

## INTRODUCING STAY OFF THE TRACKS KS4 RESOURCE

### Stay off the Tracks – KS4 films (Overhead live wires and electric rail)

These two Stay off the tracks films have been developed in collaboration with the rail industry and aim to illustrate some of the dangerous consequences of interacting improperly with the rail environment.

There are two films within this resource. Both films use either special effects or prosthetics to demonstrate the severe injuries that can occur when someone comes into contact with electrified parts of the railway environment – either from the overhead live wires or the electric (third) rail. Both films feature a Specialist Burns Nurse who helps to explain the immediate physical consequences, and long-term medical impacts for survivors to help reiterate the importance of staying off the tracks and following railway safety rules.

**This resource has been designed and is appropriate for the KS4 audience (14-16 years old). We also have a version of this resource for KS3 audience (12-14 years old) that your students may have previously seen. This film follows a similar structure and delivers similar learning outcomes, but is accompanied by differing activities.**

**It is important to note that both films contain content warnings, graphic imagery and deal with sensitive issues, such as injury and death. This should be communicated to pupils, and parents can be given details of where to watch the film if they would like to pre-check content.**

## LIVING SWITCHED ON

This resource is a part of our Living Switched On suite; a programme designed for 12-16-year-olds.

Young people often make responsible choices around the tracks but there can be times when independent decision-making can be compromised. Living Switched On has been designed to help young people aged 12-16 explore a range of themes such as peer pressure, the perils

of group mindset and how at times accidents happen as a result of small bad decisions rather than one big mistake.

Living Switched On encourages young people to gain the knowledge that could keep them safer around the tracks, whilst also exploring the impact ripple that rolls out across communities and the rail industry workplaces when accidents happen.

**We can all enjoy life's adventures when we spot signs of danger, look out for our friends and always stay Switched On.**

All other resources in the Living Switched On (12-16) programme can be found on the [Switched On website](https://www.switchedonrailsafety.co.uk).

## CURRICULUM LINKS

### KS3 & KS4

- **PSHE**
  - Health and wellbeing: self concept, drugs, alcohol and tobacco, managing risk and personal safety.
  - Relationships: Relationship values, social influences
- **Citizenship**
- **English**
  - Reading, spoken English
- **Science**
  - Physics

### S1-S5

- **PSE**
  - Health and wellbeing: self concepts, drugs, alcohol.
  - Managing personal safety and risks, relationships.
  - Social influences
- **Citizenship**
- **English**
  - Reading and talking
- **Science**
  - Physics

These resources can also be used within SMSC planning and delivery.

## WHY IS THERE A NEED TO INCORPORATE RAIL SAFETY INTO YOUR TEACHING?

There are 20,000 miles of track, 30,000 bridges, tunnels and viaducts plus thousands of signals, level crossings and stations across our rail network. There are more than 19,000 trespass incidents on the tracks every year.

Learning to hazard spot and address potentially dangerous behaviour is crucial at any age. Schools have recognised the importance of teaching a range of safety behaviours through PSHE and Citizenship lessons in school. The rail industry wants to support this vital work.

## HOW TO RUN THE ACTIVITIES AT SCHOOL

This resource has been designed to be flexible and easy to use with a range of options for delivery. This teacher guidance document contains tips for delivery/ a loose script that can be adapted by educators to best suit the needs of their learners.

**This lesson is suitable for a PSHE lesson (or small series of lessons) focused on Rail Safety.**

## RESOURCE OVERVIEW

NAME OF RESOURCE	FORMAT	LEARNING OUTCOMES
Stay off the tracks – KS4 films	<ul style="list-style-type: none"><li>VFX Overhead live wires film</li><li>Prosthetics electric (third) rail film</li><li>Transcripts for both films provided in PDF format</li></ul>	<ul style="list-style-type: none"><li>I can identify and explain the dangers of interacting unsafely with electrified railway infrastructure, including overhead live wires and the electric (third) rail.</li><li>I can analyse why some young people take risks around the railway and identify factors that may influence unsafe behaviour.</li><li>I can evaluate the possible short-term and long-term impacts that electrocution could have on a person's physical health, wellbeing, and everyday life.</li><li>I can explain the key safety messages communicated and consider how effectively these messages influence young people's behaviour.</li></ul>

## HOW TO RUN THE ACTIVITIES IN OTHER SETTINGS

We're aware that youth groups and families may also want to use the materials. Specific guidance has been provided where appropriate within the lesson plans.

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## GETTING STARTED

- Resources can be accessed via the [Switched On website](#). Living Switched On also incorporates films and activities from You vs Train, an existing Network Rail resource warning about the risks of trespassing on the railway
- Living Switched On hosts a range of resources from films to quizzes and group discussions we recommend that educators familiarise themselves with the content and plan an appropriate approach for their students

## RESOURCE GUIDANCE

### STAY OFF THE TRACKS – KS4 FILMS

#### Overview

This teacher guide will walk you through the delivery of the **Living Switched On - Stay off the tracks KS4 films** for 14-16-year-olds, giving prompts and questions to aid delivery and learning.

**Film 1:** (Visual Effects (VFX) and overhead live wires) shows a Visual Special Effects Designer demonstrating the effects on a body when it comes into close proximity of the current from the overhead live wires, which power some trains. It is created in consultation with a Specialist Burns Nurse, who explains how electricity can cause severe burns and serious internal damage to the body. The film discusses the long-term medical consequences for survivors, with clear warnings to stay off train tracks and follow railway safety rules.

**Film 2:** (Prosthetics and electric (third) rail) shows a Special Effects Makeup Artist re-creating realistic injuries, to show what could happen if someone touches an electrified rail. Once again, it is created in consultation with a Specialist Burns Nurse who explains how electricity can cause severe burns and serious internal damage to the body. The film discusses the long-term medical consequences for survivors, with clear warnings to stay off train tracks and follow railway safety rules.

#### Supporting resources and equipment required

- Stay off the tracks KS4 film – Prosthetics and electric (third) rail
- Stay off the tracks KS4 film – Visual effects and overhead live wires
- Interactive whiteboard / projector and computer connection
- Transcripts for both films
- Paper and pens
- If available (and appropriate) devices for groups to rewatch their group allocated via (non-essential)

#### Timing

Minimum 1 x 60-minute lesson

If educators want to spread this out, this can be turned into 2 x 45-60-minute lessons if curriculum time allows.

#### Home learning tips

The film can be used as home learning, with students responding to questions rather than undertaking discussions. Discussion may take place between the home educator and the student, or questions can be used for individual written reflections.

## ACTIVITY

#### Starter activity

- Provide a content warning ahead of starting this lesson:
  - While these films use VFX (visual effects) and prosthetics (stage makeup) it is important to note that it deals with serious issues and injury that some may find upsetting. This should be communicated to students, and parents can be given details of where to watch the film if they would like to pre-check content.
- Explain that the purpose of the films is to highlight the dangers of interacting with the railway unsafely, particularly where electricity is used to power trains.
- Before watching the films, cue students' attention to the following questions:
  - **Which parts of the railway are presented as dangerous if they are interacted with unsafely?**

## – Why are these parts of the railway particularly dangerous?

- Watch both films through with students as a whole class. Students should make notes whilst watching the film in response to the above questions.
- If useful, provide students with the transcript for analysis.
- Time should be given after watching the film to analyse the transcript, highlighting or noting any key points.
- If appropriate, the films may be played more than once.
- Following the film, check for understanding as a class and reinforce the two specific parts of the railway discussed:
  - **Overhead live wires**, which carry high-voltage electricity above trains
    - » You may want to point out this is sometimes referred to as ‘overhead cables’ or ‘overhead line equipment’.
  - **The electric (third) rail**, which carries electrical current through the rail itself
    - » You may want to point out this is sometimes referred to as the ‘third rail’, ‘electric rail’ or ‘conductor rail’
- Discuss briefly how electricity from both systems can cause severe injury or death, even – in the case of the overhead live wires – where someone does not always directly touch the source of the electricity.
- To help you facilitate this discussion see additional key information below:
  - **Overhead live wires** – You do not need to touch the electric live wires to get electrocuted. The electrical voltage (25,000 volts) is so strong it can ‘arc’ – or jump – up to 3 meters.
  - **Electric (third) rail** – The electrical current will grip you and hold you in place, meaning you’re unable to escape. You will only be able to get away when the electricity is turned off.

## TASK 1

### RISKS WITH THE RAILWAY

- Highlight one of the key messages of the films:  
**Each year several young people are seriously injured or killed while trespassing on the railway.**
  - **Take this opportunity to clarify what trespassing is:**
    - » Certain parts of the railway, including stations, underpasses and level crossings, are open to the public. But if you step on the railway track, the land next to the track, or any area near the railway that isn’t open to the public, you are trespassing. It is dangerous and illegal. You could be taken to court and face a £1,000 fine.
- Students should first reflect independently on the following questions, before discussing their ideas with a partner or small group.
- **Discussion questions:**
  - **Why do some young people take risks around the railway?**
  - **What factors can influence risky behaviour in teenagers?**
  - **Why might some young people underestimate the dangers shown in the film?**
- Where possible, draw from specific examples highlighted in the films initially, before drawing on other examples that the students may wish to consider. Possible themes that may arise in discussion include:
  - Peer pressure and wanting to impress friends
  - Social media trends or recording dangerous behaviour for attention
  - Thrill-seeking or wanting excitement
  - Curiosity or lack of awareness about the real dangers
  - Lack of rail safety knowledge due to not being taught it, not living near a railway, or complacency (having been regularly exposed to the railway environment)
  - Believing accidents “won’t happen to them”
  - Lack of understanding as to what trespassing

- is and when they might be doing it
  - Copying peers' or adults' behaviour
- Following paired discussion, gather responses as a class and record key ideas.

## TASK 2

### CONSIDERING THE IMPACT OF INJURIES SUSTAINED THROUGH CONTACT WITH ELECTRICITY

- Ask students to imagine the potential consequences if someone were electrocuted after trespassing on the railway.
- Firstly, students should work independently to draw out the examples from the film of where there are specific physical impacts on someone who has been electrocuted, so that they have a clear evidence base for their discussions.
- Working in pairs or small groups, students should discuss the following questions:
  - **What could be the biggest impact on your life if you were seriously injured in this way?**
  - **What changes might happen to your daily life or future plans?**
- Students may wish to consider the following prompts to support their self-reflections:
  - Bring the class back together and call on different pairs to hear their ideas/responses. Ensure all of the points listed at the bottom of this page were considered and understood.
  - Students should then create their own individual written responses to the two questions listed above, to consolidate the learning.
  - Culminate in a class discussion, reflecting on the following question:
    - **Does thinking about the long-term consequences of this type of injury change how you view the risk of trespassing on the railway? Why or why not?**
  - Finish this task by deciding as a group what is the key thing to do to avoid the severe consequences outlined in the films.
    - **Answer:** Always follow the signs present, don't go where you're not supposed to and stay off the tracks.
      - » To extend this activity you may want to recap on some of the signs present that are designed to prevent these dangerous interactions – including the 'Danger – overhead live wires', 'No entry', or 'No trespassing' signs.
      - » If students lack knowledge or need a reminder on the key signs present around the rail environment, you can try other Switched On resources, like the [Sight-seeing: Are you Switched On quiz](#).

Physical impacts	Impact on lifestyle and independence	Emotional and social impacts
<ul style="list-style-type: none"> <li>• Death</li> <li>• Pain</li> <li>• Severe burns and visible scarring</li> <li>• Long-term damage to organs or nerves</li> <li>• Long recovery periods in hospital</li> </ul>	<ul style="list-style-type: none"> <li>• Activities or hobbies you may no longer be able to take part in</li> <li>• Changes to school, work, or career opportunities</li> <li>• Relying on others for daily tasks</li> </ul>	<ul style="list-style-type: none"> <li>• Changes to confidence or self-image</li> <li>• Effects on friendships or relationships</li> <li>• Long-term trauma or mental health challenges</li> </ul>



## TASK 3

### ANALYSING THE SAFETY MESSAGES

- Working in pairs, students should analyse how the film has chosen to present this information.
- Discussion questions:
  - **Why have they chosen to use visual effects or prosthetic makeup rather than real footage?**
  - **Why have they chosen to include a Specialist Burns Nurse in the film?**
  - **What effect does the expert contribution have on how impactful the message is?**
  - **What emotions are the films trying to create in the viewer?**
- Students should consider how the film tries to influence behaviour through both facts and emotional impact.
- Following paired discussions, bring the class back together to discuss responses. Possible points to draw out and emphasise are:
  - Animation and prosthetics allow difficult topics to be shown safely and responsibly
  - Expert testimony adds credibility and authority
  - The film aims to create emotions such as shock, concern, and caution

## PLENARY

- Ask students to reflect on the overall message of the film:
  - **What do you think are the most important warning messages the rail industry wants young people to understand?**
  - **How effective do you think this film is at communicating these messages?**
  - **Has watching the film changed how you think or feel about safety around the railway?**
- Students may share their reflections verbally or record a short-written response.
- Wrap up this lesson by reiterating that the railway environment is safe as long as you follow the rules and signs present and stay off the tracks where appropriate.

### Differentiation

**For learners with lower cognitive or literacy skills who would benefit from additional support or a slower pace of learning** you may wish to draw on resources from the 'Switched On for every journey' programme, which are designed for students aged 7-11. These revisit key rail safety messages in a more supported and accessible way.

### NEXT STEPS

If you're looking for other ways to teach rail safety to your students head over to the wider [Switched On website](https://www.switchedonrailsafety.co.uk) for more resources and activities!

