



Every time you overfill someone else pays for it

KillSpills fourth Annual report to the Prime Minister

The dangers of Diesel spills

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About KillSpills

The KillSpills Team is made up of a number of ordinary bikers. They are nothing special - except in that they share a passion for biking and road safety. The Team comprises: Stephen Edwards, Neil Flitcroft, Josephine Evans, Mark Prichard and Ash Hamid.

KillSpills is sponsored and supported by the British Motorcyclists Federation and we are grateful for the help of Jeff Stone and Anna Zee of the BMF. The day to day expenses of running the KillSpills Campaign are self financed by Team Members. The BMF provide much needed funding to enable the annual KillSpills event to take place and provide press, political and administrative support to the Team. We appreciate this commitment from the BMF, as we could not continue without it. In particular, the BMF have covered the cost of funding the Metropolitan Police for the KillSpills 617 ride on the 26th May 2007.

Acknowledgements

The KillSpills Team would like to thank all the people and organisations that have provided help, support, advice and publicity for the Campaign over the past 12 months. These people know who they are, but are too numerous to list here.

1.0 EXECUTIVE SUMMARY



Who Spills Diesel?....

Someone did here!

Everyone knew someone was responsible for this diesel spill on the A537 in Cheshire (pictured left).

Everyone agreed anyone could have done it, but someone knew who had but, as usual, no one was prosecuted.

No one thought they were responsible for telling everyone about the dangers of diesel spills, but does anyone care?

KillSpills cares and so should you!

4.4 THE FACTS

The following statistics represent headline data relating to oil /diesel spills:

22 people have died on the roads between 2000 and 2005;

595 serious accidents on the roads between 2000 and 2005;

617 Killed or Seriously Injured accidents on the roads between 2000 and 2005;

3,020 accidents resulting in slight injury between 2000 and 2005;

During the period KillSpills have been campaigning:

We have witnessed a **68.6%** reduction in motorcycle Killed and Seriously Injured (KSI) accident statistics as a direct result of oil and diesel on the road surface.

A reduction of **53%** in all KSI and slight motorcycle oil / diesel related accidents,

Conversely, we have seen a **66.7%** increase in all other road users KSI accident statistics as a direct result of oil and diesel on the road surface. This also equates to a **59%** increase in all KSI and slight motorcycle oil / diesel related accidents

Oil / Diesel related accidents in 2005 have cost society **£33,543,280**

- 1.2 We have seen a very impressive reduction in diesel related motorcycle accidents since KillSpills was founded back in 2003, however, this is not the case for all other road users. Why? Is down to the fact that as KillSpills is a motorcycle led campaign which has been publicised by the biking press and biking forums, motorcyclists have become more aware of this danger and react accordingly. If this is true, then KillSpills must attract the attention of the general road going population if we have any chance of reducing all oil / diesel related accidents.
- 1.3 The purpose of this report is to appraise the Prime Minister and media of the excellent work being undertaken by various Companies and organisations, not just KillSpills to remove the dangers of diesel spills from the roads of the UK and to cover the issues that need to be addressed to ensure that oil / diesel related accidents fall for all types of road users, not just motorcyclists.
- 1.4 The purpose of the KillSpills Campaign is simple; we want diesel spill-free roads. 18% of all diesel spill related deaths on our roads are motorcyclists (this has fallen from 25% in the period to 2004). Overall, motorcyclists account for 29% of all diesel spill related accidents (a fall from 33% up to the period to 2004), yet they account for only 1% of road users. This exposes the danger motorcyclists face every day, as skidding on two wheels can in most circumstances result in far greater harm than in the case of four or more wheeled vehicles.
- 1.5 "Awareness and Education - Prevention and Cure!" KillSpills aims to get the anti diesel spill message across through awareness and education and so both prevent and cure the problem.
- 1.6 The campaign is lead by the biking community, as we are the group of road users who are most vulnerable to this danger, however, the figures clearly indicate, that all other road users are susceptible to the dangers of diesel spills. It is by making the biking community aware of this danger that KillSpills believes has helped to reduce the number of oil / diesel related motorcycle accidents. What we need to concentrate on in the coming years, is making the general road using population aware of this danger. This is where KillSpills needs the support of the media.

- 1.7 If diesel users were aware that the action of overfilling their diesel tank could kill someone, they would not do it.

Recommendations

- 1.8 The KillSpills 7 point action plan has been identified to help increase awareness and educate both diesel and road users as to the dangers diesel spills represent by:
1. Ensure that appropriate anti diesel spill leaflets are displayed at petrol stations, depot refuelling points and MOT vehicle inspection centres
 2. Ensure that our recommended amendments to the Highway Code are incorporated into the next revision;
 3. Use the “THINK!” campaign to get the diesel spill message across to the public and transport operators: “Think! DIEsel Spills KILL”;
 4. Continuing to lobby within Europe for European wide resolution of this issue so as to ensure that future generations of commercial vehicles have anti-spill devices fitted as standard;
 5. Encouraging Government Departments and Local Authorities to lead by example, ensuring that their drivers are fully briefed on the dangers of overfilling a diesel tank and or not refitting the filler cap correctly.
 6. Advising the general public to use 999 to report diesel spills.
 7. Issuing guidelines to the emergency services relating to the removal of diesel from roads.
- 1.9 The KillSpills Team have achieved a number of successes over the years. We are represented on two of the four groups tasked with delivering the National Motorcycle Strategy and we sit on the Lancashire Road Safety Partnership Ridesafe Backsafe Group.
- 1.10 The KillSpills Team care about the dangers diesel spills represent to road users. We represent all road users especially motorcyclists. We will continue to campaign until this danger is removed from our roads. We promote “Awareness and Education to deliver Prevention and a Cure”, as it is cheaper in terms of both hard cash and the human cost to prevent a diesel spill rather than clean up the resultant carnage afterwards. What price do YOU put on a road users life?
- 1.11 Accidents cannot be considered as just another statistic. Any serious accident can have life changing impacts on the victims concerned. We can never stop all accidents but we can prevent some from happening. Diesel spill related accidents can, if we want to make the effort, be prevented. Just some simple checks when a diesel user refuels will help. The adoption of a simple float valve in diesel tanks, as deployed in Sainsbury’s vehicles will do the job. These items can be retro fitted to vehicles for around £80. Its not rocket science, just common sense.

- 1.12 This report should be read in conjunction with the reports presented to Number 10 Downing Street by the KillSpills Team on the 11th September 2004 (KS-R1) the 10th September 2005 (KS-R2) and the 9th September 2006 (KS-R3). These reports are available to download from www.killspills.org.uk

Diesel spills kill people, they wreck lives, waste scarce resources, pollute the environment and cause damage to the road surface.

2.0 PURPOSE OF THE KILLSPILLS CAMPAIGN

- 2.1 The purpose of the KillSpills Campaign is simple; we want diesel spill-free roads. It's not a lot to ask, but diesel spills represent a major hazard to all road users and in particular to motorcyclists. The statistics speak for themselves; between 2000 and 2005, 18% of all diesel spill related deaths on our roads are attributable to motorcyclists. 22 road users have lost their life as a direct result of oil / diesel on our roads, this is totally unacceptable!
- 2.2 The KillSpills Team are campaigning to increase public awareness as to the dangers diesel spills represent. Awareness and Education are the corner stones of our campaign, "Awareness and Education to deliver Prevention and Cure!"
- 2.3 We are working with Government, the Highways Agency, diesel users, the manufacturers of anti diesel spill products and the United Kingdom Petroleum Industry Association to make users aware of the dangers of spilling diesel on the public highway.
- 2.4 Diesel users need to realise that they owe other road users a duty of care, and that spilling diesel should be considered as anti social as driving a defective vehicle, drink driving or speeding. Everyone we have contacted agrees that the weakest link in the diesel spill chain is the diesel user; hence education is of paramount importance.
- 2.5 However, it is not just diesel users who need educating, all road users must be aware of this danger and know how to react when they meet a diesel spill on the road. Let's face it, we all know how to drive in the wet, on ice or snow, so why should diesel be any different.
- 2.6 The purpose of the annual KillSpills rallies was to make Government, politicians and the public aware of our concerns as to the dangers of diesel spills. The rally fed the diesel spill debate; its aim was to keep diesel spills in the minds of the public, the press, civil servants and politician's. We believe that without our annual rally the dangers of diesel spills would have continued to be ignored.
- 2.7 Our first rally in 2004 attracted 750 supporting bikes. In 2005, we took 2,500 bikes to Parliament and in 2006 we took 5,250 bikes with us to Downing Street and

Parliament. As a result of this campaigning, KillSpills now sits on several sub groups of the National Motorcycle Council, which are tasked with delivering the Governments National Motorcycling Strategy. KillSpills have over a three year period, organised the three largest motorcycle road safety rallies our great Capital City has ever seen.

- 2.8 The KillSpills campaign is run by motorcyclists. The statistics show that motorcyclists are eleven times more likely to be killed as a result of a diesel spill than a car driver. Whilst we are the most vulnerable group we are actually campaigning for the safety of ALL road users.
- 2.9 For 2007, we have changed tactics. The Government are listening and taking action, and we as a campaigning group welcome this. However, diesel spills are a danger for ALL road users. Our rallies have gained us political support, and opened the necessary doors for us to start to make a difference. We have received wide spread publicity from within the biking community and from the biking press, and this has helped to raise awareness to this danger with motorcyclists, which has had a knock on effect of reducing motorcycle diesel related accidents.
- 2.10 Our campaign has not benefited from a wider exposure that can only be obtained from the general press. Our road safety message has not been picked up by other road users and this must happen if we have any chance of reducing the oil and diesel related accidents for all other road users, whilst continuing to reduce the same accidents for motorcyclists.
- 2.11 The KillSpills campaign also promotes motorcyclists as caring and responsible road users whose chosen form of transport can provide great benefits to road users in general.
- 2.12 The KillSpills campaign will continue, as will our road safety events. We need to keep the dangers of diesel spills on the road safety radar.

3.0 **RECOMMENDATIONS**

- 3.1 As our campaign is centred on “Awareness and Education to deliver Prevention and Cure”, our recommendations look mainly at the prevention of diesel spills (recommendations 1-5). However, despite our best efforts diesel spills can never be completely eliminated from our roads and recommendations 6 & 7 look at ways we can effectively and efficiently render the road safe following a diesel spill.
- 3.2 These recommendations changed little since we started. This is because the solution to the problems of diesel spills is simple - we just need to get the right support to remove this danger from our roads.
- 3.3 Some of our action plan, such as displaying warning signs and informing users, has been adopted by industry. As a Team we salute the companies who take this safety issue seriously. However, with our limited resources, we can only chip away at the tip of the iceberg. We appreciate that the Department for Transport has funded an initial run of 200,000 Anti Diesel Spill leaflets, and we hope that the issue of these leaflets across all UK motorway service stations will commence over the coming 12 months, with the continued support of the DfT and the support of the United Kingdom Petroleum Industry Association (UKPIA)

PREVENTION OF SPILLS

- 3.4 ***RECOMMENDATION 1 - Ensure that appropriate anti diesel spill leaflets are displayed at petrol stations, depot refuelling points and MOT vehicle inspection centres informing users about the dangers of overfilling diesel tanks and/or not refitting the filler cap correctly;***

Justification and Comment:

We have looked into the possibility of displaying anti diesel spill signs at petrol pumps, and have concluded that with the mirage of other warning signs, the anti diesel spill message could easily be lost.

We have designed the KillSpills Anti Diesel Spill leaflet, attached at Appendix 1, which we believe will get our message across to a wide audience if made

available at petrol filling stations, road haulage refuelling depots and at MOT test Stations.

The leaflet covers the causes of diesel spills, how they can be prevented, how road users can spot diesel spills and how they should negotiate these hazards.

We believe that by making these leaflets available to diesel users and the general public at the point of refuelling their vehicle will represent a cost effective way of getting the anti spill message across. Furthermore, truck and bus drivers also drive cars, when they see the leaflet, that they get at work also available at their local garage, then this will re-enforce that the message is to all road users, and that we are not just picking on a small minority of road users, i.e. the road haulage industry

3.637 accidents were caused between 2000 and 2005 as a direct result of oil or diesel on the road {source DfT accident statistics}. This equates to 1.7 accidents every day.

3.5 RECOMMENDATION 2 - Amending the Highway Code to highlight the dangers and publicise the penalties of spilling diesel on the public highway;

Justification and Comment:

The KillSpills Team welcomed the opportunity to respond to the public consultation on the proposed amendment to the Highway Code. Our response is covered in our report of 9th September 2006 KS-3, see www.killspills.org.uk . If our recommendations are accepted, this action point will be complete. We trust that our recommendations will be accepted, and would appreciate any support that the Department for Transport can provide to ensure that our recommendations are adopted.

3.6 RECOMMENDATION 3 - Using the “THINK!” campaign to get the diesel spill message across to the public and transport operators, “Think! DIEsel Spills KILL”;

Justification and Comment:

Over the past three years our campaign has fuelled the diesel spill debate; however there still appears to be a lack of public awareness about the dangers of diesel spills. Whilst motorists are aware of the dangers of drink driving and using hand-held mobile phones whilst driving, they are not aware of the dangers of diesel spills.

We all see the warning signs displayed by the Highways Agency on our motorways that are used to provide road users with up to date traffic information.

These displays are very informative and do we feel have a positive effect on traffic. We would therefore like to see the following also displayed:

Think! Diesel spills kill!

KillSpills believe that if this type of notice is rolled out at the same time as the anti diesel spill leaflets are issued to petrol stations, this will provide a joined up

campaign that will re-enforce the anti diesel spill message. If the press can also be encouraged to promote this, then we have the chance to make a big impact road safety impact at little cost.

3.7 RECOMMENDATION 4 - *We ask that Government lead the debate to provide a European wide solution to the problem of diesel spills, to ensure that future generations of commercial vehicles and other diesel road users have anti-spill devices fitted as standard.*

Justification and Comment:

Sainsbury's fit anti-siphon tanks to their fleet as do the Co-op. This not only prevents the theft of fuel but also stops the vehicle spilling diesel due to filling the tank to the brim. If this can be fitted to existing vehicles, why is it not fitted as standard to ALL new vehicles? We are aware that IVECO have taken the stance of offering anti spill tanks to their entire range of new vehicles, and we welcome this initiative. Anti siphon devices can be retrofitted to vehicles for around £80. Perhaps the Government could offer some tax benefits to encourage to road hauliers to fit these devices.

3.8 RECOMMENDATION 5 - *Encouraging Government Departments and Local Authorities to lead by example, ensuring that their drivers are fully briefed on the dangers of overfilling a diesel tank and/or not refitting the filler cap correctly;*

Justification and Comment:

KillSpills believes that Government should lead by example. Local and Central Government and the associated agencies should display diesel spill warning signs at depot refuelling points and place diesel spill warning stickers on their diesel vehicles themselves. The Highways Agency have adopted this recommendation and are working towards all public service vehicles displaying anti diesel spill stickers by the end of 2008. We welcome this initiative by the Highways Agency.

RESPONSE TO SPILLS

3.9 RECOMMENDATION 6 - *Advising the general public to use 999 to report diesel spills.*

Justification and Comment: keep the same

After four years of campaigning, road users are still unclear as to whom they should report diesel spills to. We have always advocated 999 as a diesel spill could cause a fatality and as a result represents a significant danger to road users. The emergency services can then contact the appropriate agency to ensure the spill is quickly removed.

3.10 RECOMMENDATION 7 - *Issuing guidelines to the emergency services relating to the removal of diesel.*

Justification and Comment: keep the same

Guidelines must be issued to the emergency services with regards to diesel spills. Although diesel spills are now recognised as a hazard in the Network

Management Duty Guidance there are still no Home Office Guidelines to the Emergency Services relating to treatment of diesel spillage we believe that such Guidelines should be immediately introduced.

Action points 1, 2, 3, 5 and 6 are well on their way to being delivered. We have an initial run of 200,000 anti diesel spill leaflets (Action Point 1) and need the help of the petroleum industry and VOSA to now fully deliver this. We have provided comments for inclusion in the new Highway Code and hope that these will be incorporated (Action Point 2), the THINK! Campaign are considering using the overhead motorway gantry signs to display THINK DIESEL SPILLS KILL, they have also given their seal of approval to our anti diesel spill leaflet (Action point 3) and the Highways Agency aim to have every public service vehicle displaying anti diesel spill stickers by the end of 2008 (Action Point 5)

4.0 KILLSPILLS PROGRESS TO DATE

- 4.1 Over the past 12 months the Team have continued very hard lobbying industry, politicians and the media.
- 4.2 Given the success of our 2006 rally, officially, the largest ever motorcycle rally in London, with 5,250 bikes joining the KillSpills team on their journey to Number 10 Downing Street, the Team believe that it would be inappropriate to undertake a similar event in 2007. Furthermore, the lack of media attention to our previous rallies was disappointing. KillSpills have reassessed the impact our mass rallies have made on the media. If we are to make any headway into reducing the alarming increases in other road users oil / diesel related accidents, we need to attract the attention of the general media. We believe that even if we took 10,000 bikes to the Palace of Westminster, this would be treated no differently by the media than our previous rallies. Hence for 2007, the KillSpills 617 ride is aimed at lobbying the media.
- 4.3 We know from our attendance at the sub groups of the National Motorcycle Council that the DfT are taking the issue of diesel spill very seriously indeed. They would not have granted KillSpills a small road safety grant for the production of 200,000 Anti diesel spill leaflets, if this was not the case.
- 4.4 We have spent much of the past year working with the manufacturers of anti siphon / spill products,. We have reviewed their products and commended those companies who we believe are developing the products that will make our roads safer.
- 4.5 We have organised the largest road safety display area at Bikefest UK which is taking place today (26th May 2007) at Donington Park in Leicestershire. We have all the emergency services present, Police Ambulance and Fire, the Highways Agency, motorcycle Advanced Training organisations such as the IAM, Handle it or Loose it and Lancashire Police's Ridesafe Backsafe, together with the manufacturers of anti spill and diesel clean up products. Bikefest UK have brought together manufacturers, race teams and traders to celebrate the best of British Motorcycling. KillSpills were invited to co-ordinate the motorcycle road safety side of the event with the aim of promoting our anti diesel spill message.
- 4.6 To help attract media attention, KillSpills have decided to go for not one but three world records on the 26th May. The organisers of Bikefest UK, Future Publishing,

have given KillSpills exclusive access to the world famous Moto GP race track for 1 hour. KillSpills have decided to hold our annual rally at the track as this is considered to be much safer than taking thousands of bikes through central London. By attempting world records at the same time, it is hoped that this will attract some interest in the campaign from the media.

WORLD RECORD 1 - Longest police escorted motorcycle parade - 617 Bikes London to Donington 87,500 bike miles!

WORLD RECORD 2 - Most different types of motorcycles taking part in a parade - Donington Park 13:30 hours – This is the only one that Guinness World Records will accept, but it doesn't stop us doing the others

WORLD RECORD 3 - Most motorcycles completing a circuit of a Moto GP race track- Donington Park 13:30 hours

- 4.7 KillSpills have produced an anti diesel spill leaflet, attached at Appendix 1 which is aimed at all road users, from lorry and bus drivers to car drivers, motorcyclists and pedal cyclists. The aim of this leaflet is to advise diesel users, that by incorporating simple checks into their refuelling system, they can prevent diesel spills. It aims to make all drivers and riders aware of the dangers of diesel spill, giving advice on how to spot a spill and how to react when you realise that you are actually on a diesel spill. KillSpills welcomes the DfT's support in producing an initial run of 200,000 of these leaflets. These leaflets will be launched at Biekfest UK on the 26th May 2006
- 4.8 Over the past 18 months, KillSpills have built up an excellent working relationship with the Highways Agency. At the specific request of KillSpills, the Highways Agency have incorporated an anti diesel spill message into their "Heavy Good Vehicle" video. KillSpills welcomes this support and input from the Highways Agency. In addition to this, the Highways Agency have taken the anti diesel spill initiative forward. This is discussed in detail in the next chapter.

5.0 KILLSPILLS/BMF AWARD FOR “ACHIEVEMENT IN REDUCING DIESEL SPILLS”

- 5.1 Over the past four years KillSpills has lobbied industry and Government alike. We have made significant progress; doors that were once closed to KillSpills have now been opened. We are in a position to ask questions in very powerful places, and we do. As stated previously, Government and politicians are listening to us, like us, they want safer roads, and we appreciate the support we have received from MPs of all parties, the DfT and the Highways Agency. Industry has played its part as well, over the past year, we have continued to build upon these working relationships, and continue to push the debate on the dangers of diesel spills forward.
- 5.2 There are some fine examples of best practice applied by a number of fleet operators who clearly take their road safety responsibilities to the highest degree. We accept that, work undertaken in preventing diesel spills may be for a financial benefit, i.e. saving fuel, but no one can argue against the positive road safety implications such policies have. Asda and Sainsbury's take this subject very seriously, and both have won the prestigious KillSpills / BMF award for “Achievement in Reducing Diesel Spills”. The Co-operative Wholesale Society, Spar and C.J.Lang and Son were all commended in 2006 for the work they are doing to prevent their vehicles from spilling diesel.
- 5.3 We are pleased to see that some large fleet operators are taking this subject seriously, however, we must identify ways of targeting all fleet operators, and we believe our anti diesel spill leaflet is a cost effective way of achieving maximum penetration in this area.
- 5.4 The KillSpills Team express their sincere thanks to all the Companies who are doing their bit to stop diesel spills.

“Achievement in Reducing Diesel Spills” Award

- 5.5 We have continued the KillSpills / BMF Award for “Achievement in Reducing Diesel Spills”. This award is presented to the organisation we believe is committed to implementing sustainable policies to make our roads diesel spill free. The award, now in its third year, is sponsored by KillSpills and the BMF
- 5.6 Winner:

The Highways Agency-

The winner of the KillSpills / BMF Award 2007 for “Achievement in Reducing Diesel Spills” goes to the **Highways Agency** for the work that they are undertaking to promote the dangers of diesel spills. The Highways Agency have undertaken a number of initiatives to tackle this danger including:

- Inclusion of an anti diesel-spill message into their "Heavy Good Vehicle" video and featuring it in an audio version on a special heavy goods vehicle website, www.heavygoodvehicle.com
- Distribution of 180,000 anti diesel-spill stickers to 42 police forces for onward distribution to road hauliers as part of operation Mermaid.
- Distribution by HM Customs of 85,000 anti diesel-spill stickers (in numerous languages) to lorry and bus drivers entering the country. These will be issued together with an audio version of the Heavy Good Vehicle video
- Distribution of anti diesel-spill stickers to every Fire Service in the Country with explicit instructions that these are to be displayed on all service vehicles
- Display anti diesel-spill stickers on all Highways Agency's vehicles and the vehicles of contractors and sub contractors
- Distribution of anti diesel-spill stickers to all Local Authorities later this year
- Aim to have all public service vehicles displaying anti diesel-spill warning stickers.

We are therefore pleased to announce that the **Highways Agency** have won the 2007 KillSpills / BMF Award for “Achievement in Reducing diesel Spills” in recognition of the work they do to make our roads safe from this danger.

5.7 The Companies commended by KillSpills / BMF in 2007 are:

TISS Anti Siphons Limited – have developed a product that can be retrofitted to vehicles to prevent diesel spills. The TISS fuel anti siphon device is fitted to the entire fleet of Sainsbury's vehicles.

Truck Protect Ltd - have developed a product that can be retrofitted to vehicles. Their InstantFit Neck-It!® device takes only 1-2 minutes to fit and retails at £79.50

Solution Specialists Ltd – have developed a method of refuelling busses that not only prevents the overfilling of the diesel tank but also leaves sufficient room for the expansion of the diesel.

Ross Environmental – for their products which are proven effective in the treatment and disposal of oil and petroleum based spillages. Not only do their products provide the means to treat spills, their products are also biodegradable and so safer for our environment

IVECO – have taken the stance of offering anti spill tanks to their entire range of new vehicles, and we welcome this initiative.

A Thank You to Local Councils and the Police

KillSpills have had reports of local council's quick response times to cleaning up diesel on the road when it is reported. We would like to thank the UK's council's for their positive action toward this.

We would also like to show our appreciation to the police for their understanding of the dangers of diesel spills, their willingness to support us and to help remove them from our roads.

6.0 DIESEL SPILLS – CAUSATION FACTORS AND IMPACT ON ROAD USERS –

6.1 The circumstances that cause diesel spills together with photographic evidence are covered in detail in the KillSpills reports KS-R1 paragraphs 4.5 to 4.9 on pages 3 and 4, KS-R2 paragraphs 4.2 1 to 4.2.5 page 4 and KS-R3 Section 6 pages 18 and 19.

6.2 In summary, Diesel spills occur for a variety of reasons;

The driver might:

1. Fill the tank right up to the filler cap (known as “necking it” in the trade);
2. Leave insufficient room for the expansion of fuel in hot weather
3. Not refit the filler cap correctly;
4. Forget to refit the filler cap;

or

As the result of a vehicle mechanical failure.

6.3 As simple as it sounds, diesel spills occur as the result of very simple oversights. This is why our campaign concentrates on Awareness and Education as these will in turn Prevent and Cure the diesel spill problem. Our anti diesel spill leaflet is aimed at targeting all road users with the aim of making them aware of this danger.

6.4 Our previous reports have shown how the surface resistance is significantly reduces when diesel is deposited on the road surface, Diesel is slippier than rain, and when the two are added together, the result is a deadly mix, as slippery as black ice. In the wet, diesel shows up as a rainbow colour as shown in the picture on the right.



6.5 Our previous reports also show how diesel breaks down the road surface, melting the tar and causing cracks and potholes in the pavement. A study in Australia “Degradation of Asphalt due to diesel impacts” by Brian Baldwin has, following laboratory tests, shown how diesel spills impact on the strength of the asphalt and also how the surface friction is reduced by as much as 68% following a diesel spill. Mr

Baldwin states there is a major impact on asphalt strength occurs in the first 14 days following a diesel spill, and the strength of the road surface continues to degrade for the next four months. Furthermore, the impact of rutting, caused by vehicles wheels is significantly increased.

- 6.6 Two samples, of asphalt were used to assess the impact diesel has on the rutting (grooving) of the road surface. A wheel tracking pressure of 700N was used for 5000 cycles. The control sample, with no diesel spill produced a rut 2.34mm deep. The second sample, which had experienced a diesel spill created a rut of 15.34mm over the same cycle. Mr Baldwin's research suggests that diesel spills need to be treated quickly if the strength of the road surface is not to be compromised.

- 6.7 Motorcyclists are all too well aware of the dangers diesel spills represent. They can have you "off" in an instance. Diesel spills are found at bends, junctions, roundabouts, bus stops and corners, anywhere where heavy braking can cause fuel to slosh around in the tank. If a filler cap is missing, or if the seals are not effective, fuel will be deposited on the road! Diesel shows up on a dry road as a wet dark patch as shown in the picture on the right



- 6.8 The picture to the right shows the damage diesel can do to the road surface as a result of the diesel sitting on the road for a long time. The diesel acts like a solvent and melts the tar. This in turn loosens the top layer of chippings and with the continuous passage of traffic, they become dislodged. Once this starts, a pot hole is born. Add to this winter salt, rain and freezing temperatures and the road disintegrates!



- 6.9 Once the vehicle skids on diesel all control is lost. A car can possibly recover; a motorcyclist is likely to lose control. On right hand bends, the rider will hit roadside furniture, kerbstones, trees etc. On a left hand bend, the rider could end up under the wheels of a vehicle travelling in the opposite direction.



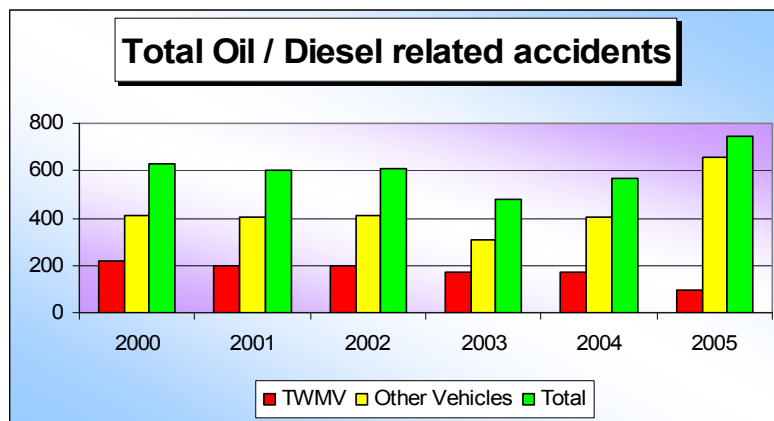
- 6.10 Diesel spills cause severe damage to the road, they are a waste of a



scarce resource, pollute the environment and sadly devastate people's lives. Diesel spills ARE dangerous and in this day and age of technological advancement, SHOULD NOT HAPPEN! Thankfully there are Companies like those mentioned in the Section 5, who are doing their bit to prevent diesel spills. It is now Government's role to act.

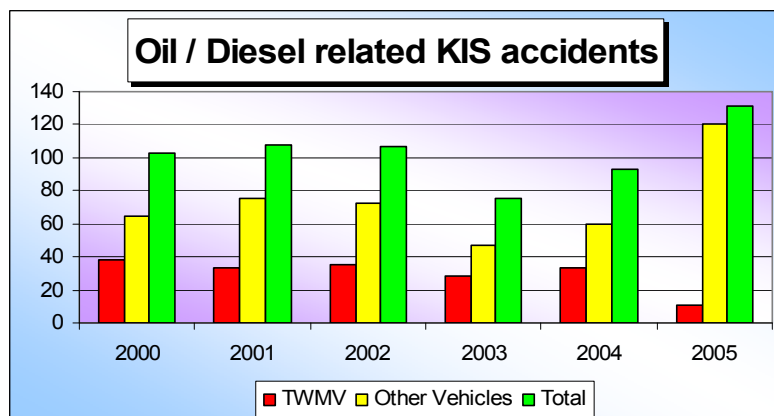
7.0 **DIESEL SPILLS – ACCIDENT STATISTICS**

- 7.1 The accident statistics used below have been provided to KillSpills by the Department for Transport. We thank the Department for providing us with the information we required to compile this section of our report.
- 7.2 The Government has issued each Police force with a guideline to reduce fatal accidents by 40% by 2010. **We need pro-active action if diesel related accidents are to be reduced.** Nationally motorcycle riders have been identified as a vulnerable road user group and the Department for Transport has introduced publicity materials to raise awareness of the problem.
- 7.3 KillSpills believe that the true significance of oil / diesel spill accidents are not fully reflected in the figures discussed below. Could some accidents reported as occurring on wet / damp roads actually be attributable to a diesel spill? Furthermore, some riders and drivers will skulk off after a minor diesel related accident where no other vehicle was involved. If this is the case, then the statistics discussed here are significantly understated.
- 7.4 The graph below [Figure 1] summarises total oil / diesel related accidents for the years 2000 to 2005. This graph shows an interesting trend, which is repeated in the subsequent graphs. For the years 2000 to 2002, oil / diesel related accidents remained relatively constant with total accidents amounting to just over 600 per year. In 2003 we experienced a fall in accidents for all road users. This falling trend has continued for TWMV (motorcycles), however, it has been reversed for all other road users, to the extent that, overall, in 2005, there were a total of 748 oil / diesel related accidents which is over 19% higher than the 2000 figure. From 2000 to 2005 motorcycle oil and diesel related accidents have fallen from 216 to 94 a reduction of almost 57%. During the same period, oil / diesel related accidents for all other road users, increased from 412 in 2000 to 654 in 2005, an increase of almost 59%. As we say, the trend is interesting. Why are oil/diesel related motorcycle accidents falling whilst those of other road users are increasing?



[Figure 1 source DfT Accident Statistics]

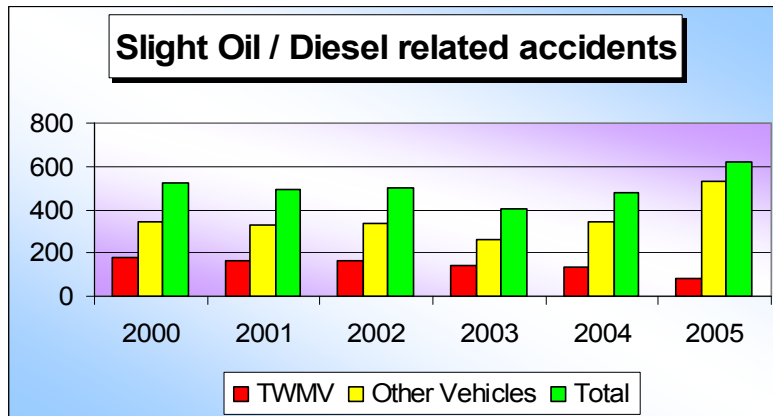
- 7.5 There have been a total of 22 deaths on our roads from 2000 to 2005 resulting from Oil and diesel on the road surface. Four of these fatalities or just over 18% represented motorcyclists. This shows an improving trend for motorcyclists 25% of fatalities during the period 2000 to 2004. However it must not be forgotten that motorcyclists are still at a significantly greater risk than other road users given that they make up only 1% of the road using population. The sad thing is that in the main, spilt diesel should not be on our roads. And if it were not, then some of these people would still be alive today
- 7.6 Figure 2 below summarises the total Killed and Seriously Injured accident statistics for the years 2000 to 2005. This shows the same trends as in figure 1.



[Figure 2 source DfT Accident Statistics]

- 7.7 In 2005, there were a total of 131 oil / diesel related KSI accidents which is over 27% higher than the 2000 figure. From 2000 to 2005 TWMV KSI oil and diesel related accidents have fallen from 38 to 11 a reduction of over 71%. During the same period, oil / diesel related KSI accidents for all other road users, almost doubled from increased from 65 in 2000 to 120 in 2005.

- 7.8 Figure 3 below summarises the total slight accidents recorded as the result of oil / diesel on the road surface.



[Figure 3 source DfT Accident Statistics]

- 7.9 Again, we see the same trend with motorcycle oil / diesel slight accidents reducing significantly and those of all other road users increasing. In 2005, there were a total of 617 oil / diesel related KSI accidents which is almost 18% higher than the 2000 figure. From 2000 to 2005 motorcycle KSI oil and diesel related accidents have fallen from 178 to 83 a reduction of over 53%. During the same period, oil / diesel related KSI accidents for all other road users, has increased from 347 in 2000 to 534 in 2005 an increase of almost 54%.
- 7.10 There is a common theme within these figures, we have seen motorcycle oil / diesel accidents reduce significantly from 2002, the fall in 2003 was replicated across all categories of road users, however during 2004 and again in 2005, motorcycle oil / diesel accidents have continued to fall, whilst all other road users have increased significantly. We have asked ourselves why?
- 7.11 KillSpills is a motorcycle led campaign, and the internet has been used to great effect in the closely knit motorcycle community to get this message across. KillSpills believe that this has been effective, especially given the coverage in the National Motorcycle press and the publicity provided by our sponsors the BMF and many supporters such as MAG, RAC Foundation to name but a few.
- 7.12 However we as a campaigning group are saddened by the increase in oil / diesel related accidents for all other road users. We have in the past attempted to engage the national press to cover this issue, but diesel spills, what are they, they are not sexy, they will not sell news papers! KillSpills needs to concentrate its efforts into further reducing motorcycle oil / diesel related accidents, but also reversing the trend for all other road users, hence the publication of the Anti diesel spill leaflet and the publicity event of the 617 ride / Donington 4000 track invasion world record attempts. We need to attract the attention of the general media. If we are to make any inroads to this, we need the help of the media.
- 7.13 Furthermore as motorcyclists are becoming more aware of the dangers diesel spills represent, and at the slower speeds, slight injury accidents tend to happen, bikers are being able to take avoiding action. However, it would appear that, as diesel spills

represent such a small proportion of accidents for all other road users, they are generally not seen as a danger and therefore the trend is rising. It would appear that the KillSpills message is getting across to bikers, but not to other road users. This is perhaps an area that we need to concentrate on in the future.

8.0 **DIESEL SPILLS – COST TO SOCIETY**

8.1 In addition to the human cost of diesel spill related accidents, each accident represents a cost to society. These costs encompass lost production, state benefits, police, ambulance and hospital care. We have used the 2002 figures provided by Mr Jamieson MP in response to a question from Bob Russell MP. The cost to society of accidents by severity are summarised below:

Cost to Society of a Road Traffic Accident

RPI Indices	June 2002 Prices 176.2	June 2005 Prices 192.2	Oil / Diesel Accidents 2005	Total Cost 2005
	£	£		£
Fatal	1,447,490	1,578,931	6	9,473,584
Serious	168,260	183,539	125	22,942,375
Slight	1,675	1,827	617	1,127,321
Total			748	33,543,280

- 8.2 In our 2006 report (KS-R3), we calculated that the cost to society of oil / diesel related accidents amounted to a staggering £106.76 million. Motorcyclists alone accounted for almost £35 million of this figure. That's a lot of public money that could be saved if diesel spills were removed from our roads. The accidents incurred as a result of oil / diesel on our roads during 2005 alone have added £33,543,280 to the above figure .
- 8.3 Readers must take note that these figures are be conservative, as not all diesel spill related accidents are reported as such. Indeed, and particularly in the case of slight accidents, road users will skulk away, with a damaged vehicle, minor injuries and dented pride.

9.0 DIESEL SPILLS – A CASE STUDY - KEVIN GREENING Smooth FM radio

Anyone who knows my work as a broadcaster also knows that I'm a biker. Motorbikes and cycles have been my main forms of transport for 30 years and in that time I've had two memorable encounters with diesel spillages.

In the first, fifteen years ago, whilst riding near my home I noticed a group of five or six motorcyclists stood next to their machines in an unusually dangerous position, in the gutter on the outside of a roundabout. Concerned that one of them had broken down or was in some sort of trouble, I did a circuit of the roundabout to offer assistance. I soon discovered why they had all stopped.

One lone rider had slid on a patch of diesel fuel on the road surface and crashed. Another had come to his rescue and skidded on the same spillage. One by one, the others – all strangers – added their bikes to the heap of horizontal metal on the tarmac and I duly became the last to do so.

My second diesel crash was far more serious and resulted last year in an injury from which I am unlikely ever fully to recover.

Only just back from an ambitious holiday in the Pyrenees whose mountain roads had stretched my high speed riding skills to their limit, I became an accident casualty as a result of hitting a diesel spillage on an urban street at no more than 15mph. On a slightly damp road (on which diesel is virtually invisible), I braked gently in response to slowing traffic around me and immediately lost all control of my machine. The bike twirled across the carriageway and flipped onto its side, dumping me on the ground.

In the process something on the bike – perhaps the gear shift lever and the footrest – had exerted catastrophic leverage on my left foot. Despite the protection of an expensive purpose designed bike boot, the foot was snapped completely in two along a line bisecting it between the heel and the toes. Because of the low speed of the accident I was otherwise completely unscathed yet the foot was thoroughly smashed, sustaining five messily fractured toes and a spectacular dislocation. Three shots of morphine barely touched the pain which was utterly eye popping for nearly 24 hours until an operating theatre slot could be found for surgery to reset the bones.

So great was the swelling that for a month I could barely lower my foot from shoulder height for more than a few seconds. I lay in bed or on the sofa day and night except for toilet breaks (for which an empty milk bottle often sufficed) and the cab journey to and from the radio station where I do my daily show.

Any freelance broadcaster will tell you that being absent from a regular airshift for a long period is professional suicide so I was back on my show within ten days of the accident belying the severity of an injury that might have kept others off work for months. For many weeks I presented my programme with my left leg parked on top of the mixing desk in front of me, my spine crumpled into the curve of my seat to allow me to reach the microphone.

More than seven months on from the accident my recovery continues. The plate and pins that braced my fractures were removed in a second operation and my left foot

now resembles my right except for two scars that look like shark bites. I can walk without crutches, swim and cycle but almost any physical activity causes me pain, occasionally severe. I walk with a limp that will probably never quite disappear; I cannot run for more than a few steps and any footwear but soft trainers gives rise to crippling discomfort. Worst of all, it's almost impossible for me to change gear on a motorcycle.

Not a minute of any day goes by without me being reminded of the accident caused by a diesel spill I never saw. Luckily its existence was confirmed by two observant police officers who attended the scene and had the presence of mind to phone for the council cleansing department. But for them and the diligent work of my solicitors Withy King, I probably would not have been able to convince the Motor Insurers Bureau to admit liability for the accident and consider a claim for compensation.

It's a cliché but no sum of money will ever recompense me for the incapacity caused by my injury. Yet I got off lightly. I'm still here to tell the tale.

KillSpills Diesel Safety Leaflet

WHAT ARE DIESEL SPILLS?

Diesel spills are a major hazard on our roads and they occur as a result of some very simple oversights. This leaflet concentrates on Awareness and Education, as these will eventually Prevent and Cure the problem.

Motorcyclists are very aware of the dangers that diesel spills represent. They can cause accidents very easily. Diesel spills are found at bends, junctions, roundabouts, bus stops and corners, anywhere where heavy braking can cause fuel to slosh around in the tank. If a filler cap is missing, or if the cap seals are not working, fuel will spill onto the road.

The pictures (left, below) show diesel spills on public roads. These are not one-off occurrences; it is the norm to see a diesel spill at some stage on your journey.

Diesel deposited on the road is as slippery as black ice. Unlike ice, diesel is found all year round. A clean dry road can be turned into a death trap by just one vehicle spilling diesel onto it.

Once a vehicle skids on diesel at a corner, it is lost. A car can generally regain control but that is unlikely to happen for a motorcyclist. On right hand corners, a fallen rider will contact roadside furniture, kerbstones and trees etc.

On a left hand corner, the rider may hit an oncoming vehicle travelling in the opposite lane.

OUR SUPPORTERS

The following organisations are doing their bit to make our roads safe from diesel spills. Make sure you do your bit too!

UK pia bmf better biking

MAC

RAC Foundation

HIGHWAYS AGENCY

IAM

THINK! Supporting THINK!

Department for Transport

Produced with the support of the Department for Transport

DIESEL SPILLS KILL KillSpills

Real people, real bikers. www.killspills.org.uk bmf better biking

EVERY TIME YOU OVERFILL SOMEONE ELSE PAYS FOR IT.

Campaign for safer roads www.killspills.org.uk

LET'S MAKE OUR ROADS SAFER AND SAVE YOU MONEY!

Do YOU ever:

1. Neck / brim / overfill your tank? – If you try and squeeze a few more pence worth of fuel into your tank by easing the filler nozzle out after the cut-off switch stops dispensing fuel, you're "necking" it.
2. Check the condition of your filler cap seals to ensure that they work properly? i.e. preventing spills.
3. Leave room for diesel to expand in your tank? – Filling up at night could mean an over-full tank in the morning. Diesel expands when warm!
4. Forget to refit your filler cap? – As draft as it sounds, some people do!
5. Wedge the pump nozzle in the filler neck? – By doing this, you can actually damage the aluminium filler neck on your vehicle. Over time, the filler neck becomes distorted, thus preventing a tight seal with the filler cap. This results in not only spilling diesel, but a new tank is also required to pass the next MOT test.
6. Spill diesel? – Diesel spills are a danger to all road-users, from busy drivers to motorcyclists, car, van, bus drivers and not forgetting pedal cyclists and pedestrians – all are affected. **DIESEL SPILLS ARE LETHAL!**

Diesel spills kill people, they wreck lives, waste world resources, pollute the environment and cause damage to road surfaces.

WHAT CAUSES DIESEL SPILLS?

Diesel spills are caused by users overfilling their diesel tanks, not refitting the filler cap correctly, damage to the filler neck, worn seals or mechanical failure. Think of your diesel tank as a mug of coffee, filled to the brim.

Would you be able to walk, change direction and stop suddenly without spilling a drop? NO! And the same applies to your vehicle when the tank is overfilled. You will spill diesel as you negotiate junctions, roundabouts, bends and stop!

IF YOU'RE CAUGHT SPILLING DIESEL!

THE LAW – If you are caught spilling diesel you face a fine of £5,000 and 6 points on your licence and also the bill for cleaning up the spill. You can also be prosecuted for driving with an unsecured load!

WHAT YOU CAN DO TO HELP

Remember the following Diesel Spill Checklist:

When you refuel please:

DON'T overfill the tank.
DO re-fit the filler cap correctly.
ADD a diesel check to your morning checks. Fuel Tank not overfull, filler cap secured? Easy as that.
REMEMBER diesel expands when it's warm. A full tank can spill onto the road if space for expansion is not left.
THINK! - DIESEL SPILLS KILL!

As a diesel user you can help to make the roads safer for all road users. If you accidentally spill diesel as you negotiate bends, junctions or roundabouts, you endanger the lives of following bikers and drivers.

OVERFILLED TANK = DIESEL SPILL = KILLED ROAD USER

DIESEL SPILL STATISTICS

Accident statistics show that between 2000 and 2005 there were 3,637 accidents as a result of oil or diesel spill on the road, 617 of these resulted in either death or serious injury. In 2005 alone there were two or more oil or diesel spill related accidents every single day, and that's just the ones that got reported! Diesel related accidents are preventable. Undertake the diesel spill check list, and you will prevent spills and help save lives!

The picture to the right shows the damage diesel can do to the road surface. The diesel acts like a solvent and melts the tar. This loosens the top layer of chippings.

Continuous passage of traffic then creates a pot hole.

HOW TO SPOT DIESEL ON THE ROAD

Look out for diesel spills on roundabouts, junctions and other tight corners that will cause uncapped fuel tanks to slosh over. Any wet patch on a dry road is a suspect and long, dark lines should be avoided. Diesel is deadly, even on a dry road, as it does not evaporate.

In the wet, look for rainbow coloured patches on the road and stay alert for the distinctive smell of diesel. Diesel is as lethal as black ice in the wet, but it takes much longer to disappear.

Keep your eyes open and be aware of diesel hot spots, such as roundabouts. Remember, diesel can cause you and your motorbike to slide down the road in seconds, so always look ahead and avoid any suspicious looking patches on the road.

Thank-you for your help and support!
 More information is available at www.killspills.org.uk