

Advice on Use of level crossings with horses

The law and management of public access rights vary widely between the four countries of the United Kingdom. Practical elements of the following advice apply in all countries but the legal requirements in Scotland and Northern Ireland may differ from those in England and Wales.

More advice is available on bhs.org.uk/accessadvice.

IMPORTANT This guidance is general and does not aim to cover every variation in circumstances. Where it is being relied upon, The Society recommends seeking advice specific to the site.

Summary

A highway includes a public road, byway open to all traffic, restricted byway, bridleway or footpath.

Closed gates at a level crossing warn highway users that they are entering a different environment (the operational railway) where they need to exercise greater care.

Riders and carriage-drivers (equestrians) should always follow any relevant signage and notices and must obey any warning lights or instructions from the railway controller.

Be alert all the time on the railway and do not spend unnecessary time on the railway.

If you have used the lineside phone to ask for permission to cross, **always phone again after crossing** so that the railway controller knows you are clear of the crossing.

Where the level crossing gates are not self-closing, ensure all gates are closed after use and confirm that this is the case where there is a phone.

Crossing while mounted or leading

Network Rail advises riders to dismount when using any level crossing. This is because the rails carry a small electric current which operates the signalling, and a horse with metal shoes could receive a mild shock if it should stand on both rails of a set at once, which could cause it to react abruptly. The risk is probably low in most instances, but riders should be aware of the possibility.

It is essential to dismount where the railway is electrified with overhead lines, including from some horse-drawn vehicles. See [Overhead electrified railways](#) below.

On non-electrified railways, dismounting and leading may be the safest way to use the crossing and some riders may prefer it; however, other riders will feel they have more control when mounted and are more vulnerable leading, as a led horse might snatch the reins free and put people in danger by being loose on the railway. The Society therefore is of the view that whether to dismount or not is at

the rider's discretion with knowledge of their horse and their assessment of the risk, not just to themselves, but also to those on trains.

Crossings should be provided with mounting blocks to facilitate dismounting and remounting. The local highway authority and Network Rail should be requested to provide them if there are none and there is known equestrian use, however, they are likely to have to be sited on land outside Network Rail's ownership, so their installation will be at the adjacent landowner's discretion.

Crossings where gates are open except when trains are passing

At the majority of public road level crossings the gates or barriers are closed only when trains are passing or approaching. Equestrians are expected to cross without delay, while obeying any traffic signals or instructions.

Where they are provided, lineside phones at these crossings are aimed at drivers of long or slow vehicles and are usually sited on the right-hand side of the road so they can easily be seen by HGV drivers. Equestrians could be in danger from oncoming traffic should a situation mean they need to use the phone.

N.B. There are remote crossings without gates where users must obey any signage or traffic signals and/or any audible warning (which may only be the train's horn being sounded as it approaches) and must assure themselves that there is no train approaching before crossing. Where a train is approaching, the user must ensure they wait in a safe position away from the white stop line until the train has passed.

Level crossings where gates are normally closed

At crossings on roads, byways open to all traffic and restricted byways where gates are normally closed across the highway, there may be a single gate for all users, or a wide vehicular gate and a side gate for pedestrians. In the latter situation, equestrians are expected to use the vehicular gate which will have catches, which are commonly difficult to open from horseback; so the lone rider will spend more time on the railway shutting one gate and opening the far one. They may have to dismount while on the crossing. This is inherently unsafe as spending time on the open railway increases the risk from trains, especially where there is no phone provided to contact the railway controller.

At such a site, Network Rail should be asked to replace narrow pedestrian gates with bridleway standard gates (see BHS Advice on Gates on [bhs.org.uk/accessadvice](https://www.bhs.org.uk/accessadvice)) or to ensure that catches on wide gates can be easily operated from horseback. There should be bridle gates on bridleways unless there is also private vehicular access, in which case the previous point applies.

Groups of three or more horses, especially if they are unable to phone the railway controller, should have one rider dismount, leave their horse with another rider and open the far gate first, then cross back to open the near one, let the horses cross and close the gate now closest to the horses, then finally close the first gate. This reduces the risk of a horse going onto the crossing too soon or back onto the crossing.

Each person is responsible for their own safety each time they cross the railway. The dismounted rider and each member of the group should check for any train approaching before stepping on to the crossing and to continue watching for trains whilst crossing.

If the group is too large to cross together, cross in twos or threes, ensuring that a lone horse is not separated from the others by the railway. Keep checking for trains all the time.

If you are under the instruction of a railway controller, having used the crossing's phone, you may need to contact them again if there is a delay. **You must phone again to say that the line is now clear** when everyone has crossed and that the gates are shut.

Carriage-drivers using any gated route must be accompanied by a competent and active groom who will use the phone and open and close gates for the outfit. Any carriage-driver who attempts to use a level crossing without a groom is liable to have invalidated their insurance and laid themselves open to criminal charges if there is an incident. At the crossing, the groom should obey any warning signs and use the phone, then, when the line is clear, open the far gate first then return to open the near one. This reduces the risk of the horse(s) trying to move on to the crossing too soon.

The vehicle is then driven across and the groom returns to close both gates, and **must then phone the railway controller** to say the line is clear and the gates closed. If there is automatic signalling, both groom and driver should check the signals each time before going onto the crossing. If there is neither signalling nor phone, both groom and driver should check up and down the line in both directions for a train approaching.

Phones at crossings

Unless there are red-green warning lights, automatic signals or some other control system, there should be (but may not be) a phone on gated crossings to contact the railway controller to:

- Check there is enough time for you/your group/vehicle to cross in safety
- Warn the line controller where there is a potential obstruction—you and your horse—on the line so that trains entering that section can be halted. That is why **it is essential to phone back** when you are clear of the line and the gates are closed.

You must obey any instructions from the controller, even if this means waiting for several trains to pass, and you must phone again when you are safely across.

If there is no phone at any particular crossing, bring it to Network Rail's attention that there are equestrian users and request one to be installed. Whether this is carried out may depend on the

number of equestrians using the crossing, the frequency and speed of trains, the available sighting distance of approaching trains, or whether the crossing is in the [closure](#) programme.

Overhead electrified railways

Electrified 'Overhead Line Equipment' (OLE) is generally 5.2m above the surface of a bridleway crossing; but it can be as low as 4.15m over some crossings and up to 5.6m over public roads.

This may appear to be ample clearance for riders, **but** there is a risk of electric current arcing ('jumping' through the air) from the live wires to a body in its vicinity. The risk of arcing increases in wet or humid weather conditions. Network Rail's operational handbook on overhead electrified lines (GERT8000-HB16) confirms a general safety distance of no nearer than 2.75m from any part of a person to the overhead line equipment.

The arcing zone reduces the safe height clearance for crossing users, potentially to as low as 1.4m and to a maximum of 2.85m.

The top of the head of a rider of a horse of 16.2hh is approximately 2.75m from the ground, therefore the head of riders (and some horses) may be within the arcing zone of the overhead lines at the lower end of the range of equipment height.

The height of overhead lines at any crossing cannot be assumed. Therefore, Network Rail will insist that riders dismount to pass under electrified lines, and will display signs at public bridleway, restricted byway, byway and some road crossings of electrified lines stating "Riders Must Dismount". The BHS supports this advice. Mounting blocks should be provided and Network Rail should be asked to do so where there are none (however, as they are likely to be sited on land outside Network Rail's ownership, their installation may be at the adjacent landowner's discretion).

Where the OLE is at full height over a road there is still the potential that if a horse was to rear, its head or the rider's head could be within the arcing zone, or if the rider of a large horse was to stand in the stirrups or raise an arm or whip overhead. The United States Department of Agriculture (USDA) records the maximum height of an uncontrolled rear, from ground to head, as up to 3.6m for larger horses. The likelihood of a horse rearing, or a rider raising an arm, may be very low; but at 25,000 volts, electrocution would be fatal, especially for a shod horse, which might have a foot in contact with the metal line. Such an incident might also cause a train to derail.

Electric shocks from the overhead line equipment emanating from the ground should not occur. Any incident attributable to electric shocks from the ground of the crossing should be reported immediately to Network Rail by calling their 24 hour helpline: 03457 114 141 or via the online contact form at <https://communications-crm.custhelp.com/?overlay=FormSelect> (and to the BHS using its General Incident Report Form on bhs.org.uk).

Increased rail electrification across the country will lead to greater frequency of trains and higher speeds and acceleration after a station or hazard. Some closure of level crossings to ensure safety will therefore occur (see below).

Reporting difficulties

If you encounter any difficulty using a level crossing you should contact Network Rail. Their emergency 24 hour helpline number is 03457 114 141. A phone number may also be provided at crossings that have lineside phones to contact the controller. Issues such as slippery boards, damaged gates or faulty phones are usually very promptly resolved. Relocating or installing phones takes longer.

If there are concerns about a wide gap between board and rail that could be a trip hazard or catch a horse's hoof, contact Network Rail immediately on their 24hr helpline number.

Sightlines in each direction need to be as long as possible. Network Rail should be requested to cut back intrusive vegetation if it would improve sightlines.

Specifications

User operated bridle gates at level crossings and side gates on vehicular routes must:

- Open one way—away from the track—so users do not walk unaware into a potentially dangerous environment and so that users spend as little time as possible on the railway.
- Not all gates have a catch as this delays users getting off the crossing while they operate it. Catch-less gates can be opened in a straight line without the turning manoeuvre at the line-side which would be needed to operate a catch.
- Have a clear width of at least 1.5m between the gate posts to comply with the law on bridleway gates. Gates on byways open to all traffic, restricted byways and roads should be a minimum of 3m but 1.8m may be acceptable where there is a Traffic Regulation Order in place to limit use. A 1.8m gap is intended to permit use with horsedrawn vehicles but not four wheeled motor vehicles (see BHS advice on Vehicle Barriers [bhs.org.uk/accessadvice](https://www.bhs.org.uk/accessadvice)).

Bridle gates will also need to:

- Be gently self-closing against the clapper post in no less than eight seconds
- Stay shut in all conditions of wind and gravity so the next user realises they are entering a potentially unsafe environment. This should be achieved mainly via the hinge mechanism but catches, such as magnets, that do not need operating can help, provided they are not too strong for an elderly or child rider to counteract easily from horseback. Weights are not acceptable as a closing mechanism as the horse can balk at or get caught in these as they move, bang or rattle and delay crossing or leaving the track
- Have 1.2m space for the horse's head and neck beyond the clapper post between 1.2 and 3m from the ground (i.e. above normal fence height)
- Have 4m by 4m manoeuvring space alongside the gate to allow the horse to move as its rider pulls the gate open and turns to go through it. This should include enough room beyond the

hinge for the horse to approach the hinge end of the gate and turn to stand parallel to it with the rider next to the clapper post, ready to pull the gate open

If the recommendations regarding manoeuvring space and obstructions cannot be achieved due to site limitations, a representative from The British Horse Society should be asked to visit the site. A catch-less gate may need less manoeuvring space beyond the clapper post than is required for a gate with a catch.

Livestock control and level crossings

Keeping livestock off the railway whilst ensuring equestrians, cyclists and pedestrians have easy and safe exits from the crossing may be difficult to reconcile. Where there is livestock, the Society recommends that a corral is constructed with a stock-proof gate, easily operable from horseback, at the field end. This should open one-way, into the field. It is recommended that there should be at least 8m between the two gates and a width of 5m, more if space allows, and particularly if the route is used by groups as everyone needs to get off the line quickly. Mounting blocks will be needed for re-mounting at crossings where riders habitually have to dismount. They should be built to the left-hand side of the path leading away from the crossing and according to the specification in the Society's Advice on Mounting Blocks (see bhs.org.uk/accessadvice).

Phones

Where a phone is provided at a crossing it should be located near the gate onto the track and be:

- At a height of at least 1.4m where it can be reached from horseback above a post and rail fence (usually works for both riders and those on foot)
- With at least 1.5m, preferably 2m clear space each side of the phone for a ridden horse to approach and stand side-on so a rider can use the phone and eventually turn away. This will normally be part of the 4m² manoeuvring space by the gate
- Hands-free intercom type phone if possible. If not, a phone should have a cable long enough to reach the rider while mounted, even if the horse fidgets. Remounting to be in control while crossing the line would take valuable time after using the phone.

Unfortunately, phones inside a 'cupboard' with a door that needs holding open are standard and are currently unable to be replaced with weatherproof phones which would be easier for a rider to use.

If there is a phone, but it is inconveniently situated, then Network Rail should be asked to relocate it so that it is easy and safe to use. The convenience of other users may have to be considered in the siting of phones.

Permitted routes that include level crossings

Network Rail's consent would be required for permitted use of a private crossing, whether for a single event or ongoing, because additional protection measures may be needed. Authorisation is likely only under stringent conditions so careful consideration must be given to any proposal to use a crossing which is not a public bridleway, byway or road. Consultation with Network Rail and the Society is strongly advised at the earliest stage of any proposal. If consent was not given, Network Rail may hold the landowner responsible for any unauthorised use of the private crossing. Many incidents on the railway have occurred through careless use of private crossings and some have resulted in prosecution of the landowner or occupier.

The Society would advise that where private access rights over a crossing are considered for use by permission or licence, it is strictly limited to a specific group of riders, such as the clients of a single livery yard, not the general public, so that regular reminders may be issued about safe use of the crossing.

Closure of level crossings

To increase rail safety and minimise train delays due to incidents, and also to increase train speeds and number of trains, Network Rail is working to eliminate level crossing risk to 'as low as reasonably practical' (ALARP); however, the greatest risk reduction is achieved primarily through their closure and removal. Seeking the stopping up of a public right without proposing a suitable and safer alternative (albeit that may be longer) is Network Rail's last option and a crossing carrying public status will not be closed without following the statutory process; including full consultation of the proposals.

New processes and procedures have been discussed between Network Rail, (IPROW) and (ADEPT) and have been implemented with Defra and DfT agreement. Discussions continue with highway authorities about this process where strategic lines and high-risk crossings are being targeted first. Local Access Forums (LAFs) should ask to be kept informed and give advice where necessary.

Equestrians who currently use level crossings and equestrian representatives on LAFs should ensure that bridleway, byway and minor road crossings are not closed without acceptable alternative provision. It is not acceptable to divert equestrian users onto a road bridge, for example, unless the road has limited motor traffic speed and low volume. A diversion incorporating an existing or replacement bridge or underpass should be suitable for combined pedestrian, cycle and equestrian use. The Society's access officers also need to be consulted on proposed closures.

Some crossings will be closed sooner than many others but, even if closure is imminent, Network Rail and the highway authority have a duty to ensure that crossings are as safe as practicable in the meantime.

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