

- S Glaister: Welcome. Thank you so much for coming. We'll just go round the table so everybody knows each other. I'm Stephen Glaister, Emeritus Professor at Imperial College and Director of the RAC Foundation.
- A Napthine: Amy Napthine, Transport Safety Commission and Working Party Manager.
- P Bottomley: I'm Peter Bottomley MP, I was sometime the Minister responsible for roads and therefore for road casualties.
- S Davenport: I'm Suzette Davenport, I'm the National Roads Policing Lead.
- J Abbott: Good afternoon, my name's John Abbott and I work for the Rail Safety and Standards Board.
- B Johnson: Good afternoon, my name's Ben Johnson, I work for Transport for London
- R Allsop: My name's Richard Allsop, I'm Emeritus Professor at UCL for Transport Studies and I'm a director of PACTS and of ETSC, the European Transport Safety Council
- J Breen: Hello, my name's Jeanne Breen, I'm an independent road safety consultant working nationally and internationally and I'm a member of the PACTS board of directors.
- N Christie: I'm Nicola Christie, I'm director of the Centre for Transport Studies at UCL.
- K Carpenter: Kate Carpenter. I chair the Road Safety Panel of the Chartered Institution of Highways and Transportation and I have a day job in construction.
- R Hunter: Rob Hunter, Head of Flight Safety, British Airline Pilots Association.
- B Sheerman: Barry Sheerman, Member of Parliament for Huddersfield and the Chair of the Trustees of PACTS.
- S Glaister: Perhaps the witnesses could just for the record introduce themselves.
- D Dorling: I'm Danny Dorling, Professor of Geography at the University of Oxford.
- J Wolff: I'm Jo Wolff, I'm Professor of Philosophy at UCL.
- Y Doyle: I'm Yvonne Doyle, I'm the Regional Director for Public Health England in London.
- S Glaister: Thank you very much. So, as you know, we are in public, we are making a verbatim record. We are making a record of what's said and that will be transcribed for our use. You have seen the published terms of reference and today especially we're interested in the subject in a public health context, as you understand. Just in terms of an overall summary of what we're trying to achieve, we're interested of course in, all of us I guess, in ways of reducing risk, reducing casualties, trying to come to a view about what the level of ambition should be in achieving that. Who should be responsible for delivering, who should be driving towards that achievement. This is not a Select Committee or anything like that; it's not an adversarial situation. We're very, very grateful to you for coming. We're in learning mode. We just want to hear what you can, what you wish to say and what we can learn from you, and I hope will we treat the session in that spirit. So, if you would like to make an opening statement, Dr Doyle, to start with. Thank you.
- Y Doyle: Thank you very much, Professor Glaister and Sir Peter. So it's a pleasure to be here and thank you for the opportunity. Perhaps the most useful thing I can do is just explain the public health system as I see it from London. I also am a member of the National Executive, but in some respects I don't generally deal with national policy, but as part of the Executive obviously will have some knowledge of that. So, I speak with passion about London because it's my place, and my responsibility is to promote and protect the health of the people of London, but very much seeing it as a public health system because this is not the territory of rugged individuals, it's the territory for cooperation and complementarity. But also I think clear accountability because one of the concerns that I'm hearing a

lot about, is that the current system is very fragmented and no one knows who's accountable. So when I came into post in April of last year in this new organisation Public Health England, which is a national agency and a body of the Department of Health, but actually, speaks truth to power about the health of the population, the first thing I wanted to do for London is to identify where our team could add some value to what was there already, what was unique about the place that I was now responsible for that we could perhaps, bring some additional work to progress. Also who was accountable for what, and it's very different in this era because we now have the great asset of local government working alongside us, but I can't tell local government what to do, in fact no one can, they are democratically elected, and therefore we must be sensitive to that dynamic. I also advise the Mayor of London and I do not work in the NHS. So for all these reasons I must make sure that I'm clear about my accountabilities, how far I can go, but also to build my relationships and achieve the possible. I probably would leave it there because we can achieve and have achieved a great amount, I think, in a year, by following that simple guidance. Make sure of your accountability, be respectful of the relationships, and work with the system you've got.

S Glaister: Thank you very much. Professor Wolff.

J Wolff: Okay, thank you very much indeed. So I don't have a view to represent to you. I don't stand for any organisation or have any particular manifesto to pursue, but I think the best thing I can do is just say a little bit about my experience in the area of transport and risk and what I've done, so just as a descriptive account of things that I've been doing over the last decade or so. So the first work I did in this area was for the Rail Safety and Standard Board at the time when it was called Railway Safety and I was asked to look at questions about the ethics really of cost benefit analysis in terms of safety decision making, so this was a time when the railway industry was under tremendous public pressure, or at least media pressure. There'd been perhaps three or four very high profile accidents and the relevant Minister at the time had said money was no object when it came to railway safety without saying whose money was no object.

J Wolff: And the industry at that time were under the salt particularly from The Observer newspaper and I think other broadsheets saying the railway industry was negligent with the public safety and the only way they would recapture public faith was by spending a vast amount of money on advanced train protection system. So at the time this was estimated to be a system that would cost at least £6 billion to introduce at a time when £6 billion sounded like a lot of money and it could only have saved about five lives a year at most because that the number of people who were dying in signal related accidents at most. And the industry was under pressure to introduce this extremely expensive system that would probably have killed more people than it have saved by the time it has put in and they were being told they were negligent for not doing it. And someone working for RSSB thought he needed to read some moral philosophy to find out whether he did have a moral duty to introduce this and he got stuck and one of his assistants had been one of my students and phoned me up and said could I come and help him out with some moral philosophy. So I began as a moral consultant to the railway industry at that time and so I did some work for about 18 months and if it's relevant I'm very happy to talk about that later, but I won't say much about it now so I did some work for about 18 months. And then I didn't do any more work for RSSB after that. But I then had a, partly because of the work I'd done, I had a three or four year research project funded by the Arts and Humanities Research Council on the ethics of risk and now this was a question of under what circumstances is it legitimate for one group to impose risks on another, you know, risks that could be remedied. So under what circumstances is it acceptable and what circumstances is it not acceptable and I can't give you a quick answer to that question, but anyway, that was a research question about the admissibility of imposing risks. More recently I've been involved in a third type of project which in a way is related to the earlier two on the valuation of life and health and I've been advising an inter-departmental group, mostly economists, concerning the valuation of life and health for safety decision making and briefly the reason why this is of any particular interest at the moment is that within governments we have two different approaches to valuing life and health. So in the pharmaceutical area when we're deciding whether a drug should be made available on the National Health Service, we see how many QALYs per £10,000, £30,000...

S Glaister: Quality-adjusted life years?

J Wolff: Exactly.

S Glaister: Thank you.

J Wolff: So we use quality-adjusted life years when we're looking at medical interventions. When we're looking at health and safety in other areas we use the value of preventing fatality, which we don't adjust for quality and we don't adjust for length of life. And a number of chief economists thought that at we ought to at least look at how these related to each other. At the moment in the health area we're using one measure, in the transport area we're using another, but what should be use, for example, in flood prevention? Should we use the transport methodology or the health methodology and there are a whole range of other agencies that are not clearly health and not clearly transport what should they do? Why do we have two measures, and can we somehow reconcile the two measures against each other, what would happen if we only had one measure? So, they are, that group is moving on its momentum now but is proposing to make some adjustments to the Treasury Green Book guidance on the basis of valuation of life and health but they always seem to be in the early stages of this, but after two or three years of that work. So, you know, I think those are the only things I've done that I can think that could be of relevance to this committee.

S Glaister: Thank you very much. Can I just check, can the members of the public hear all right? You're all right? Okay, good. Professor Dorling.

B Sheerman: You could sit where the Prime Minister sits. You could move there if it helps.

P Bottomley: Come to the front row if you want.

B Sheerman: Do move up {and you'll}, that's where the Prime Minister sits when he does his six-monthly...

S Glaister: And then we can start asking you appropriate questions so it's just...

B Sheerman: And these are my two young interns from the King Solomon Academy who are watching our proceedings with great interest.

S Glaister: Professor Dorling.

D Dorling: Okay. Okay, I should get vested interests out first. I'm a patron of the charity RoadPeace, which is a charity for the victims and families of road traffic, well road crashes, I don't like the term "traffic accident". Twenty-five years ago this year my brother was killed coming home from school on a road so clearly I have something of a personal interest in these things, although he was killed in a road which was a 70mph road, a week before the traffic lights were put in, due to a cost benefit analysis that had been triggered by some of our friends also being hit on the same point, because that's how things worked 25 years ago. I didn't look at this kind of thing for many years, but I did do work on inequality and mortality and with a group of colleagues in the University of Bristol we produced an atlas of who dies of what where for everybody who dies in Britain. And this was about five or six years ago, maybe a bit longer, and the thing that shocked me about that atlas was suddenly discovering what a high proportion of children were still dying on the roads because all other forms of death for children had reduced faster, things like childhood leukaemia and so on, for those we'd had faster reductions. So, or even though we'd have fewer deaths and serious injuries, it has risen as a threat compared to other threats, compared to measles, say or anything else. I then became interested in the 20's Plenty campaign, and this relates to your interest in public health, because I think one effect of roads becoming relatively more important as a threat, even though in absolute terms they're less of a threat, is that parents are much more likely to restrict the movement of their children now as compared to how they did in the past, and this has very important public health impacts. I compared the constituencies in Sheffield, the two extreme constituencies in Sheffield, which are David Blunkett's constituency of Brightside and Nick Clegg's constituency of Hallam, and seven times more children, have been killed or seriously injured in David Blunkett's constituency as opposed to Nick Clegg's. This is round about ages 9-12 if I remember rightly. And the reason was simply that in Clegg's constituency children were not being allowed out to play. It wasn't that the roads were safer, in fact there were more roads in Hallam. The 20's Plenty campaign's produces an enormous amount of literature so you can simply look at it to see what happens, but what's very interesting about this is that the main public health benefits are not actually stopping people being

struck by cars and lorries, although the elderly and young people are most likely to and we know that young people simply cannot judge speed at 30mph. The main public health impacts are getting more people walking and cycling and also maybe the reduction in air pollution and the effect of air pollution on our health. And then further to that, and that is measurable, further to that and what is much harder to measure is what happens when a neighbourhood becomes more sociable? When people can cross over roads more easily, they are not simply trying to get as efficiently as they can from their home to school or to the shops but they can mill around a bit more, get to know their neighbours. I have a suspicion that some of the greatest benefits of reducing road speeds in urban areas, in residential areas and by shops and school is that actual effect. Now, there are 100 local authorities and parishes that have adopted 20mph. The City of London Corporation has adopted it, but you don't have it outside this building. I think it's interesting to compare who has it and who doesn't. And at the moment it's a local decision that's up to local councillors. This has proved to be a very good thing because it's meant that the arguments have had to be made again and again and have been won by local groups which have become quite good at arguing and at doing things and then if they've won 20mph they begin to ask for other things that could include their area. However, and this is the main point I'd like to make, you reach a point, you're going to reach a point at some point when Oxford has it, Portsmouth has it, you know, Cambridge has it, so much of Inner London has it, at what point should people be penalised for the fact that their local councillors are particularly inept or just don't get it? At what point does it make sense, and who's responsibility is it, to begin to think of that national residential speed limit that we set such a long time ago at 30mph to begin to think of switching that to 20mph rather than relying on the last straggling local authority that decides its people are worthwhile to switch, and I don't have an answer, I mean an easy answer might be once half local authorities have done it, that should maybe trigger it. But I think it's something you need to consider. And this is just area wide, 20mph, with repeater signs, no humps, and it's becoming increasingly popular. There is of course some opposition to it, some people worry about how will the police it, assuming the police can police 30mph, but in general what happens is that everybody slows down and if the people ahead of you have slowed down you have to slow down. I saw it myself most dramatically in the last year because a year ago I lived on a 40mph street, which was an absolute barrier for kids. Kids did not cross it, did not know the children on the other side, and I've now moved back to Oxford, which is moving to a 20mph city, and the best thing which may sound a bit ironic, or the most striking thing is watching cyclists not going over 20, and it may be something to do with Oxford, but it really becomes very liveable when it's not just cars and lorries but also the cyclists just going along at a nice speed and it makes a place incredibly pleasant to be in. It's maybe the cheapest possible way of improving the quality of life of people in the local area. Thank you.

S Glaister: Thank you very much Professor Dorling. I'd like to start, not with the detailed issues that one or two of you have discussed but we're particularly interested in the institutions, the leadership of the safety landscape, as it were. Dr Doyle you spoke of the necessity for very clear accountabilities as I understood and responsibilities. The question is, can, what are the differences between the different sectors? I perceive very big differences. We've heard about how in rail there was an institution doing analysis, commissioning Dr Wolff to advise Professor Wolff to advise him about that and a view was come to. Whereas Professor Dorling recounts where there's all sorts of fragmentation in policy. Are there things to learn from between sectors? Would it be better to do things differently in road and to learn from rail or other sectors?

Y Doyle: Well, thank you Stephen, so one of the enduring challenges of public health as I see it, I mean I know that this has been intimated here, is that it requires the cooperation of all government departments and second, it requires many wider organisations to cooperate. So the idea that you can just tell one body to do it and you get the fix isn't going to do it in public health terms. Now, there is an argument to be made which is not my gift about whether one reorganisation or system is better for public health than another. I don't think that has ever been proven. Where I'm coming from is that we have the system we've got at the moment and we do need to cooperate but we do need to be clear. In many ways I agree with Danny. How far you go before you decide, actually, it is in the public interest to do something at national level? Now that's the second enduring question we face, and we're facing it for a number of reasons in London just now, when do you use the law and when do you give up encouraging people to cooperate because you really begin to look like a laggard, and the pressure for action becomes great. There is another mechanism and this is a theory we haven't proven, which is that members of the public themselves who elect representatives, will now know pretty explicitly through the Public Health Outcomes framework where the problems are in their



boroughs. They can find out a lot of it actually at the moment, there's a huge amount of information around in terms of maps; I have one here, it's very easy, you can see where these 20mph zones are in London, and where it appears that boroughs are not doing that to the same extent. However, when we publish the Public Health Outcomes framework, the public will know apparently where you die earlier and where you have more accidents and where, there are less free school meals. That'll all be in the public domain in a while and public pressure will then work through politics to require local government to take action.

S Glaister: Does it work like that? I hear what you're saying, but you know, listening to the witnesses, in rail there was immense public pressure to spend whatever it was, £15 million I saved on six deaths a year and it's now dropped to almost none. And yet we tolerate, we the public, through the democratic process, tolerate an enormously high death and injury rate on the roads. I suppose the question is, is there a role for some superior body which is perhaps not so directly democratically accountable to at least ask the question whether that is a rational outcome?

Y Doyle: Well, it still comes back to the debate about where everyone sees the balance of risk and benefit and if you use the example which is often used of the smoking legislation, the legislation did change, and it changed when it became overwhelmingly evident that even 80% of smokers said, "We do need to do this,". The protection was for children, and I think in those circumstances where the balance of risk to children is great and the balance of that risk is greater than personal freedom I think, in this country certainly, members of the public appreciate such risk and are willing to take action and cede their freedom. Then you get action, you have the fertile ground for taking action. Whether a higher body could speed that perception up, I don't know, I'd rather defer to my colleagues here about that.

J Wolff: I have to, the thing to say though, not necessarily about a higher body...

S Glaister: Well, let's just stick with that point for the moment then. Jeanne Breen, do you have?

J Breen: I was going to now ask direct full, directly on that particular issue, but to just understand...

S Glaister: Anybody wants to raise on this issue? Suzette Davenport?

S Davenport: Well no, it was actually the issues of accountability that I wanted to go back to, that I'm particularly...

S Glaister: Right, let's go with that then. Jeanne.

P Bottomley: Just on that very point, just very quickly, we found that when we organised the campaign with the seatbelt legislation after it's failed 13 times in this Parliament, we knew that all the Clunk Click, all those advertising, all that advertising campaign had only got it to about 33% compliance. But there was a great deal of education about it and there seemed to be an interesting meld, and I've never seen the scientific evidence, that once we introduced the legislation you got very high compliance. That's not always been the case in other countries, in ones' similar to our own. And of course with smoking that was a different process, wasn't it, in the sense that what really seemed to accelerate the growth of the smoking was the Irish example. Once the Irish example, in a country very much like ours, presumably totally in love with the smoggy and smoky atmosphere of the Irish pub, if they can do it there seemed to be a spill over and so it's interesting isn't it that at no time, in a sense, was there a higher authority except there was a piece of legislation that seemed to compliment social trends in different ways. Would you not agree with that?

Y Doyle: Yes I think a number of things came together at the right time, I think the Irish can't take total credit for it, but people were impressed with that, but it was also a very cogent argument was made about the vulnerable, about people in, particularly occupations where they were exposed without any personal control to cigarettes and of course children as well exposed to that in public places. So these factors came together and there was absolutely no doubt that public opinion was behind it. We've just had a visit to New York in November, my team and I, a small team went out to have a look at how New York did various things that were big problem for the population. For instance there were problems with tuberculosis and HIV and New York City seem to have got under that, their smoking rates are very much lower than London, and they use the law much more. They have a health code which actually operates at city level, it was brought in during a cholera epidemic, it's very

permissive and it allows things to happen at speed, but New York does not have local government at 32 places plus a Corporation and it doesn't really get down to that level of granularity when it needs other things to happen. So these are all trade-offs.

S Glaister: Professor Wolff?

J Wolff: Yes, I want to make a very similar point and it seems to me that the smoking ban was possible because people came to believe that their behaviour harmed others rather than it being the nanny state telling you what to do, and so I think, you know, this is also important in safety areas, so speed limits, when you're emphasising that you're a danger to others, drunk driving, there was a campaign to get people to wear seatbelts in the back seats of cars. I saw this in the cinema by showing how passengers in the back seats are a danger to people in the front seats, which had never occurred to me before and I thought well, it may have even changed my behaviour that advertisement possibly, so I think combining that public health message with danger to others is a really fertile way for changing behaviour.

S Glaister: Suzette Davenport, you must have something to say on that from a police point of view?

S Davenport: Only that we appear to be failing because every year I run, you know, and I lead the drink drive campaign, so every Christmas, every so on, we'll have a drink drive campaign and despite the reduction in police resources, actually we've seen an increase in productivity so the number of tests that are being taken. This is the first year in all of the years that I've been involved, and I've been a police officer for nearly 29 years, that we've seen a decrease in the number of positive tests, so we appear to be, there is almost an acceptance, a tolerance now of a level of drink-driving and you know, particularly worrying is that for under 25 year olds, which concerns me. So, as I say, this is the first, so I'm really interested in the, how do we, how do we get into the public psyche in a way in which smoking did that the risks that you present and whether it's not wearing a seatbelt, drink driving, using your mobile phone, or it's speeding and, you know, the fatal four that we describe that despite me and every time I go to any conference and speak at any conference I talk about the fatal four because we know the evidence shows that those are the four things that we can positively affect that will make a difference to casualties. So any lessons that I could learn I'd be really, you know, I would love to take back to be able to put into action.

S Glaister: Professor Dorling?

D Dorling: You have a difficulty that comes from other research, Ipsos MORI's research on the attitudes of people by age, which shows that the younger generations are becoming, or we've made them, more individualistic. So the belief that they're only going to get on in life if they do it by themselves is strengthening, but also that they should be allowed to do things for themselves and are say less happy about welfare spending on disabled people. It is shocking if you're my age to suddenly see these attitudes coming through. I do say I think it's partly our creation, the work of an older generation that has created a younger generation that is more selfish and is more likely than to do things like drink and drive. But it's inevitable that promoting individualism will promote selfishness. This is partly because we brought these young people up in a world where we told them their future depends on them and their own actions much than was the case in the world I was brought up in which was more, "Your future depends on how you cooperate with each other". You know?

S Glaister: Kate Carpenter.

K Carpenter: Dr Doyle talked about the scope for public availability of information to enable the wider public pressure to call for things to be done. Just interested in all of your views on the complexity, things like seatbelt, impact of seatbelt, and smoking and so, while people may resist a change, it might be a, you know, a political ethos or a dispute with the effect, it's relatively simple. One of the things we're interested in here is the extent to which people understand the problem and the difference between road danger or road risk and casualty rate. We've talked about disparity in child casualty numbers, which don't necessarily reflect exposure or danger on the road, but restriction of access. It links with the public health perception. People dying prematurely or suffering ill health quietly at home are invisible to the public; whereas children injured on the road are very tangible. I wonder what you viewed, is there scope for getting that information together in a way the public can

understand because at the moment there seems to be, there seem to be two issues from the public perspective.

Y Doyle: So another interesting area is what people think and what they do and in fact we know there's a dissonance here about that. Some messages are easier to understand and easier to get at and present more sound bites there are and are the more personal. We have whole industry now around market research this does yield results because people personalise, "This could happen to me or mine," or "it's something that matters to me". And if it doesn't matter to them we can be absolutely certain that, it's very difficult for them to even listen. When they listen they then have a number of dissonances. They may act, but actually the evidence now is that just hearing information and even internalising it isn't enough to act. There need to be a number of triggers, so just depending on good information, no matter how interesting it is, I think isn't enough to get people to take action. And it is a balance between understanding that there are sanctions or there are dis-benefits to doing it, and possibly, that they'll be caught. And considering road safety and accidents, this is an area that is much more ripe for this type of discussion about when to intervene, and what's the role of the state, than perhaps getting fat, which is just so much more complex. So it is fertile territory to explore.

S Glaister: Thank you, that's very helpful. Jeanne Breen.

J Breen: Thank you. Yes, a question for Dr Doyle. Just coming back to institutional accountabilities and responsibilities, could you say something about Public Health England or health sector more broadly? Starting with Public Health England, how, in terms of protecting life and wanting to speak to power concerning the protection of life, where in the organisation is there performance review, analysis of data, which then allows identification of goals and targets. Where in Public Health England is that taking place? And I say this against a background of being aware, certainly from international data, that the leading cause of death for school age children, 5-14, is in fact road traffic injury in this country. And I'm just wondering where that all sits in Public Health England first and foremost and how then it relates to the other health sector organisations?

Y Doyle: Thank you, and I'm aware I didn't answer the question on accountabilities, and it might be worthwhile just saying where Public Health England sits in that system of accountabilities and then what it does in relation to that. So, the prime responsibility for population health lies at the local government level now. The majority of public health resource is there and the Director of Public Health is the local leader and indeed the Commissioner of certain services. And I say that because Public Health England is not a commissioner. It doesn't have resource to commission services. What Public Health England brings to the table is providing and using evidence to influence and to enable that commissioning and those actions to be taken at whatever level and that could be national, it could be advising a Minister to do something. We've been very active on the plain packaging, for instance, and provided most of the good evidence on that. So, providing evidence is very important, but not just that, the organisation is structured to provide both protective services, health protection around infection. And health improvement, including national evidence and knowledge about this, goes upwards and outwards and everywhere. Such information is a free good, and to answer the question about information, I think we're drowning in it. Now, but just to complete, what does Public Health England do? So we provide evidence and information, and it is used, we do have internal groups who actually look at accidents and domestic violence and unintentional injuries and so on. And I should have declared an interest myself actually. I'm a trustee of RoSPA, so I'm very well aware of the campaigns that are running around all of this with children. Public Health England jointly with RoSPA has produced the Big Accident Book and how to implement accident prevention, effective accident prevention locally and provided it free to every local authority plus members' briefings. And there's more if you wish me to say more about things we do.

B Sheerman: I just would like to ask Professor Wolff to comment on the difference therefore between what's just been described and the railways. The railways, you have one authoritarian and legally constituted body who just dictate the whole lot, is that a fair characterisation?

J Wolff: Sorry, I'm not up to date on the –

B Sheerman: Yes, but I mean you have the railway legislation, you have the RSSB.

J Wolff: Yes

B Sheerman: And the Office of Rail Regulation.

J Wolff: So the work I was doing was really very much from an industry perspective, as to the industry had to decide how to make decisions. They were very heavily regulated, still are very heavily regulated, they have to have a safety case which is approved, which is probably quite different from anything to do with any other branch of transport, any other branch of life I should think to have a level of regulation that the railways have. The communication from the railway industry was very interesting because one of the problems at that time was fragmentation and we also had a situation where different operators within the industry had an interest in the poor reputation of other parts of it, so if you were going to bid for a franchise, it was a very good idea to talk about the poor safety record of a competitor, as was happening, and, you know, if at any point where there was an accident, there was a type of finger pointing culture of blame flowing out. So at that point the railway industry were looking rather jealously at the aviation industry where if there's an accident there's someone who'd very well groomed who goes on television and says, "We'll look into this".

B Sheerman: But completely independent? I mean?

J Wolff: Well, not independent actually but spoke with authority and spoke on behalf of the industry and you would get the idea they were looking into it, they would find out the truth, and when they'd found out the truth they would tell us. And so for example with the Concorde crash, they would give little bits of information as soon as they had it, say, "We can't jump to conclusions, at the moment there's no one to blame," whereas for railway accidents everyone would say, "It's not our fault, it was sabotage, it was someone else's problem". And –

B Sheerman: Is the railway...

J Wolff: ... of communication at that point.

B Sheerman: There is a body who would independently review an accident and make a report.

J Wolff: Yes there is.

B Sheerman: And then there's the famous ones.

J Wolff: yes.

R Hunter: Yes, it's er, since 2005 you had an independent accident...

B Sheerman: ... did a report...

R Hunter: ... absolutely, and they...

S Glaister: I wanted, sorry, I interrupted Jeanne's line of argument, I want to let Jeanne come back and then Richard Allsop and then coming down the line then, then Nicola.

J Breen: It was just, Dr Doyle, to understand who in the, which organisation in the health sector, whether or not it's Public Health England or another organisation, who is responsible for surveillance of road traffic injury for the UK as a whole or for England as a whole, who can give a national length of view, who can identify levels of under-reporting, we know that for one reason or another there are large levels of under-reporting of road traffic injuries and who then can give advice, recommendations or whatever, on priorities for national attention, for national policy, for target setting and that sort of thing. I'm still not clear who's doing it and is Public Health, is that one of the functions of Public Health England, and if so, how are you organising it, is anybody leading it, how is that working or is it, you know, if it's in development?

Y Doyle: There is a Chief Knowledge Officer function in Public Health England which will provide health data and so accident mortality will definitely be provided, and anything in the public health outcomes



framework for instance. It provides a large range and you can get into it, there's a data portal and it'll go into every facet of life actually and provide, surveillance for you and accidents will be in there as part of the public health outcomes framework, we've got a good baseline for every local authority in the country and indeed now by CCG I think it's even, I'm not sure about accidents, but a lot of data gets down to practice level now. We also, through the information centre, can get a vast amount of other information and of course the problem for transport, we will use that information, it produces good, very good road safety information and we mine that. And at my level, which is London level, I have a little team in the GLA, and one of my team members works with the Transport for London team, Sir Peter Hendy, so we can get a lot of information about accidents, walking, lifestyle, transport in London, so we get things from various places. I don't think getting access to information is a problem. I do think though that there is an issue about the focus of the country on accidents. I think it's nowhere near as interested or keen as we are on heart disease or cancer particularly or obesity, there's absolutely no doubt about that. We just don't pay the same attention to it and I do advocate quite a lot through various roles about the years of life lost through accidents because of the age group that's affected. But, I can tell you the local authorities who've really taken an interest in this, and they're very often the local authorities with the highest deprivation, because that's where it plays out, it just isn't a universally interesting thing for everybody and I don't think the surveillance systems are as good. You have to put this information together as a composite. So there used to be great accident surveillance information and some of those databases I think have gone into abeyance.

S Glaister: I'll come back, I want to come to Richard in a minute but Suzette, you wanted to comment on this, yes?

S Davenport: Yes, and it's linked to the accountability point. I'm really interested in the outcomes framework and are you ultimately responsible as a body for delivering that, is the first one, and that's to, so I've got the clarity on that. I, as an outsider, I look at health and it appears to be fragmented, a system of delivery in much the same way potentially as road safety is very fragmented. So one of the things I'm really interested in because we have an outcomes framework as well, is understanding who's accountable for what and how does that get driven in what looks like a fragmented system to achieve with a smile on your face those outcomes rather than looking slightly askance because they're not perhaps as they might be in the absence of driven targeted activity?

Y Doyle: So, who's accountable for the outcomes framework? Well, three major bodies are, I'm afraid it isn't a single body, so there are four domains and local government is accountable for a good proportion of two of them, Public Health England is accountable mainly for one of them which is the health protection and infection domain, and NHS England is accountable really in the main for one of them which is about premature mortality and what you can do about that and particularly in treatment. So this isn't easy. It plays out at every level.

S Glaister: Can you tell her the fourth one?

Y Doyle: Yes there are two, there's the wider determinants of health, there's health improvement and those two are mainly in the purview of local government, not entirely, but mainly, and then we have health protection, then we've the NHS one, and we've two overarching ones around life expectancy and infant mortality. So and it all plays to inequalities. So, I see it at London level, the relations I build are with five or six different major bodies in London. We either consider this a joy and a challenge and you have to have people with the skills who can get on with each other basically. And, yes, of course, we'll use the norm, we'll use the data where we can, we use every lever we've got. But it isn't simple.

S Davenport: Can I just add a follow up on that is, if you could change it, what would you do? How would you make it different?

Y Doyle: That's a very good question because I've been thinking about the balance of this so you would say, "Okay, it should all go back into one place," but what happened, let's just think back, because I'm now released from the NHS. What happened when I was in the NHS for many, many years, was that public health, had no personality as a function. It was subsumed, I spent an awful lot of my time sitting on boards sorting out hospitals that were going wrong. And you know now I can see the entrepreneurial possibilities that we can do through health improvement and wider determinants of

health. I see what local government is trying to achieve and I'm just amazed by it. It is very difficult and Danny has said there are places where, we get accused of forming the nanny state. But mainly that isn't our experience. However, the downside is that it is more fragmented, you have to work very hard, and the dynamics are different. You can't tell people what to do. The NHS is entirely commanded and we're not.

S Glaister: Professor Dorling.

D Dorling: I mean as I said, there is some advantage to the fragmentation. Given current spending cuts there's not much a local government councillor can do that gives them any joy other than some of these implementations that they can do and if you take that away from them, what are they left with? And also if you simply impose things then the other kind of changes that make society better, that you haven't thought of setting targets for, don't happen, so I have some sympathy for it being dropped down to a local level. However, one big worry I've got is that although within cities it's the poorest areas which have the most accidents, outside of cities it's tiny little rural districts which simply don't have the capability or the Director of Public Health doesn't know, and when the M40 goes, skirts through the edge of Oxfordshire, are you really expecting Oxfordshire County Council to be that interested about what happens on the M40? There must still be a Minister or Junior Minister with some kind of responsibility for all of this, I would have thought, so I know I'm not supposed to ask questions but...

S Glaister: You can ask questions.

D Dorling: Have things become so devolved that there isn't a Minister responsible for the roads?

S Davenport: There's road safety, yes.

D Dorling: There is still?

S Glaister: Yes, just to follow up on this kind of question of leadership and responsibility and we've Yvonne from you that, you know, there's oodles of evidence around and I'd agree with that in road safety as well. And that's actually being marshalled really well at a local level to empower local democracy and a lot of that evidence I think is probably from the road safety sector around the issue of 20's for example, a lot of that's road safety evidence, but I wonder how much that's actually being driven forward by people who are interested in, you know, place enhancement and the urban realm or the realm in the location where they are and the role the 20 can, 20mph as a limit can play in that and I'm just wondering, you've got what seems to be kind of a successful marshalling and use of evidence to come up with local democracy and persuasive arguments to make change happen, which is actually empowering people beyond then that decision, and yet we've also heard that we don't seem to have this evidence being used in a similarly effective or productive way at a national level, so do you have any views on why that's happening so differently locally and say nationally?

D Dorling: My view is that it depends very, very much on individuals. So Lancashire County Council which is a Conservative council went for it. It's a few people who've driven this forward in particular areas and the campaigning groups, it's shocking and stunning to find that they often only involve two people not being paid at all for their work, who are leading things, and it really is very, very individualistic. And this is leading to a new inequity which is that if you can afford a house within the ring road in Oxford, you can live in a nice pleasant slow environment, but if you're in one of the satellite towns outside in Oxfordshire where the county council don't like this at all - then you can't, and I think people are going to begin to notice at some point. But I'm torn as you can talk about localism, because it's really encouraging to watch local communities do it for themselves, bring it in, argue it through, debate and talk about general quality of life and general public health, not so specifically. But we are going to hit a limit, do we really want a country in which if you see that 20mph sign at the edge of the city that tells you, you are about to basically come into a fairly prosperous place and if you don't have it, it tells you that there's something wrong with the area.

S Glaister: If that kind of democratic fine-grained thing is going to work it requires a really very high level of sophistication in understanding the evidence, doesn't it? And you know, we've done work with the help of Richard Allsop on, you know, speed camera data, masses and masses of speed camera

data. How do you really understand what the facts are in the effectiveness of something like a speed camera or some other measure? You can't rely on well-meaning personalities in particular areas to do that I submit.

D Dorling: Yes, no I'd agree with you but a parallel would be if you looked at infant mortality in the 1950s it was actually lowest again in Oxfordshire because one particular hospital got in incubators early. Once you've got enough evidence about things that work by looking at those places that are ahead, then you can begin to say, "We need to provide a service for premature babies across the entire country and it shouldn't rely on the laggard parts of the NHS catching up and realising this is what is what you do," and we may have reached this point with road speed and road safety but it's not a decision for somebody like me to say whether we've reached a point. It really is all about democracy.

J Wolff: And it may be Parliament to take a position on it.

B Sheerman: Chair, isn't there? Just on that point, very quickly, sorry Richard, just on that point, yes, the old arguments about data collection and the spread amongst different organisations, I mean increasingly I'm seeing evidence of data mining companies who really have this expertise of bringing it all together in a highly effective way, you know, outstandingly different than anything I've seen before. Very, and six months ago I'd never heard of data mining. Suddenly, you know, it's everywhere, you know, you could actually get the stats that affect my constituency in almost every aspect of its life and it took me back to when I was a Shadow Home Affairs Minister when you went into a police station and they said, "Ooh, this crime pattern, and no, it's a big dodgy this, or it's a bit trendy," you know, so we are now looking in the UK surely with data mining and very sophisticated crime pattern and it's exactly where the risk places are, and where the accidents are.

D Dorling: But the problem is you don't know whether for Huddersfield you have a low rate of accidents because the parents of Huddersfield are not allowing their children to go on their own to school until they go to secondary school, because that data doesn't reveal that, the data on how a child gets to school and whether they're accompanied by a parent (most often a mother), is not collected, it doesn't exist, so you can have all the other data you've got for Huddersfield to access but you don't know is your town becoming safe because you've made the roads safe or because the parents are so scared of the roads that they're not letting their children near them?

B Sheerman: Yes, but it's actually more complicated than that because we get our most deaths in our Pakistani community, there's a long tradition of playing out in the Pakistani community and that's a real worry, a and we know it intuitively, you're quite right about it, yes, okay.

S Glaister: Richard Allsop.

R Allsop: I'm getting a nested store here three, three, two follow ups and then what I would like to move back to substantially. First follow up is of course in relation to the 20mile, use of 20mph limits and zones. It is relevant that rather late in the day the DFT has just put out to tender a three-year research programme to try and look much more properly than has been done so far at the evidence and it will be fascinating to see what that brings to light and it could exactly be the turning point because if it's done well it can provide a basis for in just what way it should be made national and taken above the level initiative level, so that would be an interesting time. Second level on the, I'd like to follow up on the data question and the public health possibilities. My vision would be that with the synergy with public health we could have at the level of a national statistics database which reported road casualties of Great Britain is, we could have that included in the probably two-thirds of unreported seriously, killed is all right, they are found out about, but probably two-thirds of seriously injured cyclists in collisions with motor vehicles and probably some similar proportion of seriously injured pedestrians because they never reach the Stats 19 line because the poor, the driver who's involved is desperate to get people to the hospital and help the person that they have injured and the police just are never drawn into it and there's no legal obligation to do that and I mean I would hope that because the local authorities in partnership with the police are producing the Stats 19 data that we have, perhaps with local authority responsibilities for public health, we could have those two gaps filled in and an even bigger gap, those who are seriously injured, and some die, from trips and falls on the footpath, which are just as much highway and transport accidents as ones that involve motor vehicles and the numbers are very considerable and that would be a proper sector of reported road

casualties in Great Britain. Now, before I move onto to something completely different, is that something that there's some hope of?

Y Doyle: Well I don't know whether there's hope of it, it's not really in my gift to say, but I think I absolutely agree with you Professor Allsop that it is much better to collect this at the lowest level in my view would be regional and probably nationally because I have experience of trying to do local collection with the police and with A&E departments on crimes related to alcohol. It's a very good theory, it's been tested in a particular set of areas and found to be very good at targeting police intervention as a consequence of those data, but it is murderous to get the information locally, particularly from A&E departments. So if we're going to go down the route of collecting more accident data, I absolutely think there has to be probably a national system of doing that coherently. I really, my experience is that A&E departments, by asking people to collect data locally and aggregate it nationally, is very, very cumbersome. And doesn't work and leaves us with loads of gaps.

R Allsop: It has worked for Stats 19. Stats 19 is all done locally, but the local people...

Y Doyle: But not through A&E.

R Allsop ... agree to do it in a way that the national database comes to...

Y Doyle: Yes, it's a very good idea.

R Allsop: ... two national statistics then.

S Glaister: Would that imply then some legal duty or responsibility on A&E to report these kinds of events? I mean it words, Stats 19 it worked because as Richard says, the police have undertaken to do it I guess routinely.

Y Doyle: 1948 –

S Glaister: Okay, statutory, alright, yes, yes. But there isn't sort of a kind of corresponding statute for these things that come into A&E?

Y Doyle: Not from any public health actions in A&E, and I've a long history of collecting data through A&E, and my first year as a doctor was going round A&Es in Ireland collecting stuff. It's very difficult unless it's core business they are desperately run off their feet and public health is just not their business so I think depending on A&Es to provide data in a non-statutory fashion would be at best hit and miss.

S Glaister: So what's the solution?

R Allsop: You need to think in terms of a statutory basis.

J Breen: But can I just ask, doesn't health sector need that to evaluate trauma care? I mean, doesn't it need information about road traffic injury in terms of trauma registries, I mean at different levels to evaluate?

Y Doyle: Yes. Well, I mean there –

J Breen: There is performance in terms of trauma care.

Y Doyle: They can, they'll take the information they get coming through their A&E as far as it relates to the care that is offered in the hospital, I mean, near misses, discharges, you're left to having collect that information, unless it's some, part of some performance indicator that you have to collect or the law, you know, just asking people to do it because it's important for local public health in my experience, they just can't cope with that.

B Sheerman: Amy just made a comment to me.....?

- A Napthine: What about the use of technology? I know technology and systems that are in trauma departments in A&E are changing and have changed and there are growing moves to bring things together and the use of data has come up. How can the use of modern technology and modern data sharing help that, and can just an extra tick be put in a certain box?
- Y Doyle: So that's what we tried, and we gave money for it, I wouldn't mind, this was not about money, you know, it's about the sheer scale of the workload in these places, you've got to consider, if you're collecting data, and it's not for the primary business of the organisation and it's run off its feet, you've got a number of factors there that are not hopeful for a systematic furrow collection.
- B Sheerman: Yes. There's a very broad and important point here which I'm sure we'll come back to that, as you say, they're faced with the nitty gritty of sorting people out, but there's a public interest in the long run in really understanding this and saving the incidents in the first place because we've got a better data and that has to be resourced somehow.
- P Bottomley: Can I come in? The first thing is I went through my local hospital as to what paperwork would happen if I came in as a suspected pneumonia case and if I was discharged within four days there are 140 pages that people are supposed to fill in. And the idea that you add more on and it's going to work, most of them aren't filled in properly anyway, there's a lot of duplication of knowledge where each bit of paper goes. So I think Yvonne Doyle's actually helpful in saying, "Watch it". It seems to us, to me, there are two interesting things. One is with the sample surveys on a research project, if repeated, can show you what changes in patterns there are. The second, and that might help you and how treatment can be improved, the second thing is to say, if you need to know where your local risks are, doing it through hospitals or even through the police is not the best way, it's probably best to get some kind of association of people who use the roads. Cyclists are very good. Pedestrians don't yet. Motorcyclists can. And to say to them, "If you can spot in our local area where you think the risks are and where you've had bad experiences," get those onto a data map and then make it available to the police, to the medics, to the politicians, to RoadPeace, to others, then there are two ways of doing it and I think that we're probably a few years away, if we ever get to a paperless NHS, then a tick might work. But until we get to a paperless NHS I don't think it's going to.
- S Glaister: Thank you Sir Peter.
- Y Doyle: Could I just respond, thank you very much Sir Peter, you've just reminded me that there is another way and it's sort of technology. There's a world map which uses media reports in places that, where we don't have reliable data collection, for instance, in Central Africa, to understand where we're getting new infections emerging or new outbreaks. It's actually very powerful and it's about 60-70% right about something that is actually happening, so using other ways of ascertaining as a first pass is a very clever way of doing it and so the mapping idea is very actually very apt.
- S Glaister: Richard, you had your point to make.
- R Allsop: Yes well, I'd just like to take us back if I can to, we were talking about when there was a public understanding of a source of risk and in particular where it was seen that behaviour of A was a danger to B and I'd like to ask the three of you, what happened, what should we, what should happen when this runs into a substantial vested interest and I'm thinking of the alcohol limit question, I mean I think it's true that, well it's certainly true that for of the order of ten years, 70-80% of the population wants the alcohol limit reduced to 50mg and a similar percentage of drivers, it's not just that all the people who never drive want it reduced and the drivers like to be able to carry, it's 70-80% of the drivers want that reduction and I mean we've been within an inch, I mean if John Prescott had stayed in his post perhaps a year longer, if Adonis had stayed in his post a year longer we would have had it, but at the point of considering Peter North's recommendation for this, the drink retailers, not the manufacturers, the final outlet retailers, pub owners and the restaurant owners conjured up an estimate that it would cost them £1 billion a year to do this for a considerable number of years. Now, what should happen when there is this blatant apposition of a widespread public wish in the sort of way that you were describing in other instances where it happened, for something lifesaving and injury preventing to happen, and such a narrow vested interest gaining the ear of the decision makers?



S Glaister: Professor Dorling, you want to pick that up?

D Dorling: Okay, I'm an amateur on this, but if somebody could show that those figures were wrong and that the overall cost to health including liver disease and so on of not having made the decision because of lobbying has been incredibly damaging to the public, I would say at what point can you hand it over to somebody legally who can seek redress for the damage done to the very lifestyles of people who've been harmed from that advice being given with a vested personal corrupt interest? I mean does this get into a legal situation, in similar to the ways that when tobacco firms fix evidence and behave badly we have laws suits against them?

S Glaister: Under the civil law?

D Dorling: As I say, I'm an amateur on this, but if any organisation seeks to change behaviour to affect a change which is damaging to people's health and does it maliciously and knowingly and the precedent is all in the tobacco industry, then eventually, and it can be decades later, then law suits emerge and the big advantage of law suits is not in the actual case, but in upholding in people's heads when they're thinking of doing this, in the interests of their company, not to do it because it's commercially not sensible to do it because they could face that legal challenge in the future. I mean I... that's seems to me the obvious route, but I'm an amateur as to which part of the law would apply.

S Glaister: Professor Wolff, any thoughts?

J Wolff: Well I'm another amateur on this, but I still have a certain amount of faith in the British political system and I don't think we're as corrupt as some systems in which, you know, politicians get recycled as the lobbyists and so on and the power of lobbyists, for example in the United States, is so powerful that politicians find it very hard to act. They think about their future careers as lobbyists and so on. I don't think we're at that situation here. I mean it does seem to me legitimate for industry to be part of a contributor to a public debate. I think it would be in a way negligent for them towards their own shareholders not to try to work out what the effects would be for them and perhaps even to put the worst case forward, but it's only one voice in the debate and, you know, there are other voices and there should be other people who are putting contrary arguments. I mean I think there's a wider question about, you know, how is policy formed, how much evidence is used in policy formation, who is the evidence given to, who knows what? So I'm very struck about the discussion about data and producing more and more data when it seems to be data very often plays a pretty low level of, low role in how policy is formed and even more importantly how opinion is formed. So, going back to the thing I do know a little bit about which was some of the survey work we were doing on the railway industry. At the time I was doing my work another company was doing a quantitative study of public perceptions and one of the questions they asked the public, about 1,000 people, was, "How many passengers are dying every year on the railways?" This was round about 2004 so how many people with tickets were dying? They asked about 1,000 people. The median answer was around about 100, the range was 10 to 1,000, and the truth was five. So everybody had got –

B Sheerman: It was a bad year actually.

(Laughter)

J Wolff: Well, so ticket holders, so these include people who are dying one by one and not necessarily in accidents, people who... so, it's quite clear then that, you know, the public perception of risk is not determined by any type of figures. We did some interviews with some people and they said, and we asked them why they thought so many people were dying, "Well, you know, I hear about these accidents but there must be all of these other ones I don't hear about". Whereas, you know, for railway accidents, actually everyone is reported and most people probably could give us the names of accidents that happened ten years ago. Whereas for the roads –

D Dorling: Yes but only for ticket holders, not, I mean most people who die on the rails are suicides.

J Abbott: Suicides and trespassers.

D Dorling: Yes.

- J Abbott: So, yes, you go up to about 300 if you include suicides and trespassers.
- D Dorling: Yes. And they're not reported.
- J Abbott: Suicides are all reported and we try to find the causation of them as well when it goes through the coroners –
- D Dorling: Sorry, I meant the wider press and media.
- J Abbott: Yes. Trespassers are if they're interesting trespassers, children or groups.
- S Glaister: But the basic proposition is the general public haven't a clue about the facts.
- J Wolff: No, you're right, that's –
- J Abbott: And when I started, what Railway Safety then was, wanted to do was pump lots of fact into the public domain so that they, so people knew how few people were dying and how safe the trains were. And there were consultants who thought that was the right way of going about it whereas our view was, my team was the public really don't want to know that, they don't want to have to think about it, and you know, as soon as you're putting these statistics in the public domain it's as if you're worried about something and you're alarming people. What people want to be is to be able to trust the competence in the system which is what we moved onto rather than pumping those statistics out. Statistics need to be known, but they're part of any experts' discussion, they're not part of a democratic discussion it seems to me.
- S Glaister: Well, you must face the same kind of problem also in the public's perception of what the risks to them are, presumably a long way different from your understanding of the truth?
- Y Doyle: Yes... so it's known that health literacy is very low. Very low. And...
- S Glaister: Health literacy?
- Y Doyle: Literacy. And that probably follows on from the fact that about 20% of the population are not very literate in general.
- S Glaister: Or even numerate, I mean...
- Y Doyle: Or numerate, yes. Yes, it's sort of ten-year-old numeracy is quite a, yes, is quite a benchmark for a certain proportion of the population, so if you just drowning people with a whole load of stuff it's boring. No matter how you present it, and it gives the wrong message. It's a message of lack of trust. However, there is a way of communicating the way we are now, that we are not good at, and it's certainly not about spewing out statistics and giving lectures to people, but when we have the opportunity we have the kind of straplines that say, "And did you know actually that...?" "Around this town there are about a third of kids who are actually fat." And you say it in that kind of lay language and people get thinking about, so what does it, it comes back to social marketing. But the point that was made about alcohol is an interesting one and I mean from my perspective, that's another one where a public that is a par excellence for public perception of risk is way adrift of what the actual risk is and the risk is actually high in this country and it's high across all social classes and it's very difficult to get people to accept what are safe limits and we've been really awful I think at explaining what units are so we've got a real bad combination here into which the traffic arguments come. I think the sad thing is that we're all amateurs on the issue of the law and having a big row in the courts in public about public health and we saw this in America where we, again in New York, we heard it from other cities which have innovated in various ways to improve public health, so New York did take various vested interests to court and lost actually. What it did though was it gave the message to the people of New York that the administration was taking care of them at that level, was caring about their health, and behaviour changed actually as a result of it and the consumption of sugar drinks went down and I think in America behaviour changed as well, so we haven't got to that stage and maybe never will where we face something up in a court of law. I think we're not well

placed at the moment. We don't tend to want to go there. I'm saying if you're going to have a big row it's got to be one where you understand the consequences of it.

S Glaister: Now, Nicola Christie's been trying to get in for a while. I do, I apologise ...

N Christie: yes. That's all right.

N Christie: That fragmentation of leadership. On the one hand we have Department of Health and that goes right down to a local level. On the other hand we have Department of Transport going down through to Highways Departments and often there seems to be a kind of parallel monologue going on and just as an example for this, the National Institute of Health Research, which is funded through the public health, Department of Health funding stream, put out a call for research on interventions for young, to reduce young drivers' crashes. And the Department of Health didn't, Department of Transport didn't know anything about that. So that's one issue. Public health in many ways, they are so advanced in terms of professional development, they're kind of competency framework, excellent on the evidence base, information rich, but in terms of delivery you're almost, you have no commissioning role whereas in the Highways Department they have a commissioning role to kind of, to actually do something and often those two groups are working, not working together and I just wondered is there a way that we can combine those efforts and I know the appointment of Lucy Saunders in GLA and TFL in an excellent example, she's a public health specialist and working at Transport for London is a really good example of how you can perhaps broker more joined working but what are the opportunities?

Y Doyle: Thank you and I agree with you actually, I think probably our weakest link at the moment for mainly historical reasons and because we've come through a very difficult recession where people had to focus at national level on getting through it, but there is now an opportunity to think, "Well, how do we actually enable the best health and wellbeing across the country to supported across government? I mean we now are trying to persuade schools again to think about health and they've been very successful on education but it's been very reductionist, you know, parents I think we're having this request, parents want to know how healthy their schools are, the Mayor of London is doing a lot to help with it, but, schools, transport, another key department, you know, we could call them all and say, "What is the model of getting health thinking through other government departments?" and I'm not sure we know the answer to that.

N Christie: Because in terms of capacity you look at a lot to people involved in road safety, their career paths are pretty weak, their training is pretty weak, they do things because, well, they've always done it like that, and I think the professionalisation and support and what public health could offer people working in Highways Department I think we're always unfair on our road safety officers, we're almost letting them, we're setting them up to fail because we're not building the capacity.

Y Doyle: So we're having great success and I can, I mean, speaking here for the London side, with the little team we've got in Transport for London, because the persons in there are good and suddenly they're opening the eyes and ears of the people working alongside them to what is possible to do and we're getting tremendous thinking about aligning, you know, use of the public realm, obesity, safety and you know, getting people around the place being reasonable and proportionate about things, but you need people in there who actually work alongside to open up the eyes and ears and at the moment we're a bit blindsided I think, we need some, we definitely need people with that right imagination across government, but what the correct model of doing this I don't know. There's been also, they've been a Cabinet sub-committee for health, as you know, that I think has gone into abeyance.

N Christie: And just to open one question up to the panel is there, I mean, Yvonne, you said that if we provide all this information to people and they will act on it. I don't believe that for one minute. I think if you look at in kind of deprived areas for example, you have low volunteering rates, the last, you know, to actually galvanise a community to do something takes a huge amount of effort when there are many other issues that they have deal with and the role of public health is to advocate on behalf of those who can least advocate for themselves, so how does someone, how, what leadership is there to create champions for reducing risk on the roads because I don't believe that putting information to there makes any difference at all.

- Y Doyle: So I mean here's, well, I agree with you. I don't think information is going to do it. I think the people who use information are the people who are thinking about how to implement stuff rather than the people perhaps who are affected by this stuff. So, you know, that's in a sense our role is to try and influence councillors and decision makers and commissioners and whatever it is at the right level, you know, with the right tools and materials to say, "This is why we're doing this," but what we do and how we do it is the important question really, and this is where I do agree with the local emphasis, so what I would rather see is communities to have, and we have examples of this, I mean we've got Living Streets in London, communities who have got issues and problems take matters into their hands, they have health literate trained folk within those communities, they may or may not be volunteers, maybe we should be exploring whether we pay these people more to do this sort of thing, so that they act as advocates because they know better than I know. And actually, Danny said something about a generation of folk now who don't want to be told what to do but actually it sounds pretty patronising when the doctors and the public health specialists come in and tell them as well. It isn't the way things change at local level and sustain because we go away, they stay living there. So it is how do we build up communities and transport and safe streets really can help that, because you have to know who your community is.
- N Christie: You do.
- Y Doyle: And, you know, you have to care about what happens on that road and the people living opposite you and also, you know, who is it that has the resource and the capability to actually, and who lives there and has a vested interest in it? So that would be my answer in the first instance.
- S Glaister: To Suzette Davenport in a sec, but Professor Dorling, that's a great story for London, but is it not the case that London in many respects is magnificently well-funded and well served by officials in a way that just isn't the case in other parts of the country? You alluded to this earlier perhaps.
- D Dorling: Well, London also gets this incredible publicity for individual deaths of cyclists which is very, very useful, but other parts of the country just don't get it, partly because this incredible change in the demographic, I mean, when I was a child the cyclists were the men who cycled to the car factory. The cyclists are now cycling to Whitehall and if you want to see a change in how people are treated look to London cyclists, but London is the success story and the congestion helps as well, and it's much worse out of London, it's poorer areas, particularly in the north, but also the areas we never talk about like the shire Home Counties, without pavements, where people are rich enough to give their 17-year-old boys cars, especially in places without street lighting and...
- S Glaister: And where a lot of fatalities happen.
- D Dorling: It's where a lot of fatalities happen, and it's also where there is some of the most individualistic thinking, so there isn't advocacy and for 20mph, or 40mph where there is 60mph. To put it bluntly, there isn't, there aren't many advocacy groups in the areas with the highest fatalities because it's the kind of most anti-nanny state part of the country and I do find it sad that it's not recognised and also that it's one of these inverse health inequalities, so, these are some of the best-off children in the world and young adults in the world...
- S Glaister: At risk.
- D Dorling: ... at risk and because of a traditional interest in the poorest that risk is ignored and that's becoming starker. Simple advice of, you know, "Do not buy your child a car," I mean, you just you know, the worst possible birthday present for a 17 or 18-year-old is car? Why don't we have that as a little advertising campaign?
- S Glaister: Or at the very least introduce some graduated licencing. Suzette Davenport.
- S Davenport: Just to build on that point, I heard a stat probably about a month ago which is that the biggest killer of young women are young men, their boyfriends in the car. But the point, the question I was going to ask was, and this is for Yvonne and Danny in particular, the view from a, at the health perspective, the view from the local democracy perspective is given the challenges there are around funding and resources locally, and you know particularly around road safety, how is it that we can most effectively

target the health and wellbeing boards to get the best outcomes to therefore focus on reducing death and serious injury in particular on roads and both urban and rural environments?

Y Doyle: So, thank you, because one thing I think we're all concerned about is what happens after 2015 when local government funding is cut further.

S Davenport: Yes.

Y Doyle: And we will really have to be very focused about what we're expecting them to do at that stage and what help others can bring to bear on this. The one advantage we have is that there is a ring-fenced budget which will continue.

S Davenport: Yes.

Y Doyle: And that will give the Director of Public Health as the local leader, you know, some latitude to be creative around these wider areas of health and, the environment and accidents prevention is one of those. And it, but it will always go along the local needs that have been determined and the best value you can get for whatever you do, so that's the kind of language we've come to expect is, you know, is this something that's happening in your area, in large numbers, and unfortunately in very reduced funding that's the way people will think, "Is this going to give us a bit impact?" And is it good value if we actually commission or do stuff on this. The Director of Public Health and councils, I'm still focusing on councils because the potential is here, you know, should be working across all parts of the council to work with the environment, to work with local police forces, to try and see how they can make the very best of their collective resource and accident prevention should be one area and with the voluntary sector they should be able to do that. But I do know from my work with the voluntary sector it hasn't proven easy to get those alliances going at the moment. So I think, I wouldn't underestimate the challenges here, particularly after next year.

S Glaister: Professor Dorling?

D Dorling: In other countries in Europe they do make more use of health budgets to be used by local authorities for this and that would be one way because although the health budget has been squeezed it hasn't been squeezed anything like at all as much as that of local authorities, so that's sitting there. And it's... I think that's probably the best way to look and you're talking about very small amounts of money, but the problem is, a small amount of money is huge in a situation where you are cutting back and back and back and now that local authorities are often only going to do what they are statutorily required to do, so they do need that money. However, I'll just come back to this last issue, the point I made earlier. In an environment when you cannot do what you used to do in the past, what can you do? When we abolished local authorities in the 70s and created new ones they all built swimming pools, so if you look at your local authority swimming pools and wonder why they are all dated at roughly the same date, local councillors used to have more money to spend and did things. Now I find it very hard to see what a local councillor can do apart from saying, "I've tried to be careful where the cuts are," other than say, "But we really can improve the life of this town by this," and it might perversely become easier to get a spread of 20mph just on the grounds of what little else is a local councillor going to be able to advocate or...

S Glaister: What can it afford?

D Dorling: ... what can it afford? And I find it hard to think of anything cheaper than 20mph, it's much cheaper than a playground and in a sense if you're worried about children playing, you know, it might get our kids back to what they used to be able to do far more than worrying about expensive playground equipment.

S Glaister: Professor Wolff and then Ben.

J Wolff: Just a very quick comment on this, so probably four or five years ago there was a lot of attention to the social determinates of health and I can remember going to seminars with people from the Department of Health who say, you know, we completely buy this, we completely believe in the social determinants of health. The trouble is nothing in our domain is a social determinate, you know,



we're spending money on hospitals, we're spending money on pharmaceuticals, on doctors, but it's not though we're now convinced those are not the things that are going to make the greatest difference to health, and so at that time I think there was a quite a lot of discussion about partnerships with other agencies spending the health budget in effect, and there must be more scope for that and this is really what you're talking about. Now, but if can link it to something that the Department of Health at least at one point agreed with which is the social determinants of health, then, you know, there's another way of joining up the dots.

B Johnson: So London's an interesting example of a number of things that we've talked about here. One is that there's sort of no point putting statistics out the behaviour change. In the press in London there's a mass of attention on cyclist death and obviously that's a, you know, a very important issue for London. And I think that brings together this idea of other people and the responsibility for the impact on other people of your actions, which we discussed around smoking a bit. But actually, obviously in London it's not cyclist death that is the massive proportion of deaths, its pedestrian death in road casualties, so, you know, we haven't got that public debate in this location where there actually is quite a lot of awareness probably around road safety compared to other places perhaps. And then we've had a little bit of discussion about the kind of lack of a case if you like to collect perhaps some more data because we're already drowning in to some degree in the evidence and the data and also are we even going to use that in our behaviour change programmes because apparently the public in a general sense won't listen to that, so yes we can use that to understand what it is we think needs to be done as practitioners I guess, but actually it's not going to be the primary source of our communications message, our behaviour and attitude changes massively, so I'm just wondering what space there is for some discussion around morality in the kind of leadership debate here, because, you know, it seems to me that if we're trying to make change happen we need to engage with the public in a slightly different way than the evidence base, and so yes, how can we play out that debate in a set of language, a set of terms that we think will make the right change happen?

D Dorling: On language it might help if you use the word "civility" rather than "morality". It's one of David Cameron's favourite words, but being civil and civil, polite ways of behaving, the importance of politeness, I just think civility has a much more powerful traction, ask how would a polite person behave towards others and how they drove in local roads, civility.

J Wolff: I think that's right, I mean it's very interesting that we have so little moral vocabulary now that than anything, you know, traditional moral vocabulary sounds so priggish if you use it, but we're not without terms. "Civility" is one, but "thoughtlessness" is another and thinking about whether people are thought, have you thought things through? And this can be about your effects on other people as well as yourself. The notion of recklessness as a form of immortality, I mean people will understand "recklessness" as a bad thing. They won't think of it as immoral immediately, so you know, I think there are ways in which we can talk about it, well, there's reckless driving and reckless behaviour and in the health realm you certainly don't want to talk about morality.

R Allsop: Is ethical any use?

J Wolff: No, ethics is no good and so we set up, we were going to set up a centre for ethics and health at UCL and we were advised by the Dean of the Medical School not to because ethics in their view means what you have to do to get your research approved.

S Glaister: So it's going to be Centre of Recklessness is it?

J Wolff: So ethics is about approval.

S Glaister: Yes. But I think is it not true to just refer back to an earlier conversation that I know there's of course still a problem with drink driving, but these days the general public does regard driving whilst seriously drunk to be reckless in a way they didn't 30, 40 years ago, isn't that correct?

J Wolff: I would agree with that, that's why I surprised by the figures, I mean it may well be because the limits seem to a lot of people to be very low now, they don't feel they're being reckless.

- D Dorling: It's because the amount of alcohol that is more easily available is rising. I was just staying by City Airport last night and in the big ExCeL building they have the International Liver Conference which is absolutely massive because we are all drinking much, much more and hence there will be an increase of drink-driving and there's a whole problem with denominators in all of this, so more people cycle so it looks like it's more dangerous but in fact cyclists are safer, fewer children walk so it looks like it's safer but it, you know, isn't, and the denominators are often hidden, but we...
- R Allsop: It sounds as though we should measure the amount of drink driving again, I mean we haven't measured that for about ten years and if you're saying because of this increased drinking there must be more drink driving, of course that is, offsets what the chairman has just said about the current understanding. I suspect that the, myself, if the right questions were asked we would find that the great majority are recognising but the minority who don't may be doing worse and worse because of the increased consumption. Sometimes realising that it's increased consumption and sometimes just the size of glasses has gone up from and the strength of what's in them has gone up and people are not aware. On the other hand we do benefit greatly from people massively overestimating how near they are to the present limit. If people knew how much they could drink and still be below 80, we'd have a tragic situation.
- S Glaister: Right now, Rob Hunter has been trying to get in for a while and then Jeanne Breen, if that's alright. But Richard, I know you've got to go, is there just a final point you wanted to make before you go?
- R Allsop: Well, just very briefly to go back, I think the idea that bringing the drink retailers somehow to court for doing something so questionable just by selling their stuff, that doesn't seem to me to be a way forward. I can see a situation where if there were a movement for pubs to say, "You're welcome here, you know, having drunk, you're welcome to drink your two or three whatever that you're now allowed to drink here," then of course some of us could choose to avoid those pubs and go to the ones who refuse to display such a thing, but I can't see the law, I can see, of course, in... we do have to separate, we I think in road safety it's quite important, we are concentrated with the consequences of driving after drinking. We are not concerned with the massive public health consequences of there being alcohol and alcohol being about the place and used and so on. We are simply concerned with not driving after you've used alcohol.
- D Dorling: Yes, but you could improve public health far more by reducing people's drinking. Then the effect on the roads would be tiny compared to the cirrhosis.
- R Allsop: Yes.
- S Glaister: Now I must let Rob Hunter get in because he's been patiently sitting there.
- R Hunter: So my question's in two parts, and that is how does our road safety compare internationally, and in that comparison, is there any correlation with the matter that we're here to discuss today which is the models of accountability? So is there some place in the world that performs really well and they performed really well because they do things this way.
- Y Doyle: Yes, so there are parts of Europe that are safer on the roads than here and there are, if you look globally, this country performs very, very well in terms of the further east you go particularly, it is, you know, deaths on the road are very serious, they are very serious, probably one of the most common causes of mortality in young people, I mean Thailand has a very, very high death rate from, you know, from, particularly from traffic accidents and for pedestrians, so I spent some time in China, there are hardly any rows of road there, so, you know, it is frightening how many, and there's no health service either to, you know, adequately to address the needs of all the population so the mortality's very high. So, but we're not by no means are we the best in Europe in this country.
- R Hunter: But the linkage of that data with the accountability models locally, so what's causing the differences and do any of those causes relate to what we're here to discuss today?
- S Glaister: Professor Wolff, did you hear?

- J Wolff: One... so all I can say here is what I can remember from looking at statistics from a few years ago and in terms of causes of death, road accidents is in the top ten causes of death for many middle income countries because they, you know, they can afford the cars but not the road safety, so you know, it's really astonishing to see how many people are dying in road accidents around the world. Of the larger countries in Europe I think we do pretty well, so I think it's, you know, the Scandinavian countries always do better. And the Netherlands, but if we're looking at sizes of comparable, countries of comparable size to us, I think we're probably best in the world and –
- S Glaister: The question is, where they did do better is because of a different institutional attitude, accountability and indeed, across sectors you get aviation with roads is this a lesson to learn there do we think?
- J Wolff: Well I think the United States is a very interesting place to look at because if you look at the north east, it's in New England, that's just like Europe. If you look in the south, it's more like the middle income countries of the world and so you've got probably people driving much safer vehicles in the north, but being less reckless.
- B Sheerman: And a lot of variation by state, different states have different levels of regulation.
- Y Doyle: There's very, for a state California doesn't have a good record of the...
- B Sheerman: But what I meant was actually the regulations vary a great deal from state to state.
- Y Doyle: Yes.
- J Breen: Actually road traffic injury is the leading cause of death in the United States. Top circle, all four –
- P Bottomley: If I can just intervene, Peter Bottomley again.
- P Bottomley: We've changed no law or practice in the last ten years in this country and the figures show that between 2002 and 2011 the number of crashes that involved a drinking driver as recorded by this, that and the other, appears to have halved, the number of casualties appears to have halved, so I think looking at differences in regulation isn't necessarily the best indication of getting a change in what actually happens.
- J Breen: No, it's good to have a recession!
- D Dorling: The recession did reduce the amount of driving dramatically.
- Y Doyle: Yes.
- P Bottomley: And speeds.
- D Dorling: Yes, but not enough to account for a drop as big as that. We don't, we're not good at comparing chunks of our country to similar chunks of other countries. Now the Scandinavians do remarkably well given how extensive are the rural areas in Scandinavia, and we should really only compare Scandinavians with Scotland for a similar road layout. A massive population increase has been concentrated in London and the South East and this makes London and the South East safer and safer because it slows it down and clogs it up, so that's going well,. I had a go trying to work this out, how much safer is the South East? We can check this now because many urban parts of Europe have 30km speed limits, so 18.5mph in the Netherlands and so on, and over the Big Data I've tried five times with the company TomTom who are the major satnav company because your satnav sends a signal through its mobile phone chip telling them your speed, so TomTom have data on actual speeds and this on every section of road in Europe but I can't persuade them, no matter how charming I am, to give because in a sense you'd get data about how many people were breaking speed limits in every part of Europe, but it would be lovely if somebody could get that data to actually find out the real speeds.
- P Bottomley: Well, that if I may say so is the recommendation which we could put forward, so if you'd like to send us a note...

D Dorling: I'd love to.

P Bottomley: ... on that it would be very helpful. And Richard Allsop's talked about how much drink driving there was. When I was Roads Minister we got a survey done where we'd stop people at random and test them. And if they were over the limit we'd offer to drive them home. We had this in cooperation with the police but it, if you agreed with the advice you weren't prosecuted. And that showed roughly the drink driving times or drink driving days, the good is that one person in 50 coming towards you had been, the four in five been driving, one in 50 was above the legal limit and one in 500 was above twice the legal limit. Now, being able to get sort of benchmark figures to see how those change must be an important part of it, but I think your point about the geography of speed and how to then link that in metadata to what appeared to be the pattern of casualties, I think would be a really useful thing that you could, if you could put a note in to Amy, I think we could then take it seriously.

S Glaister: Thank you. Now I've got, we're coming towards the end of our time so we managed to wind up. I've got Jeanne Breen and Kate Carpenter, but it just didn't, in making your final thoughts, if there are any gaps in what we've been discussing let us just log it up now, but also any particular recommendations you'd like to put to us as we just had one there possibly, please feel free to mention it. So, Jeanne?

J Breen: I was just really going to pick up on Ben's question which I thought was very interesting in terms of the ethics associated with leadership in terms of I suppose evidence base. We're saying, aren't we, from this discussion that direct approaches to drivers, road users, through just presenting data and information and publicity etc. don't work, you know, you don't get the results that you need to get and we know from the research that it's combined policing and publicity which brings the reductions in drink driving, you know, it's road safety engineering, it's vehicle safety. There's a whole lot of system type issues, if you like, that are effective. And I thought you were raising that as to whether or not the panel thinks that actually going down an evidence-based approach is an absolute requisite for effective leadership in road safety, and how that impinges on Public Health England, possibly in terms of your developing policy.

S Glaister: Dr Doyle?

Y Doyle: I think if you want to get things done you have justify with the evidence. You have to start in that place. As someone said, it doesn't end in that place, it rarely does actually, but you start that way. The other thing that we do is, I think it's very hard to get everybody's attention. Policy makers, councillors, whoever it is, ministers, you know, they're getting lobbied by just about everybody so what I try to do is to wrap up a number of things in something where we get several hits for one effort, so when I'm talking about road safety I link it with obesity, I link it with mental wellbeing, so that we go along at sort of and ask of safe streets that are pleasant places to be that help people walk, you know, that are safe for cyclists, and then if you ask, it's like 20mph, let people cycle on the paths, you know, because that gets people cycling, the risk and benefit is better, and you weave the evidence in in the ordinary do you want to make, so that you have some concept of what you're trying to achieve, you know, as a package. I think if we, I understand why this committee may need to focus on one thing, but if I'm doing this out in London I'll try and get several hits for one.

J Wolff: Well, I think this is an important point because when we think about public health a lot of people thing we're talking about behaviour change, yet and traditionally public health was about sewers and, you know, clean water which had nothing to do with behaviour, it was about putting the right systems in place and so when we talk about system change I think, you know, the evidence is very, very important because, you know, there's absolutely no point changing the system if you don't have any evidence that it's going to be better, so there I think, you know, the data, information is absolutely critical. If we are interested in behaviour change we need different things to data, possibly we need to get people to understand the harming others and morality, we probably do much better with anecdotes and narrative, however unscientific this is, but telling stories mean things to people, and you know, I think, you know, going back to the difference between road and rail, you know, I think the reason why people had a distorted view of how dangerous the railways were was that there were so many stories in newspapers about crashes and hardly any stories about road accidents because they weren't newsworthy because there were so many of them.

P Bottomley: And one of the great ironies, yes.

J Wolff: Yes, and so, you know, the fewer rail accidents they are, the bigger the news story they are when they happen, you know, so we're preparing ourselves for a really big story now because we haven't had a big rail accident for a few years. So, I think you just need to know what you're trying to achieve and what the core audience is and I think also, for the officials, you can try to get them to behave or change the regulations, and some cases you want to be persuasive so you're trying to make an argument, and other cases they do want to listen but they don't know who to listen to, so there's always going to be a question, you know, who speaks for the public? And you know, one thing we learnt, it's not the newspapers. You know, the newspapers can put any editorial forward; they just want to sell newspapers. Once upon a time it might have been the trade unions, it's not anymore probably. It's certainly not the victim groups or special campaigners and so, you know, trying to get to public attitudes and public belief is actually difficult and it's a different, it's a different type of work to the thing that one we're ordinarily have.

D Dorling: I'd agree with that. Although, if you go back to cholera, although it was about systems, getting in sewers, there was a behaviour change which was getting those people who had the power to put sewers in, getting them worried enough about cholera because they thought they could get it and it was massively useful to the Russian court who got it early, and just chance because it turns out there's recent work that shows that it looks as if the rich were actually fairly safe from cholera but they didn't know it, and this was incredibly useful for getting good public health systems brought in. We now have the opposite situation, you know, better off people are actually at more risk once they're outside of towns from what happens on roads, but are often least interested so you've got a political disconnect with the lobby who are most interested in slowing this down and I do think, I think the case for 20mph's been made, it's just a question of implementation, there's a much harder case about 50, 60, 70, and what you do outside urban areas and there looking at Scandinavia's interesting but the difference in Scandinavia and rural South East England politically couldn't be further in Europe. And so that's your challenge. Learning from other countries and anecdotes is a brilliant way, for instance in Japan where it's illegal to cycle on the pavements, people cycle on the pavements. In a country where people otherwise appear to obey every other law going, they just cycle at 10kmh on the pavements and 20kmh on the road. So you have two speeds for cyclists, and it's partly by seeing different things occurring in different places which show you that it's possible to behave differently to how we are behaving now, otherwise people find it very, very hard to imagine change.

J Wolff: Yes.

S Glaister: Last question from Kate Carpenter.

K Carpenter: It links the things we talk about, about leadership and policy and decision making, I'm just interested in your view as the extent to which the devolved thing of decision making both to local authorities and to liberal people within authorities has actually aggravated an inequality of exposure and vulnerability, so for example, we know that the most affluent people who are least at risk are most competent at lobbying for things to be done so we see a lot of, outside London really, a lot of local authorities where it's the most affluent areas for the least injury rate that get the 20mph zones. Children taught to drive on airfields which we know increases their subsequent accident involvement, but it's popular. People like it, they vote for it, the most affluent children in five star cars who are least likely to die are getting this training which is more likely to increase their accident involvement. The people with the greatest need are getting the least treatment because they're not people who come forward and engage in the kind of democratic process we have. What could do in terms of leadership to redress that balance?

P Bottomley: I'd like to add to that if I can on 20mph zones. In my past my grandmother was a geographer with Hertford, before the First World War, and lived in a play stream when I was younger. Do you have much evidence showing the difference between the cultural impact of a 20mph zone and road environment changes whether white lines or chicane parking, which actually makes a difference?



D Dorling: The honest answer is no, other than anecdote, although having returned to a city that used to be 30mph and I've come back and now see it at 20, but people haven't collected data. There's lots of theories about it and you can, you know, get a sense and it makes logical sense, and work has been published about footfall and shops doing well and so on, but a difficulty is that the more affluent places like Oxford tend to get it first. Portsmouth will be interesting because it usually isn't seen as an affluent town, but these are all university towns, Portsmouth is a university town, so the problem is we need somewhere that hasn't got much else going for it that puts in 20mph and the baseline measure that shows that the improvement happened then and it wasn't simply that it's a university town, we had a big increase in students and that slowed everything down as well, it's difficult. On your question about what happens in areas, Sheffield is a great example for this. The local council decided to devolve it down to seven partnership areas and the mistake of doing that isn't necessarily that it was the richest area that when through it first, but the number of tiny little roads that connect that area that then need all these extra 20mph signs and you really don't want that, you want to devolve the decision to the level that involves a minimum number of perimeter roads needs signage just to avoid confusion, otherwise you're, you are confusing drivers an enormous amount and that is a problem because of the shapes of our local authorities or when a local authority decides to devolve even further and it becomes very, very inefficient.

S Glaister: Thank you Professor Dorling. Professor Wolff?

J Wolff: I've nothing to add.

S Glaister: Dr Doyle?

Y Doyle: I think I, come back to the idea that when you begin to perceive that a vulnerable group of the population and it could be those who suffer inequalities of children, are just not getting a voice. You then are presented with a real, I think it is a moral dilemma about whether the state needs to protect those people and it's one where I think I would always say to use it wisely but I think you use it all the same. If you perceive that, you know, the democratic system at local level is simply not serving the people who need it most in these respects because, you know, they're not howling for what they're needed. No, if the Director of Public Health in those areas cannot perceive or doesn't for other reasons of distraction perceive that, and there is real inequality being suffered, then others must ask that question as to whether there needs to action at a different level. It's a really good question to end on.

S Glaister: Yes. Well thank you for that. We've had you for two whole hours. You've been very generous, thank you for coming. As we've said, if you have thoughts afterwards please jot them down, ring us up, whatever, and we'd be very grateful to receive that, and we may take the liberty of writing to you with questions if they occur later. You can prepare. Thank you everybody.

[End of Transcript]