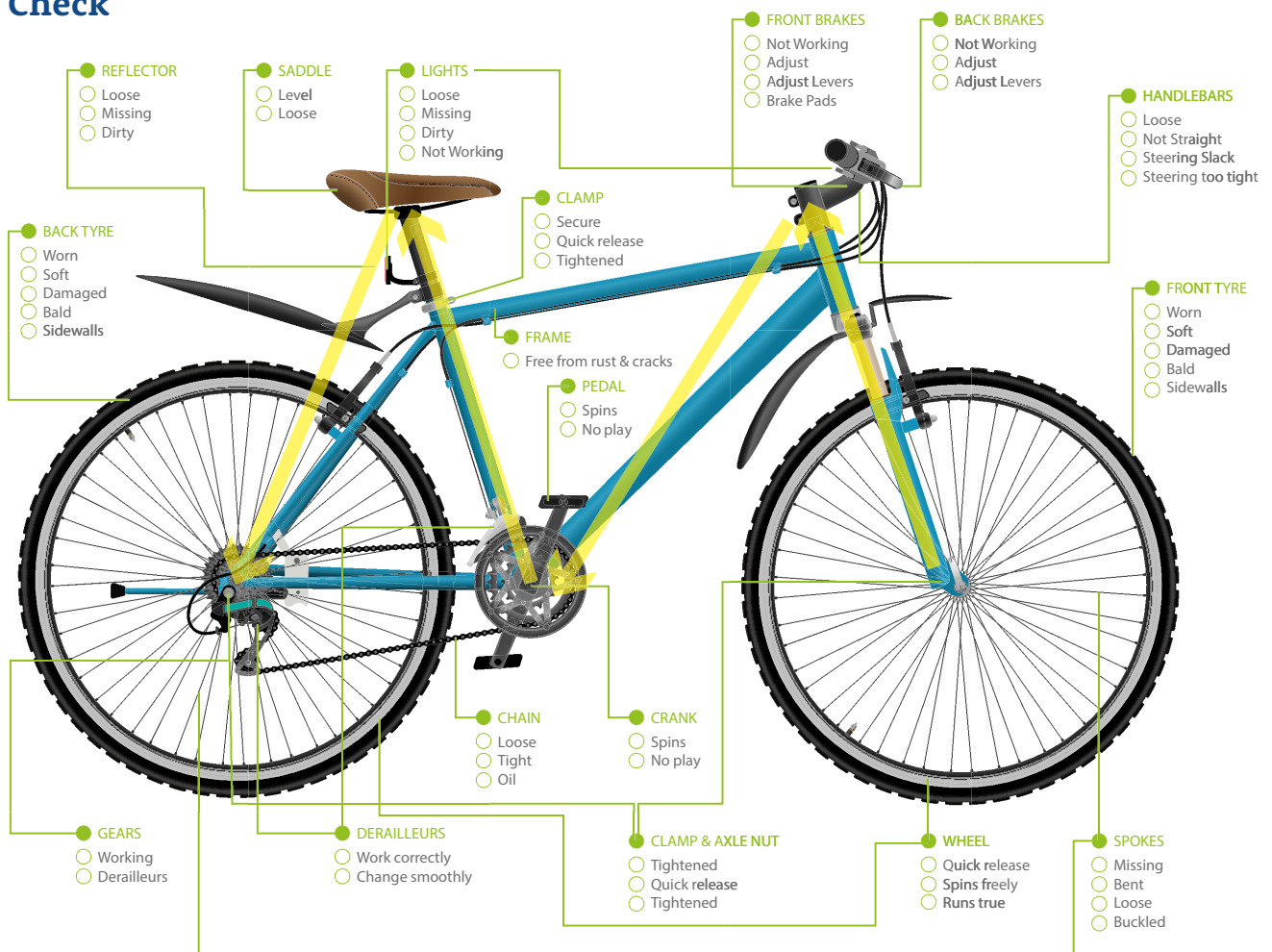
Bike Check



The bicycle check is one of the four checks that every cyclist should complete before getting on the bike – any one of the checks could prevent serious injury or save a life, yet all together take moments to complete

- **Bike Check** or “**M Check**” before getting on the bike.
- Start at the front of the bike and systematically work towards the back of the bike checking if anything sounds, feels or looks loose.
- There is a direct link between **roadworthiness** and safety
- A **bell** on the bike if on the road by law in Ireland

M Check



Servicing the bike

It is good practice to have a bike serviced every year. This may be done by an adult, or even a child, who is competent in bike maintenance, but will most often involve leaving a bike to a bike shop to make sure everything is working properly.



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Lighting

It is very important to be seen when on the bike and once daylight has passed, in dusk and dark, a cyclist needs good lighting to help stay safe.

- A **white light in front** and a **red light at the rear**, as well as **red reflectors** on a bike in Ireland after daylight.
- **Dynamo lights**, lighting powered by the bicycle by either a hub built into the front wheel or tyre driven mechanisms. Some dynamo lights may go out when the bike has stopped and a cyclist may not be as visible.
- **Lighting up** – outside full daylight hours.
- Lights are about **seeing and being seen** – lights need to suit the environment with **strong front lights** to see in darkness and **flashing strobe lights** to attract attention of other road users.

Conditions Check



The conditions check is one of the four checks that every cyclist should complete before getting on the bike – any one of the checks could prevent serious injury or save a life, yet all together take moments to complete.

Interaction between **ground surface** and the **weather** can cause difficulty and needs to be considered:

- **Road Surface**

- Broken edges/soft margins
- Road camber
- Changing levels on the road
- Shores may be raised above, or dropped below the general road
- Pot-holes
- Bumps
- Kerbs
- Gravel
- Grass
- Tarmac
- Raised edges in concrete
- Patches of surface differently coloured to surroundings can indicate wetness, or spillage such as oil or diesel, which can be slippery
- Steering straight and making a right angle to an obstacle (like a capital “T”) is the best way to keep control.

- **Rain**

- Makes stopping distance three to four times longer
- Metal (drain covers) and painted (road markings) surfaces become very slippery
- Leaning into corners on wet surfaces can cause falls or drifts
- First wet day after a dry spell can cause slippery conditions
- Puddles can cover potholes, cracks, drains and other obstacles
- Wet gravel, tarmac or leaves can be very slippery, especially in a corner

- **Wind**

- Difficult to hear
- Can be hard to manoeuvre the bike, extra care needed
- Crosswinds
- Sudden gusts at exposed areas such as gateways and crossroads

- **Sun**

- Bright sunlight can dazzle
- Warm temperatures can cause overheating

- **Cold (Ice and Snow)**

- Stopping distance may be up to ten times longer
- After a cold night, even when roads seem clear, dangerous patches may persist in shaded spots
- Letting a small amount of air out of the tyres can give better grip on slippery surfaces if there is a lot of snow or ice
- When heading for ice, it is best to keep going in a straight line, stay relaxed and keep straight – skidding is most often caused by braking, speeding up or changing direction

- **Fog**

- Motorists may see cyclists very late or not at all
- Cyclists will not see motorists until they are closer
- Sound can be muffled and an approaching vehicle heard later

A combination of conditions from these greatly increases risk





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Parking a Bicycle

It is just as important to be aware of safety off the bike as on and not to leave a bike where it can be a hazard for others.

- **Not blocking** a path, entrance or walkway
- **Locked** securely to prevent loss through theft
- Note the unique **bicycle ID number** on the frame – photographs of a bike with the owner, and of the number itself can help establish ownership if the bike is stolen

SESSION ONE QUIZ – QUESTIONS AND ANSWERS



- What are the risks of speed in different situations and the possible negative outcomes for cyclists and other road users when their speed exceeds their control? (See Page 1 for answers.)
- What are the ways to evaluate speed and the environmental conditions which will dictate safe speed? (See Page 1 for answers.)
- What is the difference between looking and seeing? (Looking is a physical action, seeing is taking in information on what is looked at.)
- Name items on the road which may cause particular problems, especially in poor weather – tracks, tramlines, metal gratings, kerbs etc.?
- Which brake should a cyclist pull first to stop a bike on a bike in Ireland and what side is it usually on? (The left). In other countries where traffic travels on the right, what side is the back brake likely to be on? (The right.)
- Where is the best place to carry things on a bike? (See Page 3 Clothing Check for answers.)