

BHS Statement

The majority of off-road¹ routes can and should accommodate all non-motorised vulnerable road users – equestrians, cyclists and pedestrians. None of these users should be excluded and forced onto carriageways with the increased danger to them and to motorists. All non-motorised vulnerable road users need safe off-road routes wherever possible.

The Society welcomes the [Government's policy](#), expressed by Richard Benyon in 2011, that highway authorities and other providers should accommodate horse riders as well as cyclists and pedestrians on all off-road routes where it is practicable. The Land Reform (Scotland) Act 2003 gave statutory access rights to most land for all users in Scotland and such an approach should be followed in respect of cycle routes in England and Wales.

- Routes that cater for all non-motorised vulnerable road users represent best value.
- Off-road routes reduce the number of vulnerable road users (including equestrians) on the roads, increasing safety for everyone and reducing congestion for motorists.
- Ease of access for people with impaired mobility is increased by shared use paths. Many people who ride could not walk or cycle.
- Equestrians, walkers and cyclists have comfortably shared use of paths in urban and rural environments for the last century since bicycles became commonplace.
- If all possible routes are promoted as shared use, not as 'a cycling route', but inclusive of all non-motorised users, it creates acceptance of other users and consideration of all needs.
- The number of horse riders on most cycleways is likely to be few compared with cyclists and pedestrians but the route may be crucial for those users. They are likely to avoid times which are busiest for cycling.
- Horse riding has considerable [health benefits](#) and equestrians should not be prevented from enjoying open air exercise and recreation by failure to provide safe routes.

The number of horses on most shared use or 'cycle' tracks is likely to be few compared with cyclists and pedestrians but the route may be crucial for those few horse riders. Equestrian use of cycleways should not be forbidden unless there is particularly cogent reason for doing so.

¹ 'Road' refers to classified roads predominantly used by mechanically propelled vehicles, not unclassified unsurfaced roads primarily used on foot, horse or cycle.

Government Support

The former Minister for Natural Environment and Fisheries, Richard Benyon MP, endorsed this view and supported the inclusion of ridden horses on cycle / multi-user paths. This position remains Government policy.

In a [letter to Anne Main MP](#) in June 2011, Mr Benyon asked why horse riders were not permitted to use a route known as the Alban Way which was being promoted as a cycle track. He urged all local authorities to allow horse riders to use cycle trails, routes and any other ways where it was in their power to do so, and to encourage that permission or dedication to happen where it was not in their power.

It can be argued that a mix of user types slows down the speed of individuals and encourages use by all user groups. Fast cyclists are intimidating and dangerous to other users, even if they too are cycling, and especially if they are elderly, accompanied by small children or dogs, or have impaired mobility, vision or hearing. The presence of horses can slow down fast cyclists to the benefit and increased safety of all other users. Sustrans have issued a 'Share with Care' leaflet aimed at cyclists who have scant regard to other users. Horses at speed can be very frightening to users not accustomed to them, and every opportunity should be taken to educate users into the danger they pose to others and the need for consideration of everyone.

Common Concerns

Concerns about whether to include equestrian users on shared use routes or cycle paths are:

- Assumption of Conflict – Incidents of real conflict are rare and on investigation are usually found to be perceived rather than actual conflict or arising from lack of understanding of who may use the route or lack of consideration for others. The solution is to better educate all users and promote understanding and tolerance by shared use on all routes. The more common shared routes are the less misunderstanding and intolerance will arise.
- Width – There are many bridleways which are less than 3m wide and shared by riders, cyclists and pedestrians without problems. Occasional passing places or refuges may be feasible even if the whole length cannot be wider. There are unlikely to be so many horses as to make narrow routes impractical but including horses could save lives.
- Cost of surface – Surfaces suitable for all users can be provided at a lower cost than tarmac, and even a non-slip tarmac surface off-road is safer for equestrians than motor roads. Horses are unlikely to have a detrimental effect on a surface which would be provided for cycle use.
- Cost of barriers – Barriers to prevent motor vehicular use but permit all other users are used successfully at relatively low cost.

- Horses' droppings pose [no hazard to human health](#) and quickly disperse. Where horse use is high, providing an unsealed surface for part of the width and encouraging riders to use it or to keep to one side can be effective so that the other side will be dung-free.

False perception of conflict which does not exist

Equestrians, walkers and cyclists share paths comfortably throughout the country in urban and rural environments, including bridleways, restricted byways and byways in England and Wales, and on many routes in Scotland. Amicable sharing has occurred on some multi-user paths for over a hundred years so there is no reason to exclude horses from the majority of paths. Much of the insistence that horses are excluded appears to be a reflex response based on lack of familiarity with horses and assumption of a conflict that simply does not exist, as is proven by the decades of horses sharing paths with pedestrians and cyclists and the many promoted shared routes in the country.

There is no evidence of significant conflict between different user groups. A research study by the Countryside Agency published in 2003 on how people interact on off-road routes showed that actual conflict is a rare occurrence. Investigation has usually found that there is a lack of understanding of who may use the route or basic lack of consideration for or tolerance of others, such as occurs every minute on roads between drivers, drivers and cyclists, and drivers and horse riders. The Society supports better education of all user groups to promote understanding and tolerance by issuing and publicising codes of conduct such as that already developed for horses and cyclists.

Width

Circumstances vary and every route should be considered independently on its own merits and potential benefits for increasing safety by taking horse riders off roads. A less than ideal width may be acceptable where a narrow off-road route is safer than the alternative road. Passing places and frequent attention to vegetation or adjacent hazards to ensure the full width is available at all times may be adequate mitigation along with promotion of sharing and tolerance between all users.

Lack of availability of a 3m width (insisted upon by some based on the Rights of Way Act 1990 for paths on arable land) should not mean that equestrians are automatically excluded from a cycle route. There are many bridleways that are less than 3m which are shared by riders, cyclists and pedestrians without problems. Occasional passing places or refuges may be feasible even if the whole length cannot be wider.

Horse riders tend to avoid times when a cycle route is busy which reduces their impact on cyclists, e.g. during commuter periods.

Cost of surface

Surface requirements for shared use routes are described in detail in the Countryside Agency publication aimed at *"helping everyone to respect, protect and enjoy the countryside"*.

There are [surfaces](#) suitable for all users which can be provided at a lower cost than tarmac so this is not a reason for excluding horses.

Horse riders would normally use a hard surface at walk or possibly trot if no other users are around. These speeds are unlikely to have a detrimental effect on a well-drained and compacted or sealed surface. Local BHS access officers or bridleway groups can be involved in raising funds, if necessary.

Cost of barriers

Barriers to prevent motor vehicular use but to permit all other users exist and are in use without excessive cost. Simple horse stiles are effective, and even more so are horse stiles with three bars rather than the British Standard two. Various barriers are described in the Society's advice note 'Gaps, Gates and vehicle barriers'.

Horses' droppings

The deposition of [horses' droppings](#) on a popular path is often given as a reason not to permit horses. However, unlike dog faeces, horses' dung contains no pathogens and poses negligible risk to human health (or that of dogs). Providing softer vegetated strips within the width of a route can encourage horse riders to use those strips which would therefore leave hard surfaces free of droppings. Signs and promotion could strongly encourage horse riders to use the respective strips only for the purpose of minimising contact with droppings by other users.

Fear of horses

Understandably, some people who are unfamiliar with horses are fearful of them. This situation is little different to a fear of dogs and is no reason to exclude horses from paths. Indeed, there are likely to be more incidents recorded involving with dogs than horses. It should be noted that many people are delighted to encounter horses while they are out, especially those with children who may be fascinated by the animals.

Education

The best designed path is useless if its users have no idea of their responsibilities in its use. Perception of conflict and the rare actual conflict appears to arise from misunderstanding about which users have a right to be there and their needs.

Education of all users about what to expect on a path and how to accommodate other users is a primary requirement.

Promotion of codes of conduct or visitor charters can be very successful in avoiding perception of conflict. [Durham Railway Paths Visitor Charter](#) is a good example.

Inclusivity

Women are widely under-represented in most forms of exercise for many reasons but 73% of riders are female and the health benefits of riding and being with horses are well understood by those who are involved with them. This is supported by the [study on Health Benefits](#) performed by the University

of Brighton in partnership with Plumpton College. For many women who ride, the work associated with keeping a horse and riding are their only exercise but it is good all-round exercise with many benefits for both mind and body.

Further Resources

BHS [Code of Conduct for riders and cyclists](#) (pdf)

BHS [Supporting Equestrian Use of Cycle Routes](#) (National Cycle Network, Sustrans)

Devon County Council researched multi-use routes prior to producing its ROWIP [Executive summary for multi-use routes](#)

Countryside Agency produced [On the right track: surface requirements for shared use routes](#) – a good practice guide for surfaces and other information

Surfaces

A working group of the CSS (County Surveyors' Society then, now ADEPT, a local authority organisation of highway engineers) wrote a [report on bridleway surfacing](#) in 2004.

Tarmac (stone mastic asphalt SMA)

There is often high pressure to tarmac shared use routes for the benefit of cyclists and wheelchair users. This disadvantages horses and should be opposed on bridleways or byways unless there is cogent reason for tarmac, such as where equestrian use is minimal or unlikely (should not be assumed because no one has seen a horse or because it is judged not accessible to horses), or ground conditions are such that even tarmac would be better for equestrians than the existing surface. In most situations, it should be possible to tarmac one half of the width while leaving the other half, or centre, as a softer surface for horses, see Shared Use Surfaces.

On all routes there are sealed surface options that are acceptable for all users, potentially with less effect on adjacent drainage and much more aesthetically appropriate in rural situations (see BHS advice on [Surfaces](#)) but they may be more costly and funding may not be available.

Note : While tarmac is usually acknowledged by local authority rights of way officers as far from ideal for horses, it may be the cheapest option and as local authority budgets for rights of way decrease, alternatives will not be possible unless someone is able to raise the funds to contribute to providing a horse-friendly surface.

Report of study by University of Surrey on conflict on shared use routes [part 1](#) and [part 2](#) published by the Countryside Agency. Although the report focuses on walkers and cyclists, riders are mentioned. The conclusion of the report is very useful to bear in mind:

"The results of the behavioural observation demonstrate that actual conflict is a rare occurrence. The questionnaire survey supported this and found that perceived conflict too was extremely low. Even

when people recalled their route experience later, it was not seen as conflictual, although perceived conflict was recalled as higher than when in the route environment. It is only when people talk about conflict that the incidence, or assumed incidence of conflict escalates and appears to be more serious. Therefore, in the scenarios and focus groups, conflict emerged as a serious issue, although it was not considered a serious problem. We conclude, therefore, that the discussion and focussing of attention on conflict serves to escalate its perceived existence."

[Dung](#) is a frequent argument against horse use, but is not harmful.

Examples of Shared Paths

The examples of paths shared by horses, cyclists and walkers and others below show that shared use paths and trails:

- have been in use for many years throughout England,
- have been developed in both rural and urban situations,
- continue to be developed and promoted.

These are promoted routes, many of them promoted primarily for cycling, but in use by horses and pedestrians as well and support the case to include equestrians anywhere. Many use disused railway lines. Their rights vary: some being a mixture, others permissive. Bridleways, byways or unclassified roads are not specifically included but some routes may incorporate such rights in part.

[Railway Paths, Durham](#): over 100 miles on 11 paths, in use since the 1990s, with a further four paths under development for walkers, wheelchair users, horse-riders and cyclists. [Charter](#) to encourage responsible use. No substantiated evidence of conflict.

[The Derbyshire Greenways](#): 22 shared use trails for walkers, cyclists, horse riders, prams and mobility scooters.

[Monsal Trail and Tunnels, Peak District](#): 8.5 miles, opened in 1981 and extended in 2011, for walkers, cyclists and horse riders, funded by the Dept of Transport, with a code of conduct.

The Camel Trail, Cornwall: 18 miles, claimed to be the most successful recreational multi-use trail in the UK with 400,000 users each year providing access for walkers, joggers, cyclists and horse riders. Running through a Site of Special Scientific Interest (SSSI) and Special Area of Conservation (SAC).

[Downs Link, West Sussex](#): 37 mile shared use route links the North Downs Way at St Martha's Hill, Surrey with the South Downs Way near Steyning, West Sussex, disused railways.

Whitby-Scarborough Railway Line: permissive bridleway, successfully multi-user for many years owned by Scarborough Borough Council. Dedication as bridleway was close to completion in late 90s but stalled because of liability for bridges (roads over the line) and access from those roads. Subsequently, access points have been designed for pedestrians and exclude horses. Adoption as Sustrans route has meant furniture and 'improvements' excluding horses.

Moors Mineral Line Ingleby Greenhow to Blakey, North Yorkshire: disused line much used by cycles. Bridleway. Majority use by cycles but useful link for horses. No problems.

Pennine Bridleway: 280 miles in total with the Mary Towneley Loop 47 miles. The Loop is used by many groups for races, cyclists, relay race for fell runners etc. Bit of a pain but only a few Sundays a year.

East Riding Railway Routes: gradually being dedicated as bridleways after long term multi-use.

[The Meon Valley Trail, Hampshire](#): 11 miles with parts open to walkers, cyclists and horse riders. Part of the Meon Valley Trail was being trialled for carriage drivers as well and is believed to be still available available to them.

[Chiseldon to Marlborough Railway Line, Wilts](#): approx. 7 miles in use since 1988 for walkers, runners, cyclists and horse riders

[The North Dorset Trailway](#): 7.5 miles, open since 2002, for walkers, runners, wheelchair users, horse-riders and cyclists. Further developments underway. This multi-user track has 'so far proved that there is no conflict between the users, despite the views of certain people who perceived that walkers and horse riders should be segregated'.

[Great Central Way, Leicestershire](#): a suburban route with the length outside the City boundary dedicated as bridleway.

The [Brampton Valley Way](#), Northamptonshire: uses the old Market Harborough to Northampton railway line. Part of it carries the Midshires Way (Ridgeway to Pennine Bridleway) riding route. One stretch goes through a tunnel and horses are supposed to go round but the stony ground in the tunnel means it is possible to hear a horse approaching.

[High Peak and Tissington Trails, Peak District, Derbyshire](#): 17 and 13 miles.

Peterborough Green Wheel: Promoted as cycle route. Check whether horses can safely use all of it but I am pretty sure it was intended as a multi-user route. It may be that there have always been physical problems – very damp around Peterborough with lots of big roads and railways

Milton Keynes: The extensive off-road network within Milton Keynes separates horses, walkers and cyclists, on parallel strips with the horse side having a softer surface (grass over hoggin).

Great Northern Railway Trail, Bradford: Early agreement that it would be multi-user and now several years old. The surface is mostly sealed, but there are wide grassed margins. Some parts well used by horses, usage is mostly walkers and cyclists. Biggest problem is dog fouling. The section currently being built will provide the only off road route for bridleway users locally. Joins Calder Aire Link, which is a Pennine Bridleway feeder route.

[Worth Way, West Sussex](#): 7 mile shared-use route, from Three Bridges to East Grinstead, mostly past railway

[The Shipwrights Way, Hampshire](#): 60 miles under development since 2011 for walkers, cyclists, horse riders and the mobility impaired. From the project officer: Sections not open to horses: mainly two sections where there are footpath level crossings of rail lines; we have permission for dismounted cyclists to use them but for horses they have to leave a much longer time to cross, which slows the line speed and affects the timetables so they weren't willing to give this permission. There are also some sections where we have shared use pavement through towns and alongside a dual carriageway which, while technically available to horses are not particularly appealing to use by horse.

[Bournemouth Castlepoint shopping park](#): a bridleway which follows the eastern boundary.

Great Central Way from Glen Parva to Leicester – a suburban route. Leicestershire dedicated the length outside the City boundary as a bridleway. There is no problem with it being a bridleway in Leicester City and horses can almost reach the city centre.

Northumberland and Tyneside wagonways (mainly disused railways) 90% bridleways (considered so by authority even if not yet definitive), most part surfaced bitmac for cycles and wide grass verge or dust strip for horses. Primary use by cycle, heavy pressure from Sustrans to be foot and cycle only.

[Downland Villages and Ilsley Downs](#) riding routes, Berkshire. Long established multi-user, promoted for riding, bridleways and minor roads

[Letchworth Greenway](#): 21km permissive bridleway around Letchworth for walkers, in parts wheelchair users, cyclists and horses.

Cycle Tracks

Although this advice refers specifically to Sustrans routes (the National Cycle Network), the principles are applicable to any cycle track, whether a segregated part of a carriageway or an independent route.

The British Horse Society (BHS), together with the membership of its Affiliated Riding Clubs and Bridleway Groups is the largest and most influential equestrian charity in the UK. The BHS represents the interests of the 4.3 million people in the UK who ride or who drive horse-drawn vehicles.

The BHS works for safer on and off-road riding and carriage driving through an improved public rights of way network, and seeking to create new opportunities of lawful off road riding and carriage driving, and safer use of our roads by all road users.

The BHS works in partnership with other user groups, including Sustrans, local and central government to make rights of way and other access areas useful and open to all, and our roads safer for all users.

The length of the public right of way network currently amounts to 188,700km, consisting of 146,600km of footpaths, 32,400km of bridleways, 3,700km of byways and 6,000km of restricted

byways. Horse riders therefore, currently only have access to 22% of public rights of way and horse-drawn vehicle drivers only 5%.

Many rights of way are now disconnected from each other because the roads that should connect them are no longer safe for equestrians to use because of the speed and volume of motorised traffic on them, leaving many equestrians without a safe local route to use.

The National Cycle Network (NCN) is now over 13,000 miles long. The Network is not formally designated as part of the highway network, although it does in places coincide with minor highways and public rights of way.

The NCN could make a significant contribution to the safe off road riding that is available to equestrians, who like cyclists are vulnerable road users, in many instances negating the need for equestrians to use heavily trafficked roads to access the equestrian public rights of way network and other areas with equestrian access without the necessity of utilising heavily trafficked road networks.

Richard Benyon MP, Minister for Natural Environment and Fisheries [wrote to Anne Main MP](#) in June 2011 concerning Alban Way, questioning why horse riders are not permitted to use it.

He urged all local authorities to allow horse riders to use cycle trails, routes and any other ways where it is in their power to do so, and to encourage that permission or dedication to happen where it is not in their power. In the Government's view,

"Unless there are good and specific reasons not to expressly allow horse riders to use such routes, local authorities should take steps to accommodate them. Local authorities should be making the most of their off-road networks through integration of use. Multi user routes have been shown to be readily adopted and well appreciated by local people. Where they are done well they bolster community cohesion and create a better understanding between users."

Mr Benyon stated further that,

"Horseriders are particularly vulnerable road users, and cycle routes can provide appropriate and important opportunities to avoid busy roads. There is potential for conflict in any situation where people share a public space, but the possibility of conflict is not reason enough to disregard ridden access; actual conflict could be resolved and any misplaced concerns reduced over time."

The BHS agrees with this point of view. Multi user paths represent best value for everyone, users and taxpayers. [Research](#) demonstrates that multi user paths present no unacceptable risk to users. Bridleways of all widths, gradients, sightlines and surfaces have been shared by walkers, horseriders and cyclists since 1968.

In response to the Minister, [Sustrans stated](#) that

"Horses automatically have access to all of the Network which is on the public highway, generally quiet roads, restricted byways and bridleways. Of the 600 miles of the NCN Sustrans actually owns, there are less than 50 miles which horses aren't able to use, and that's mostly because the strip of land in our ownership is either too narrow, or because we haven't developed a route on that land"

yet. Where the NCN runs over land that is not in Sustrans ownership then the landowner determines whether horses can use the path. Where a route follows the course of a bridleway or restricted byway there is a statutory obligation to provide a route that is available for walkers, horses and cyclists to use and in developing the NCN we take this into account."

In response to the Minister's letter to Anne Main, Sustrans queried the additional cost of maintenance relating to equestrian access.

The BHS will work with Sustrans to see if it can have the opportunity to negotiate with landowners who deny access to equestrians as it is believed that in many instances any concerns that exist can be resolved and that access for equestrians could be provided in future schemes.

[Sustrans' Technical Information Note No. 28, 'Horses on the National Cycle Network'](#) states that 3m minimum width should be provided on a shared cycle track/footpath and bridle path with a preferred clearance of 1m on either side of the path. The BHS maintains that horseriders, walkers and cyclists can comfortably pass on a route that has a width of 3m and all can happily coexist on narrower routes with one party giving way to the other as appropriate. Many public bridleways and permissive routes are significantly narrower than 3m, yet reports of it being a problem are very rare; rather it can create a greater feeling of cooperation and tolerance between users.

The BHS believes that Sustrans insistence that they prefer to provide access for equestrians where a 5m width can be provided is unreasonable as this can militate against provision being made for equestrians, and provides an easy excuse not to provide access for equestrians when it could easily be provided.

In Scotland, the Land Reform (Scotland) Act 2003 gives everyone statutory access rights to most land and inland water. This means that horses are allowed on all paths, irrespective of width or surface. This is the approach that the BHS believes Sustrans should follow when providing the NCN in England and Wales.

BHS support for the inclusion of equestrians on cycle routes

- Equestrians are vulnerable road users and every available opportunity should be taken to provide safer off road access for them just as it is for walkers and cyclists.
- Providing routes that cater for all non-motorised vulnerable road users represents best value
- Equestrians, walkers and cyclists coexist very well on bridleways, restricted byways and byways in England and Wales, and on routes in Scotland. There is therefore no cogent reason why this should not happen on cycle tracks
- The lack of a 3m width should not automatically mean that equestrians should not be provided for on a cycle route
- Surfacing should not normally be a reason for not providing for use by all non-motorised users

- All local authorities should implement a general presumption to permit equestrians to use cycle routes along with walkers and cyclists
- Equestrians tend to avoid times when a cycle route is busy
- In Scotland the Land Reform (Scotland) Act 2003 gives everyone statutory access rights to most land and such an approach should be followed in respect of cycle routes in England and Wales.

Dung or Droppings

- Horse dung is mainly digested grass.
- Horse dung is good for biodiversity and is useful in a compost bin in small amounts
- Horse dung is biodegradable
- Unlike dog faeces, horse dung from a healthy horse presents no threat to human health

Horses depositing dung on a popular path is often given as a reason not to permit horses. However, it should be noted that, horses are not ridden out for the purpose of defecating, as may be the case with dogs. Horses defecate approximately eight times a day, that is, once every three hours. Thus, most will not pass droppings when out for an hour's hack.

Horses' droppings are mainly digested grass, are biodegradable, good for biodiversity and a useful addition to the compost bin. Unlike dog faeces, droppings from a healthy horse present no threat to human health. The risk of horse droppings to human health following exposure to horse manure on public rights of way was reviewed by Jane Greatorex, Department of Medicine, University of Cambridge. In brief, a paper prepared in the USA *Does Horse Manure Pose a Significant Risk to Human Health?* by Adda Quinn concluded that the chemical constituents of horse manure are not toxic to humans. Furthermore, the equine intestinal tract does not contain significant levels of the two waterborne pathogens of greatest concern to human health, the parasites *Cryptosporidium parvum* and *Giardia lamblia* and furthermore they do not contain significant amounts of the bacteria *E. coli* 0157: H7 or *Salmonella*. Horse manure is a solid waste excluded from federal EPA [USA] solid waste regulation because it does not contain significant amounts of hazardous chemicals, nor does it exhibit hazardous characteristics. The paper concluded that humans and other sources within the environment (e.g. wild animals and birds) with their overwhelming population numbers are far more likely than horses to contribute to human health risks.

Other studies include a private study by University of Tulane, which concluded that: *"use of horses for recreational riding is unlikely to pose a significant risk of environmental contamination from Cryptosporidium of equine origin nor is it likely to create a significant threat to human health from either of these pathogens"*. A study undertaken by Colorado State University Fort Collins sampling horses on trails concluded *"it can be concluded that the adult recreational trail horse population is not likely to be a significant source of Cryptosporidium environmental contamination in water shed areas"*. A broad search in the scientific literature provided no evidence that horse manure would pose any significant risk to human health when deposited on public rights of way.

However, horses' droppings can be unpleasant if they cannot be avoided by passing feet or wheels, particularly for a wheelchair or on a path frequently used by small children. A [code of practice](#) has been adopted by BHS Scotland and can be used as a basis for local codes of practice to encourage riders to reduce the impact of horse droppings on other users.

If there is still local concern about horses' droppings, and conditions permit, it may be feasible to retain or create a soft surface over part of the path width, suitable for horses, to encourage horse riders to use one side of a route. Thus, the other side will be dung-free. This can be done without a physical barrier or change in surface but, for example, by signs on posts or on the surface that encourage horse riders to Keep Left (for example) and explaining the reason. Alternatively, a central 'green' strip with two outer hard surface strips will encourage horses to use the central strip, leaving cyclists and pedestrians to use the firmer outer lanes. A central strip provides optimum head room for the tallest users (horse riders) on tracks with overhanging vegetation from the sides.

Zoonoses and Horse Manure

Zoonoses is "a disease that can be transmitted from other animals to humans" or "a disease that normally exists in other animals, but also infects humans".

Jane Greatorex, Department of Medicine, University of Cambridge, discusses the risk of zoonoses following exposure to horse manure on public rights of way:

Risk of zoonoses following exposure to horse manure on public rights of way

Two main pieces of evidence:

[Does Horse Manure Pose a Significant Risk to Human Health?](#) Document prepared in the USA for use in Master Planning processes, trail planning/development and other public meetings where horse manure poses significant health risks to humans. Author was Adda Quinn, who was employed with a nationally (US) known research institute for 21 years prior to her retirement. She has done research both on global climate change and contaminated soil and groundwater issues. As a trail advocate, she has provided research results in a variety of regulatory debates, both nationally and locally. This document was used by a group called the California State Horsemen.

Literature search using PubMed on 'horses AND zoonoses;. Kept deliberately broad to find as many references as possible. If you search medical databases on "horses AND manure AND risk of infection" you come up with zero.

1. Review of Does Horse Manure Pose a Significant Risk to Human Health?

Chemicals in horse manure

Primary chemical constituents are the same as harmless household and agricultural fertilizer. Based on its chemical constituents horse manure should not be considered toxic.

Pathogens of concern:

Various references cited:

Summary was that the only organisms that merited further investigation were Cryptosporidium parvum and Giardia Lambila (both parasites). Non fatal. Cause diarrhoea. May cause prolonged disease in the immunocompromised.

Some evidence that foals and their lactating mothers may carry these organisms but they are unlikely to be out hacking on rights of way. No research done on adult animals until 1993.

Private study by University of Tulane, concluded that: "use of horses for recreational riding is unlikely to pose a significant risk of environmental contamination from Cryptosporidium of equine origin nor is it likely to create a significant threat to human health from either of these pathogens".

Size of study was criticised (91 horses). Second study undertaken by Colorado State University Fort Collins sampling horses on trails between the ages of 3 and 30. Of 300 horses only one was found positive for C parvum. He was 24 years old and in poor health. Conclusion of this study was: "it can be concluded that the adult recreational trail horse population is not likely to be a significant source of Cryptosporidium environmental contamination in water shed areas".

Conclusion of the study

Horse manure is a solid waste excluded from federal EPA [USA] solid waste regulation because it neither contains significant amounts of hazardous chemicals, nor it exhibits hazardous characteristics. The chemical constituents of horse manure are not toxic to humans. Horse guts do not contain significant levels of the two waterborne pathogens of greatest concern to human health risk, neither do they contain significant amounts of the bacteria E. coli 0157: H7 or Salmonella.

2. Literature search

Found 216 references. Vast majority concern exotic viral illnesses a) not found in this country b) not transmitted by the faecal oral route.

A single UK reference involving E coli 015:7 in children who visited an inner city open farm in Sheffield. The organism was isolated from a cow, three breeds of pig, two breeds of sheep, two breeds of goat and one horse.

Checked through all the medical literature for "E coli 015:7 and horse" - no references at all. Remainder of European references are to do with consumption of horse meat.

Review article on "Equine zoonotic disease risks in vet medicine" from Canada. Article highlighted several organisms found in sick animals but cited no direct evidence of transmission in majority of cases. Two cases of vet students infected following treating horses for C parvum, some cases of ringworm following direct contact. MRSA following treatment of hospitalised horse.

Reference from South Africa of a gardener who may have acquired a Streptococcal infection from fresh horse manure in his garden but they could not isolate the organism, either from the manure or from his garden.

Conclusion

No evidence in the medical literature that horse manure would pose any significant risk to human health when deposited on public rights of way.

Jane Greatorex November 2006

[BHS Scotland advice note on dung](#)