Cyclos Guide

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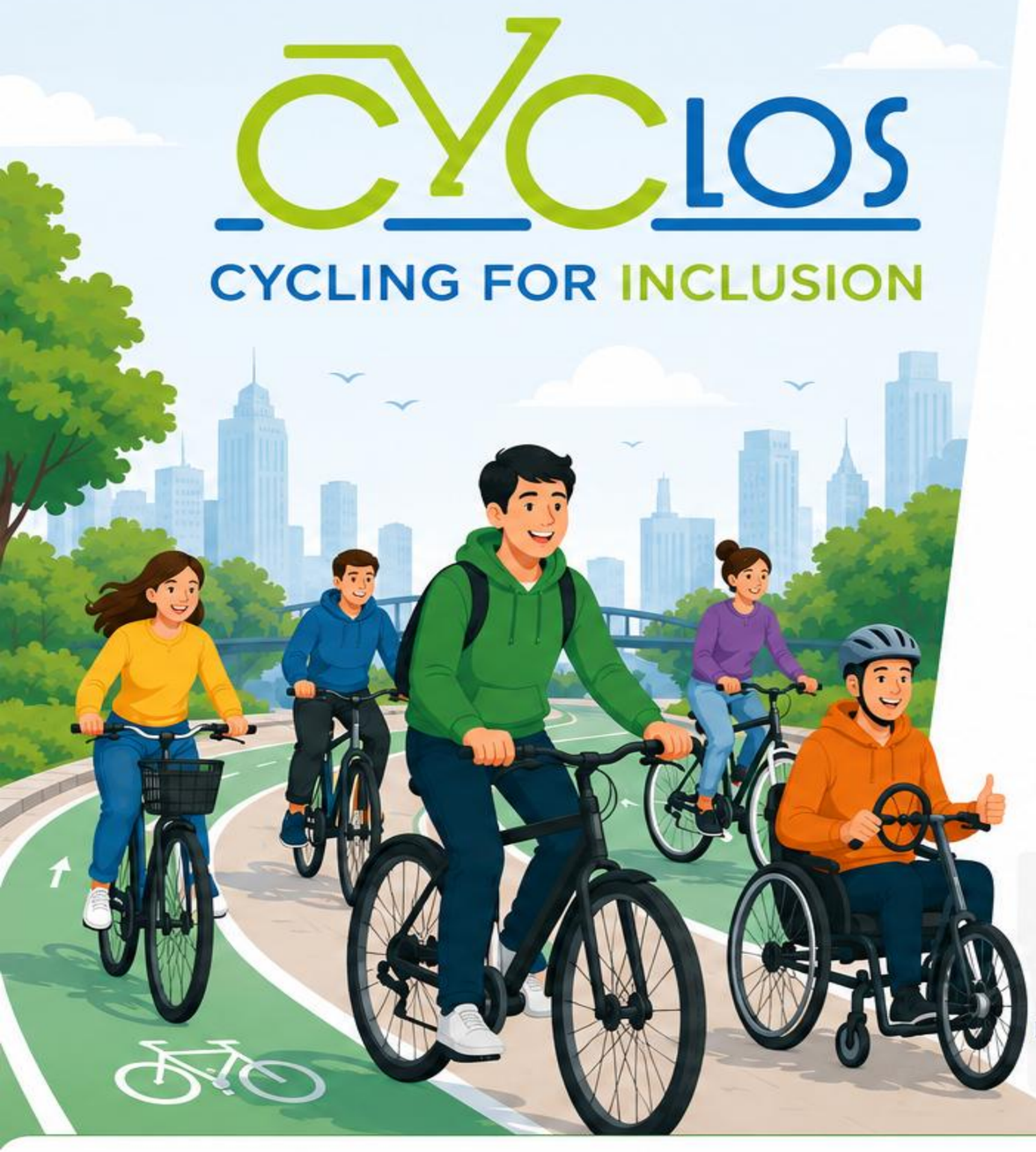
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PROJECT VISION

CYCLOS is an Erasmus+ project that promotes cycling as a powerful tool for **social inclusion, sustainable mobility** and **personal empowerment.**

Through an inclusive training programme, the project supports disadvantaged young people in developing cycling skills, improving their physical and mental wellbeing, increasing their independence and becoming active participants in greener and more inclusive communities.

SUSTAINABLE MOBILITY
For a greener future

SOCIAL INCLUSION
No one left behind

HEALTH & WELLBEING
Body and mind in motion

EMPOWERMENT
Independence and new opportunities

THE TRAINING PROGRAMME

MODULE 1
Green Mobility and its Benefits for Disadvantaged Youths

MODULE 2
Basics of cycling

MODULE 3
Advanced Cycling Techniques

MODULE 4
Bike maintenance and safety checks

MODULE 5
Confidence on the Street

HEALTH | INCLUSION | SUSTAINABILITY | INDEPENDENCE | CONFIDENCE

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Erasmus+
Enriching lives, opening minds.

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Module 1

Green Mobility & Cycling for Disadvantaged Youths



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Environmental Impact of Green Mobility and the Role of Cycling



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What is Green Mobility



Transport with low environmental impact



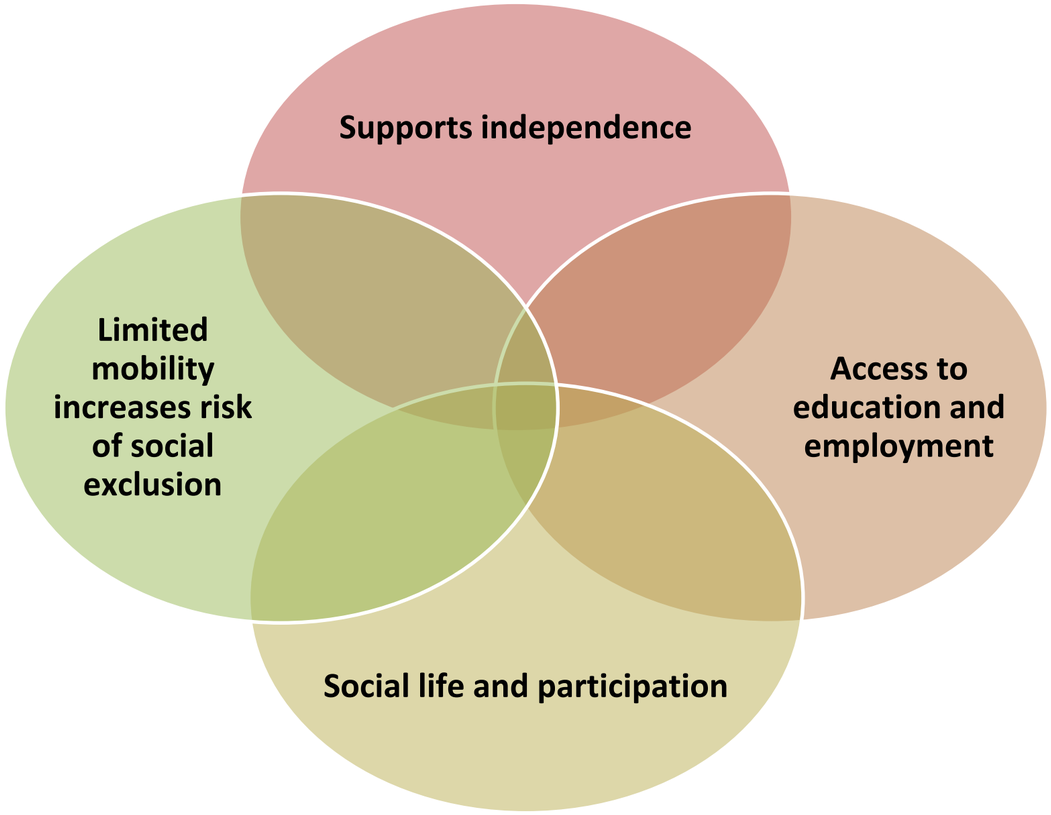
Walking, cycling, public transport



Better health, cleaner air, more liveable cities

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Why Mobility Matters for Young People



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Environmental Benefits of Cycling

- No direct emissions
- Reduces traffic congestion
- Less noise in cities
- Helps young people develop environmentally responsible habits

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Mobility as a Factor of Social Inclusion

- Mobility influences access to education, jobs, and services
- Lack of transport leads to isolation
- Cycling increases autonomy and participation



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Types of Disadvantage Affecting Youth Mobility

- Cognitive (learning difficulties, attention challenges)
- Cultural (language barriers, migrant background)
- Emotional (anxiety, low self-esteem)
- Social (isolation, weak peer networks)
- Economic (lack of financial resources)



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Barriers to Green Mobility

- Lack of safe cycling infrastructure
- Financial barriers (bike, equipment)
- Limited road safety education
- Fear and low confidence

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Physical & Mental Health Benefits

- Better cardiovascular fitness
- Increased strength and endurance
- Helps prevent obesity and chronic disease
- Improves mood and overall mental wellbeing

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Barriers to Green Mobility

- Lack of safe cycling infrastructure
- Financial barriers (bike, equipment)
- Limited road safety education
- Fear and low confidence
- Cultural or gender norms

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Cognitive & Emotional Benefits of Cycling

- Improves attention and memory
- Reduces stress and anxiety
- Builds confidence through achievement
- Supports emotional resilience

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Physical & Mental Health Benefits

- Improves attention and memory
- Reduces stress and anxiety
- Builds confidence through achievement
- Better cardiovascular fitness
- Increased strength and endurance
- Helps prevent obesity and chronic disease
- Improves mood and overall mental wellbeing

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Social & Cultural Benefits

- Group activities encourage cooperation
- Builds friendships and support networks
- Promotes intercultural interaction
- Strengthens sense of belonging in the community



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Economic & Life-Skill Benefits

- Affordable form of transport
- Improves access to school, training, and work
- Develops responsibility and independence
- Builds practical skills (route planning, maintenance, road safety)

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Cycling as a Tool for Empowerment



INCREASES INDEPENDENCE



MASTERY EXPERIENCES BUILD SELF-EFFICACY



CONFIDENCE GAINED THROUGH CYCLING TRANSFERS TO OTHER LIFE AREAS

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Community Participation

- Community rides and local events
- Role of mentors and volunteers
- Strengthens social bonds

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Key Takeaways

- Cycling supports health, environment, and inclusion
- It reduces mobility inequalities
- It empowers young people on multiple levels
- It can be a tool for real social change

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Module 2

Basics of cycling

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Assessing individual abilities and needs

Many cyclists with disabilities use standard bicycles for:

- **Health and fitness**
- **Enjoyment and recreation**
- **Competitive cycling**

Bicycles may need adaptations based on each individual’s impairment and personal needs.



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Assessing individual abilities and needs

Training programs should also be adapted to suit different abilities and requirements.

Trainers and mentors should:

- Recognize individual **abilities**
- Understand specific **support needs**
- Provide inclusive guidance for **disadvantaged groups** interested in cycling



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Cycling for
health and well-being



Joy and
enjoyment



Compete and achieve
your goals



Bikes adapted
to individual needs



Training adapted
to different needs



Trainers and mentors
recognize abilities



Understand and respect
individual requirements



Inclusive opportunities
for all

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1. Cyclists with disabilities

“People with disabilities want to cycle”– proclaims the Cycling Embassy of Denmark (Aagaard Kristensen, 2024).

L’Étape Romania by Tour de France hosted the campaign

The Joy of Cycling, TOGETHER! On August 31st 2025

People with disabilities took part in the same competitive races alongside other participants. With appropriate support, participants could become para-cyclists, focusing on skills and abilities celebration, combined with consistent practice; while resources and specialist assistance were offered to those determined to discover and develop their cycling journey.



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1.1 Cyclists with physical and sensory disabilities



- **Individualised goal setting**
- **Adapted teaching and training approaches**
- **Access to appropriate adapted equipment**
- **Supportive and safe environments**
- **Ongoing support and progression opportunities**

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1.2 Cyclists with cognitive disabilities

- **Understand first individual needs**
- **Tailor communication and instructions**
- **Consider associated physical implications**
- **Focus on abilities rather than limitations**
- **Promote inclusive cycling communities**



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1.3 Cyclists with disadvantaged socio-economic status

- **Explain the physical and mental health benefits**
- **Illustrate the economic advantages**
- **Merge personal advantages with environmental sustainability**
- **Ensure access to safe infrastructure**
- **Build practical skills and confidence, while socialising**



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1.4 Cyclists with migrant or refugee backgrounds



- **Ensure culturally sensitive and inclusive course design**
  (a) cultural norms
  (b) gender expectations
  (c) language barriers
- **Provide access to adapted or beginner-friendly bicycles**
- **Offer safe, traffic-free environments for initial training**
- **Include social support mechanisms, such as peer groups or mentors**
- **Promote integration into broader community cycling networks once skills and confidence increase**

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2. Adopting a safety-first approach

Safety always remains the top priority!

Here's what you need to know to ride responsibly, whether for pleasure, for competitions, for health targets, or enjoying family rides, or simply commuting to the workplace.

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2. Adopting a safety-first approach



2.1 Proper equipment

Helmet: the no. 1 rule

- Ensure the helmet is certified for cycling.
- The helmet should fit perfectly.
- Never use a damaged helmet.

Additional Gear

- Gloves can protect hands during falls and improve grip.
- Closed-toe shoes help maintain control over the pedals.
- Knee and elbow pads are recommended for beginners or when riding on rough terrain.

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2. Adopting a safety-first approach

2.2 Respecting riding rules

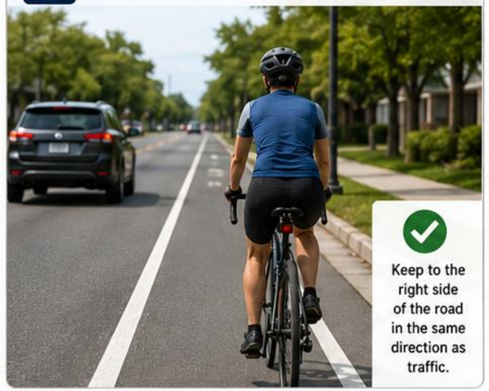
- **Ride on the right**
- **Respect traffic signs and signals**
- **Communicate intentions**
- **Maintain safe distance**
- **Avoid risky maneuvers**

2.3 Visibility and lights

- **Lights**: always use white front lights and red rear lights
- **Reflective clothing** (vests)
- **For extra protection**: attach lights to the wheels
- **Timing**, avoid the most trafficked time

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1 RIDE ON THE RIGHT



Keep to the right side of the road in the same direction as traffic.

2 RESPECT TRAFFIC SIGNS AND SIGNALS

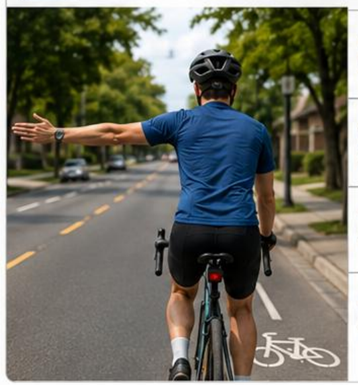


STOP Obey all signs and traffic signals.

Red means stop. Green means go.

Follow all road rules — they are there for your safety.

3 COMMUNICATE INTENTIONS



Left turn: Left arm out.

Right turn: Right arm out.

Stop: Left arm down.

Use a bell or voice to alert others.

4 MAINTAIN SAFE DISTANCE



Keep at least 3 feet (1 meter) of distance from others and vehicles.

5 AVOID RISKY MANEUVERS



Don't weave in and out of traffic.

Don't follow too closely.

Don't ride no-hands.

Don't ride against the traffic.

LIGHTS: ALWAYS USE WHITE FRONT LIGHTS AND RED REAR LIGHTS



Be visible. Use a white front light at night or in low visibility and a red rear light.

REFLECTIVE CLOTHING (VESTS)



Wear reflective clothing or vests to be seen by drivers, day and night.

FOR EXTRA PROTECTION: ATTACH LIGHTS TO THE WHEELS



Wheel lights increase visibility from the side. A smart choice for extra safety.

TIMING: AVOID THE MOST TRAFFICKED TIME



Whenever possible, ride outside peak traffic hours for a safer and more enjoyable ride.

ALWAYS WEAR A HELMET



A helmet can save your life. Make it a habit, every ride, every time.

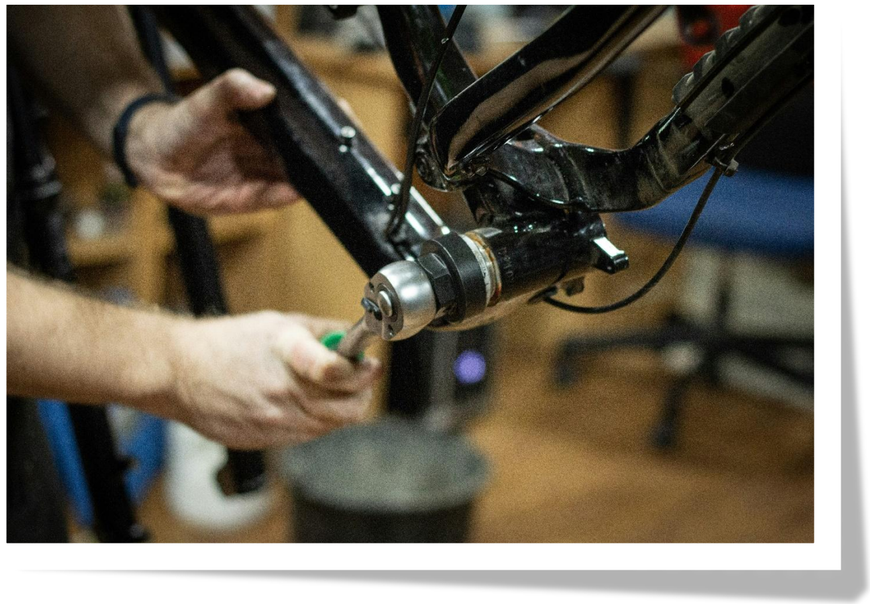
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2.4 Bicycle maintenance

- **Pre-ride checks**
- **Emergency kit**
- **Routine maintenance**



2.5 Preventive behaviour

- **Stay focused**: do not ride while wearing headphones or using a phone
- **Adopt a defensive mindset**: assume drivers may not see you
- **Predictability and unpredictability**: be careful
- **Avoid distractions**
- **Adjust for environmental conditions** (e.g., rain)

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3. Choosing the right type of cycling instruments

Cycling instruments can exist in multiple forms and configurations, designed to accommodate the individual needs and abilities of cyclists.
Both standard cycling and adaptive cycling provide similar positive health benefits.

These benefits include improvements in:

- Cardiovascular fitness
- Muscular strength
- Mental well-being
- Overall quality of life

Research supports adaptive cycling as an effective and inclusive physical activity (Mosser et al., 2025).

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3.7 Recumbent bicycles



3.8 Tandem adaptive bicycles



3.9 Low-step and easy-access bicycles



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Module 3

Advanced Cycling Techniques

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Ride with confidence and safely

Learn how to control your bike, ride safely

and feel confident in traffic



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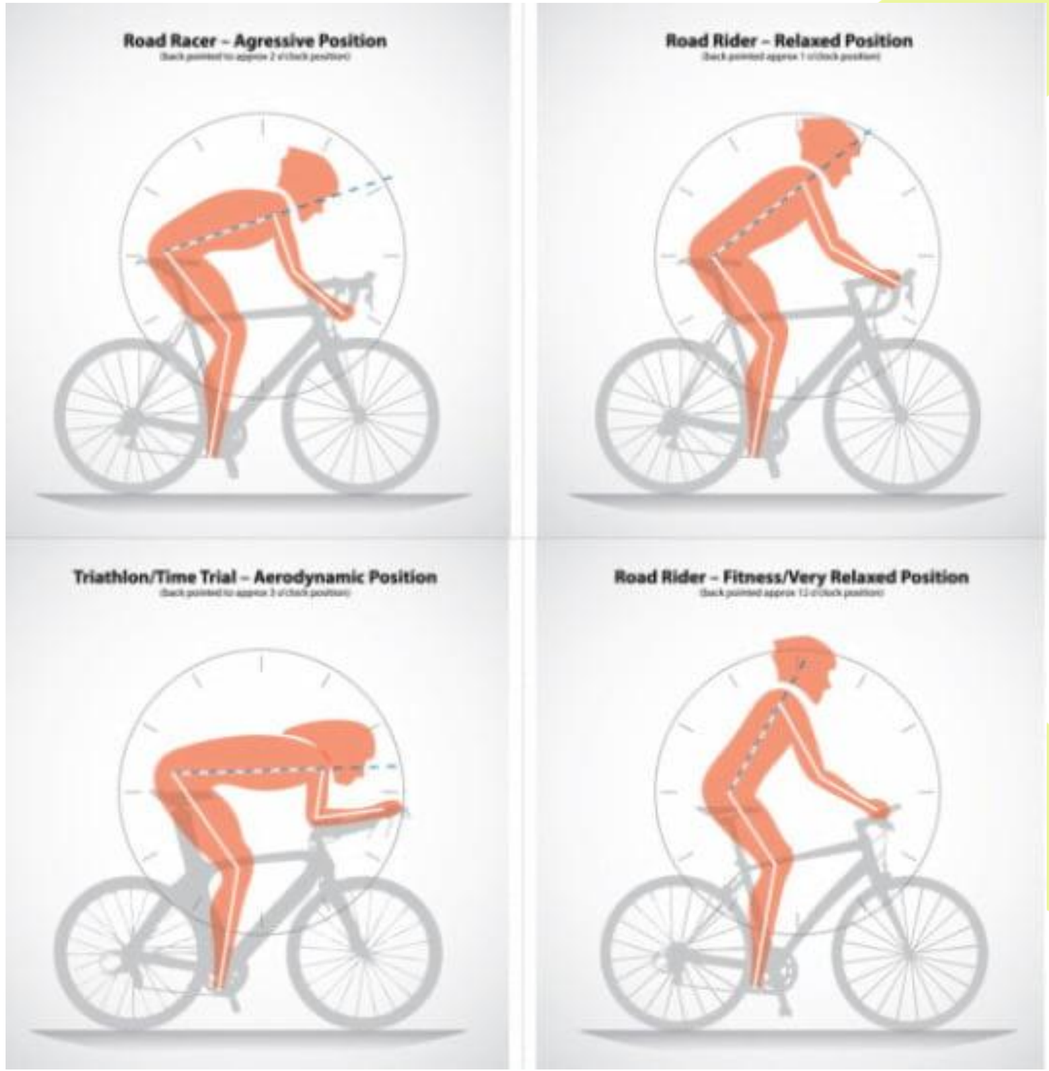
What does feeling safe mean to you?

- Material
- Confidence
- Understanding road signs
- Managing traffic
- ?

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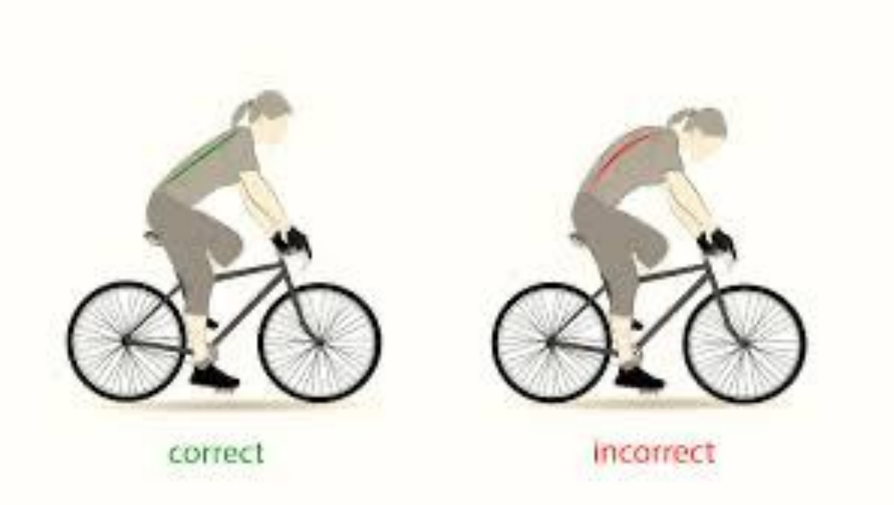
Balance and Bike Control

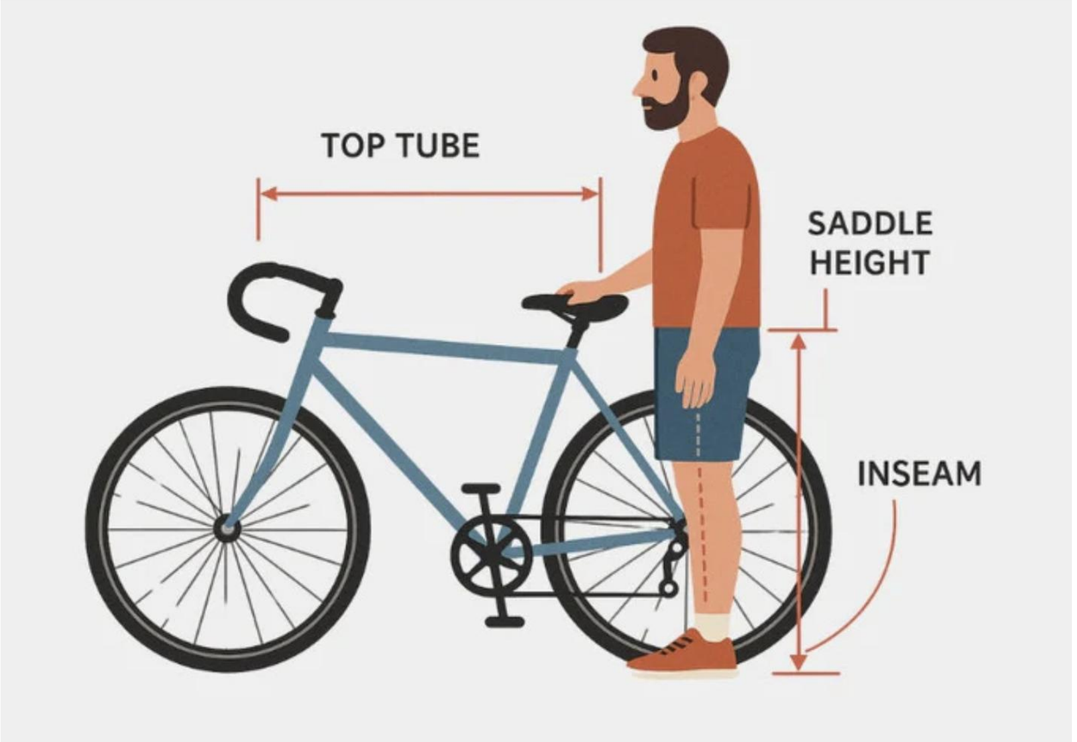
- Look ahead, not at the wheel
- Keep arms and shoulders relaxed
- Ride smoothly, not suddenly
- Adapt your position to your practice



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Posture and position





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Braking safely

Use both brakes:

- Brake smoothly, not suddenly
- Brake before turning

Emergency braking:

- Shift body weight back
- Stay calm and focused



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Using Gears the Right Way

Gears make cycling easier

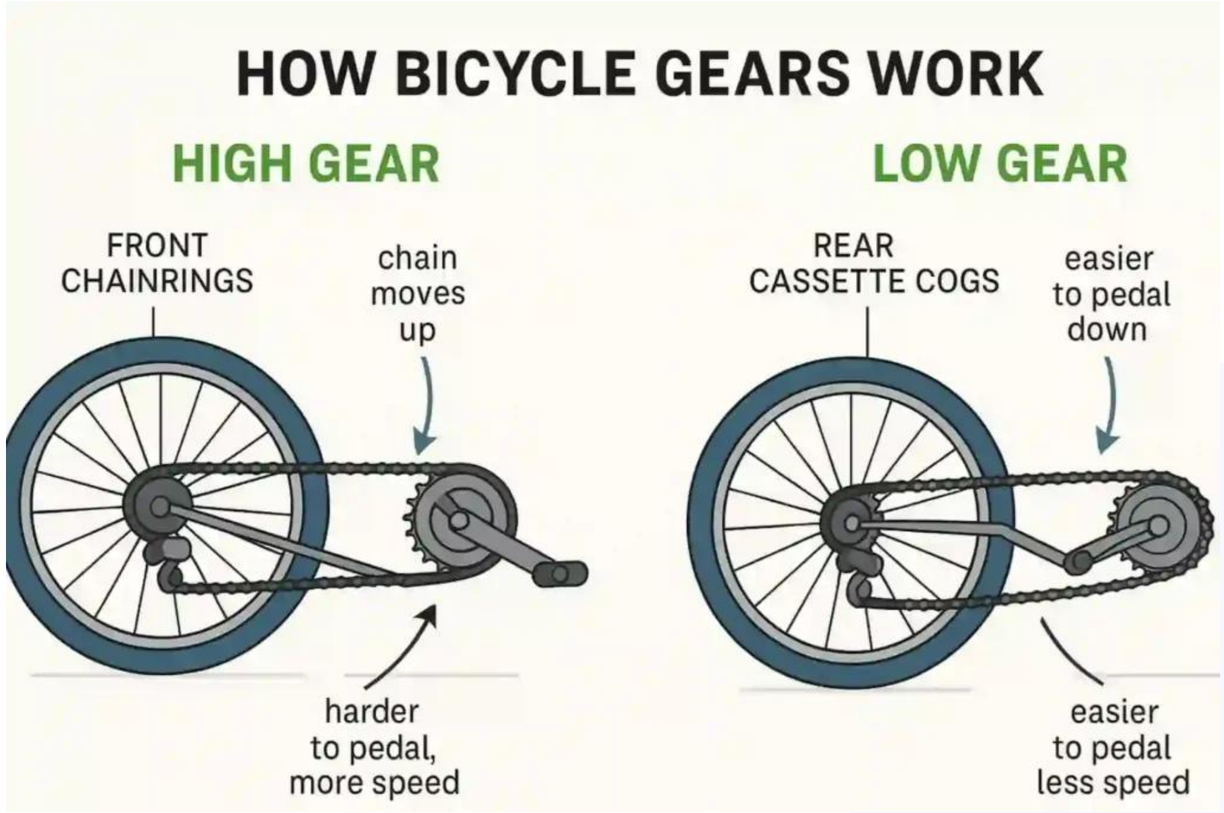
- Change gears before stopping
- Use lower gears for hills
- Keep pedalling smooth

Key message:

The right gear = less effort, more control.

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Using Gears the Right Way



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Cycling in traffic

Share the road safely

- Follow basic traffic rules
- Be visible and predictable
- Communicate with others

Key points:

- Use hand signals
- Make eye contact
- Position yourself clearly on the road

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Where are you allowed to cycle?	Where are you not allowed to cycle?
 Cycle path	 Road closed in both directions
 Cyclists excluded	 No entry in this direction
 Route for cyclists and mopeds only	 No access for bicycles or non-motor-powered invalid carriage
 Cyclists in both ways	 No access for bicycles, mopeds or invalid carriage
 Cycle path – optional	 Main highway
 Bicycle street	 Footpath
	 No access for pedestrians

Traffic can be stressful – stay in control

- Breathe slowly
- Anticipate what others may do
- Stop or dismount if needed

It’s okay to slow down or stop!



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Module 4

Keep your bike safe and ready to ride

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Why check and maintain your bike?

To ride safely

- To avoid breakdowns
- To save money
- To feel independent

Key message:

Small checks prevent big problems.

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Firstly, know your bike parts:



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The ABC Method

A is for AIR

Check your tyres

- Tyres should feel firm
- No cracks or damage
- Use a pump if needed



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B is for BRAKES

Check your brakes

- Brake levers should work easily
- Bike should stop quickly
- No rubbing or strange noises

KEY MESSAGE : Brakes save lives



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C is for Chain

Check moving parts

- Chain should move smoothly
- No rust or loud noises

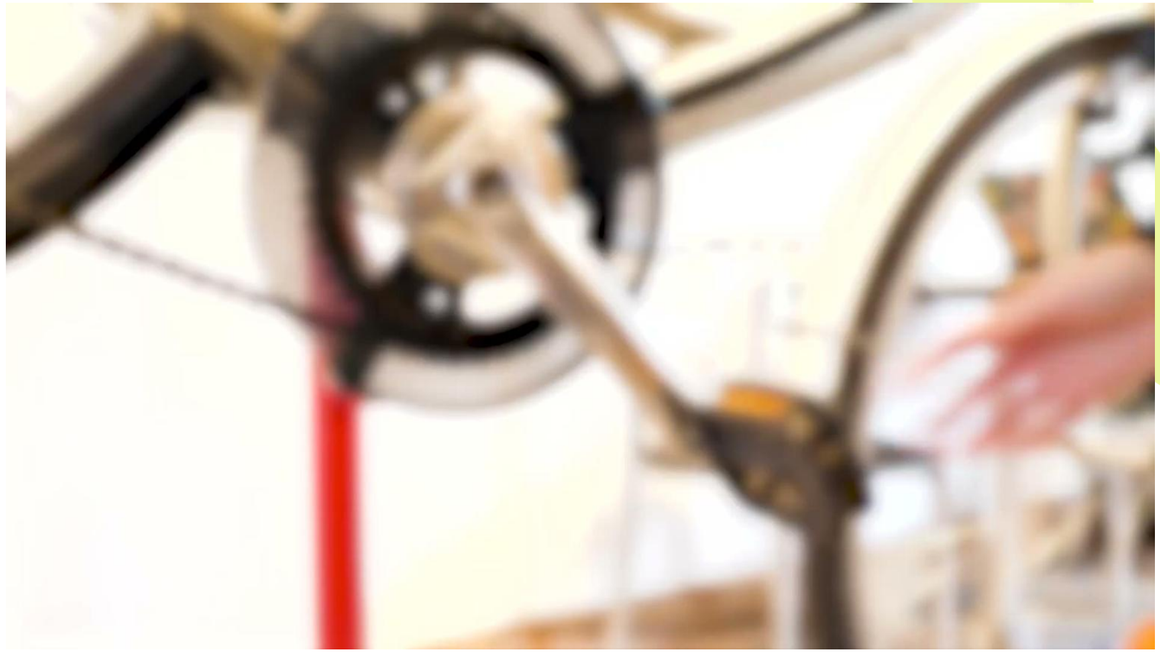


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C is for Cranks too (pedals)

Check moving parts

- Cranks and pedals should not be loose
- No rust or loud noises



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Cleaning and lubricating your bike

A clean and lubricated bike is safer and lasts longer :

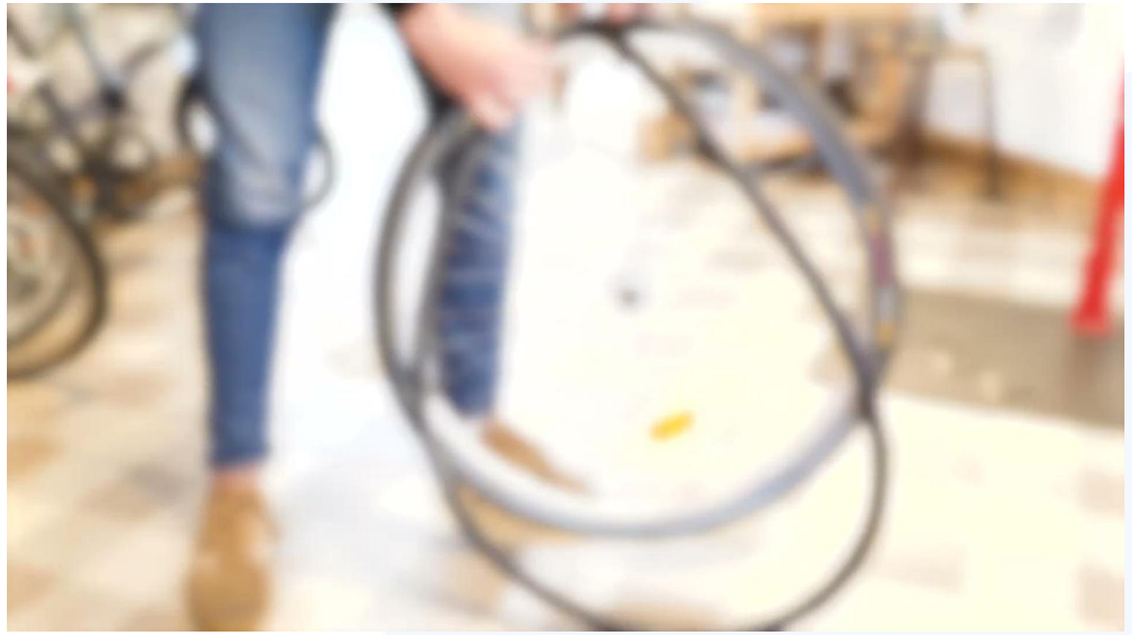
- Use water and mild soap
- Use a cloth or soft brush
- Avoid high-pressure water
- Oil the chain only
- Wipe off extra oil
- Never oil brakes or rims



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Know your limits!

There are small reparations, maintenance and cleaning that you can do yourself (such as changing the inner tube of your tyre: see video) but you need to go to a professional when it gets too difficult or when you need specific parts.



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Module 5

Confidence in the street



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Module 5

Overview

This module bridges the gap between structured training environments and the chaotic reality of urban streets. Designed specifically for disadvantaged youth migrants, refugees, and people with disabilities, it builds the psychological and physical confidence needed to cycle as equals in traffic.





Street Diplomacy

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The Invisible Cyclist Problem



Key Insight:

An inexperienced cyclist spends most of their mental energy simply maintaining balance, leaving almost none for monitoring road dangers. This imbalance is dangerous.

The Syndrome:

Most accidents happen when a cyclist hesitates and becomes unpredictable to other drivers, not when they make a technical mistake. Hesitation = Danger.

Goal of this module: Make physical movements habitual so cyclists can focus on evaluating road situations.

1.1 Psychology of Fear & Positive Reinforcement

Fear of traffic is not only a physical danger, it is a serious psychological obstacle for vulnerable groups.

What Happens in Fear

- Cognitive and motor skills FREEZE
- Risk of accidents increases sharply
- Migrants & refugees especially affected
- Body tenses → reduces reaction time
- Tunnel vision narrows perception

Positive Reinforcement Method

- Never criticize a mistake directly
- Praise every small success loudly
- Example: 'Great braking at that corner!'
- Build confidence step-by-step
- Gradually introduce real-world scenarios

DID YOU KNOW?

10–15%

of urban cycling accidents caused by car doors opening (ROSPA)

1.5m

minimum safe distance ECF recommends from parked cars

75%

of bicycle accidents occur at intersections (European Commission)

54%

of adults (16–50) ride bikes, vs 98% of children 5–15 — fear is the gap

The Art of Communication

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Essential Hand Signals for Cyclists

Communicate your intentions BEFORE you act, every time, every maneuver

LEFT TURN



Extend left arm horizontally to the left

RIGHT TURN



Extend right arm OR bend left arm up at elbow

STOP / SLOW



Extend left arm down, palm facing backward

HAZARD AHEAD



Point downward at the hazard with your left hand

Managing
Real-World Risks

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2.1 Navigating Complex Intersections

75%

of bicycle accidents occur at intersections

Eye Contact First

If you cannot see the driver's eyes in the mirror, they cannot see you. Never proceed assuming you are visible.

Look → Signal → Position → Move

This sequence must become automatic for every single maneuver at any junction.

Beware Blind Spots

Never ride beside trucks or buses at red lights. Drivers often don't check side mirrors when turning right.

Take the Lane

At narrow junctions or roundabouts, riding in the center of the lane prevents dangerous overtaking attempts.

The PAS Protocol, British Red Cross (2023)



PROTECT

Move yourself and your bicycle out of the traffic lane. Create a safe perimeter around the accident scene. Signal to other road users.



ALERT

Call emergency services immediately. Dial 112 (EU universal number). Report the exact location clearly, describe the situation and number of people injured.



SUCCOUR (Help)

Do NOT move an injured person. Speak calmly and clearly. Ensure they can breathe. Manage their stress. Stay with them until help arrives.

First Aid: Common Cycling Injuries

21%

Road Rash & Burns

Do NOT apply cream immediately. Lightly cover the area to prevent infection. Keep the wound clean.

High

Arm Fractures

When falling, we instinctively extend arms. If arm is broken or bent at odd angle — do NOT straighten it. Immobilize it until help arrives.

Severe

Unconsciousness / CPR

If cyclist loses consciousness and has breathing difficulty, begin CPR at 100–120 compressions per minute until ambulance arrives.

Winter

Hypothermia Risk

For cyclists stranded in cold after accident or breakdown, a gold foil emergency blanket should always be in your kit.

Consistency & Co-existence

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3.1 Stress Management: De-Escalation Techniques

Driver aggression is one of the most common situations in urban environments. React wrongly and the situation worsens.

1

Power of Not Reacting

Responding to an aggressive driver ALWAYS makes the situation worse. Silence is your weapon.

2

Breathe & Break Eye Contact

Take a deep breath. Break eye contact with the aggressor. Calmly continue on your way.

3

Step onto the Sidewalk

If any real threat exists, immediately move to the sidewalk and wait safely for the driver to pass.

4

Signal Clearly to Explain

A hand signal transforms driver anger into understanding, 'Oh, they're turning, not randomly slowing.'

Eco-Intelligence: Green Routing

The shortest route on the map is not always the best route for cyclists

✓ GREEN ROUTE (Recommended)

- Parks, cycle paths, quiet residential roads
- Dramatically reduced traffic interaction
- Cleaner air — better lung health
- Lower stress and calmer mental state
- Safer for beginners and vulnerable groups
- WHO-endorsed mental health benefits

✗ SHORTEST ROUTE (Risks)

- Main roads with heavy vehicle traffic
- High cognitive stress — constant alertness
- Air pollution — carbon-filled environment
- Aggressive driver behaviour more likely
- Higher accident risk at busy intersections
- Psychologically exhausting for beginners

QUIZ · Question 1 of 2

You are cycling on a narrow street and there is no safe space for a car to pass.

Which position is safest?

A Riding to the corner / edge of the road

B Riding on the sidewalk

C **Staying in the middle of the lane**

D Stopping and getting off the bike immediately

QUIZ · Question 1 of 3

You are cycling on a narrow street and there is no safe space for a car to pass.

Which position is safest?

A Riding to the corner / edge of the road

B Riding on the sidewalk

C **Staying in the middle of the lane** ✓ CORRECT

D Stopping and getting off the bike immediately

QUIZ · Question 2 of 3

What is the minimum safe distance from parked cars to avoid a door collision?

A 0.5 metres

B 1.0 metre

C **1.5 metres**

D Distance doesn't matter if you're going slow

QUIZ · Question 2 of 3

What is the minimum safe distance from parked cars to avoid a door collision?

A 0.5 metres

B 1.0 metre

C **1.5 metres (ECF Recommendation)**

D Distance doesn't matter if you're going slow

Exercise: Fill in the Blanks

If you can't see the driver's eyes in the mirror, you're probably in their _____

?

The most effective way to reduce conflict on the street is to make your driving style _____

?

You should make _____ before entering any intersection _____

?

Hand signals are a way to convey your _____ to other road users _____

?

Taking a deep breath and ignoring rude behaviour is a form of conflict _____

?

Exercise: Fill in the Blanks

If you can't see the driver's eyes in the mirror, you're probably in their _____

Blind Spot

The most effective way to reduce conflict on the street is to make your driving style _____

Predictable

You should make _____ before entering any intersection _____

Eye Contact

Hand signals are a way to convey your _____ to other road users _____

Intentions

Taking a deep breath and ignoring rude behaviour is a form of conflict _____

De-escalation

Thank You

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