

# The REM and Safety:

## How to Educate Your Students?



### After the video, have a conversation with your students!

Use this guide to engage young people in a crucial talk on safety around the REM (Réseau express métropolitain).

The REM is a neighbour who brings new habits to bear during our commutes. It also introduces new reflexes into the daily lives of young people to ensure their own safety around the REM's infrastructure. This document will guide you in delivering safety messaging to your students.

#### REM Highlights

Understanding the REM will help you talk about it better.

Here are its key features, which will provide you with the context you'll need for an effective discussion about safety:



**System Type:** Electric light metro

**Automation:** The REM operates at the highest level of automation in the world (GoA4). This means that there is no driver on board. The system is supervised 24/7 by a control centre.

**Speed:** In some places, the REM can reach a maximum speed of 100 km/h.

**Frequency:** During peak hours, the REM will run very frequently, as much as every 2 minutes and 30 seconds, in both directions.

**Power supply:** The REM is powered by an overhead catenary system (electrical wires) that carry 1500 volts of direct current.

# Two Unforgiving Risks on the Tracks

Stepping onto the REM's tracks inevitably carries two major risks.

## Electrocution: An invisible danger

The REM's power supply system is extremely powerful and running at all times. The current is carried in overhead electrical cables (the catenary), but also in ground cables in different electrical troughs and boxes.



**High voltage:** The catenary carries 1500 volts, or about 15 times more than a standard domestic outlet.

**A hazard, even without contact:** Direct contact is not necessary for an electric shock to occur. If a person or object (bag, stick or even a liquid) comes within three metres of the tracks, an electrical current will occur and cause serious or even fatal injuries.

 **Remember:** The current is invisible and silent.


## Collision: Force that can't stop on a dime

The REM doesn't escape the laws of physics: REM trains cannot brake instantly.



**Braking distance:** At a speed of 100 km/h, a REM car needs more than 300 metres to come to a complete stop.

**Striking analogy:** This distance is equivalent to the length of 20 school buses lined up behind each other.

 **Remember:** With REM cars running as much as every few minutes in both directions, a REM car can arrive faster than you think. Plus the tracks are never really empty, even at night! Maintenance vehicles may be running.

# Technology, Consequences and Discussion

## REM security technology

### The REM can detect intrusions by a number of means:

#### Intrusion detection systems:

REM tracks are under high surveillance. Under the fences are fibre optic cables that pick up the slightest vibration:

Incredible, but true: The system is sensitive enough to detect groundhogs.

#### Constant surveillance

The entire network is protected by anti-intrusion fencing and monitored by video cameras connected to the control centre 24/7 and a security and control team that criss-crosses the network.

#### Rapid response

In the event of an intrusion, a signal is sent to the control centre. Operators can intervene by stopping REM cars from running and by sending in response teams.



## Not only is it dangerous, it's also illegal

Trespassing on REM tracks can lead to significant immediate legal consequences.

#### Heavy fines

Fines for trespassing on REM tracks can be as high as several thousand dollars.

#### Legal proceedings

Trespassing on the tracks also means being subject to prosecution and therefore a criminal record.

### The shame of it all!

Picture it: The police arrive, a huge fine is issued, and your parents hear about it. That's nothing to celebrate!



# Ideas for classroom discussion and takeaways

Open the discussion with impactful questions

## Get the conversation started:

"What information struck you the most in this video?"

"Why would anyone be tempted to cross the tracks? And why is this a fatal mistake?"

"How would you react if a friend dared you to cross the REM tracks to 'go faster'?"

"The video explains that the REM's braking distance is equivalent to the length of 20 school buses. Why is it important to remember that?"



## 3 safe behaviour rules to follow when around REM tracks

1

### Avoid going onto the tracks.

To cross REM tracks, you should only use designated passage-ways, such as bridges, tunnels or walkways.

2

### Do not cross fences: Fences save lives.

Crossing REM anti-intrusion fences means crossing the line between life and death. It's illegal and it can be deadly.

3

### Did something fall onto the tracks? Contact us!

If an object (ball, phone, etc.) falls onto the tracks, call the REM teams. They recover lost objects and you stay safe.

## For more information

Website: [rem.info/en/safety-around-rem](http://rem.info/en/safety-around-rem)

Emergency Line/Information: 1-833-REM-INFO (736-4636)

