

MEDIA RELEASE – 22 AUGUST 2008

**Coroner uses new powers to call for action by Government to reduce road deaths caused by undiagnosed obstructive sleep apnoea**

Our 25 year old son Toby Tweddell was killed 2 years ago on his way to work in Liverpool. His car was waiting in a morning rush hour queue on the M62 motorway approaching the Rocket Interchange. The queue was hit from behind by a heavy goods vehicle and Toby's car was crushed. The driver of the HGV had fallen asleep at the wheel, and was later diagnosed to be suffering from Obstructive Sleep Apnoea (OSA).

On 5 August 2008, following an all day inquest in St Helens on 25 July, Merseyside Coroner Christopher Sumner delivered a verdict of Accidental Death. Alongside this verdict, the Coroner took the unusual step of issuing a "Rule 43 Report" to the Lord Chancellor in an endeavour to reduce the number of road deaths caused by OSA. The Rule 43 Report (attached to this media release, together with a report to the inquest by medical expert Dr Dev Banerjee) calls for the following:

- Regular medical screening for all lorry drivers.
- Amendment of the DVLA Medical Examination Report form to improve identification of undiagnosed sufferers from OSA.
- Fast track medical assessment of commercial drivers involved in road traffic collisions.
- Better education of all drivers on the dangers of tiredness when driving, in the same manner as drink-driving campaigns.
- Better education of commercial drivers to make them aware that a diagnosis of OSA is almost certainly not the end of their livelihood as a driver.

Under new rules that came into force on 17 July, the Lord Chancellor is required to respond to a Coroner's Rule 43 Report within 56 days.

We welcome everything in the Coroner's Report.

The dangers of undiagnosed sleep apnoea on our roads are already well documented in Government publications:

INF4D, the "information and useful notes" booklet which accompanies the DVLA Medical Examination Report form D4:

- “OSA is one of the few medical conditions that has been shown to increase significantly the risk of traffic accidents.”
- “The greatest danger is prior to diagnosis, when the significance of the symptoms is not appreciated.”

The NHS Health Encyclopaedia:

- “One study calculated that people with severe untreated OSA are 15 times more likely to be involved in a car accident.”
- “Research has shown that someone who has been deprived of sleep, due to OSA, has the same impairment in reaction time, and judgement, as someone who is over the drink-drive limit.”

But this has not yet been translated by the Department for Transport into adequate action to identify drivers with undiagnosed OSA and to get them treated. The case for the Coroner’s recommendations to be accepted is unarguable.

When the Government has accepted and implemented all the Coroner’s recommendations, we want to see a further step taken: there must be agreed criteria for identifying those applicants for vocational driving licences who are most at risk of being undiagnosed sufferers from OSA, and such applicants must then be tested for the condition. Any applicant found to be suffering from OSA can be granted a licence as soon as they are confirmed to be undergoing successful treatment.

The DVLA’s current INF4D booklet, referring to Obstructive Sleep Apnoea, says: “A road traffic accident may be the first clear indication of the condition”. Our whole purpose is to reverse this situation and to have sufferers identified before they cause an accident. We therefore hope for acceptance by Government of all the Coroner’s recommendations in order to reduce this cause of death and injury on our roads.

Nic and Monica Tweddell  
Martindale  
Cumbria

22 August 2008

[ENDS]

## Notes for editors

1. Attached to this media release are:
  - Appendix 1: Coroner's Verdict
  - Appendix 2: Coroner's Rule 43 Report
  - Appendix 3: Medical expert report to inquest by Dr Dev Banerjee
  - Appendix 4: Previous media release dated 5 August 2008
2. The Coroners (Amendment) Rules 2008 came into force on 17 July 2008, and an accompanying Guidance for Coroners has been issued recently entitled Changes to Rule 43: Coroner reports to prevent future deaths

Rule 43 now says: "Where evidence at an inquest gives rise to a concern that circumstances creating a risk of other deaths will occur, or will continue to exist, in the future; and in the Coroner's opinion action should be taken to prevent the occurrence or continuation of such circumstances, the Coroner may report the circumstances to a person who the coroner believes may have power to take such action." A written response to the Coroner's report must be given within 56 days.

These changes follow a 2004 House of Lords case (Middleton) which examined Coroners' duties in relation to the European Convention on Human Rights, and in particular Article 2: the state's obligation to protect the right to life.

3. In America at the beginning of this year a Medical Expert Panel appointed by the US equivalent of the Department for Transport recommended screening of all lorry drivers for undiagnosed OSA and testing of those judged to be at significant risk, see [http://www.mrb.fmcsa.dot.gov/documents/Final\\_Meeting\\_Minutes\\_January\\_28\\_2008\\_MRB\\_Meeting\\_certified.pdf](http://www.mrb.fmcsa.dot.gov/documents/Final_Meeting_Minutes_January_28_2008_MRB_Meeting_certified.pdf). Criteria are given for judging whether a driver is at significant risk of suffering from undiagnosed sleep apnoea – see Recommendations 4 and 5; acceptable methods of testing those judged to be at significant risk are given – see recommendation 6; and a preferred method of treatment is given – see Recommendation 7.
4. For further information contact Nic Tweddell on 017684 86226 or by email to [nic.tweddell@virgin.net](mailto:nic.tweddell@virgin.net).

## **Appendix 1: Coroner's verdict**

IN THE COURT OF HER MAJESTY'S CORONER  
IN THE COUNTY OF MERSEYSIDE  
SEFTON, KNOWSLEY AND ST. HELENS DISTRICT  
IN THE MATTER OF JOSEPH TOBIAS TWEDDELL DECEASED

On 25 July 2008 I heard evidence into the circumstances surrounding the death of Joseph Tobias Tweddell Deceased.

The facts surrounding Mr. Tweddell's death were not in dispute.

At approximately 8.35 a.m. on 8 August 2006, the deceased had been the sole occupant of a Nissan Micra car, which was in a line of stationary traffic on the westbound carriageway of the M62 some ¼ mile west of Junction 5.

An ERF articulated lorry, driven by Colin Wrighton, collided with the rear of a Toyota 4x4 vehicle. After this impact, which pushed the Toyota onto the hard shoulder, the lorry hit the rear of a Vauxhall Astra. This car, in turn, collided with the Nissan Micra driven by Mr. Tweddell, which impact shunted the Micra forward and under the flatbed of a Ford Transit pick-up.

In all, nine vehicles were involved in the incident.

Mr. Tweddell was trapped in the Micra for approximately one hour, so great was the damage to the vehicle.

Mr. Tweddell was taken to Whiston Hospital, where he died in the operating theatre at approximately 1.36 p.m.

Following a forensic autopsy, Dr. C.P. Johnson gave the cause of death as "Multiple Injuries".

The driver of the articulated lorry, Mr. Wrighton suffers from sleep apnoea, which at the time of the collision was undiagnosed.

At an unknown date in April 2006, Mr. Wrighton had visited his G.P. complaining of tiredness. Blood and urine samples were taken to ascertain if he was a diabetic, when these returned indicating that Mr. Wrighton did not suffer from diabetes, his G.P. advised him that he was most probably suffering from stress. Critically, no diagnosis of sleep apnoea was made, nor was Mr. Wrighton referred to a consultant in sleep medicine.

Following the collision, Mr. Wrighton was referred to Dr. A.S. Pulakal, a Consultant Respiratory Physician at the Regional Sleep Service at Wythenshaw Hospital, Manchester. Following examination, Dr. Pulakal, who had the benefit of seeing the results of overnight screening oximetry, and who arranged for polysomnography testing, concluded that Mr. Wrighton suffered from obstructive sleep apnoea and sleep deprivation. His report was before the Court. It had been perused by Dr. I. Ebrahim, a Consultant Neuropsychiatrist in Sleep Disorders at St. Thomas' Hospital, London, whose report was also before the Court, and who concluded that Mr. Wrighton suffered from Obstructive Sleep Apnoea Syndrome.

Lastly, I was assisted in Court by the expert evidence of Dr. Dev Banerjee, a Consultant Respiratory and Sleep Physician, of the Sleep and Ventilation Unit of the Department of Respiratory Medicine at the Birmingham Heartlands Hospital. He evidenced that Mr. Wrighton suffered from obstructive sleep apnoea of a severity in itself described as "severe", together with chronic sleep deprivation.

At the conclusion of the evidence, none of the representatives chose to address me as to the law.

The evidence of the three doctors eliminates the possibility of any Inquest returning a verdict of Unlawful Killing as a result of Gross Negligence Manslaughter. I appreciate that such a conclusion might be unpalatable to the family of Mr. Tweddell, but to return such a verdict, I must be sure that someone owed the deceased a duty of care, and that duty of care was breached and that breach caused the death of Mr. Tweddell and the breach of duty was grossly negligent so as to amount to the crime of

homicide. At the time of the accident Mr. Wrighton was unaware of his condition. The four constituent parts necessary to formulate a verdict of Unlawful Killing are not in place.

I turn now to the only verdict open to me, one of Accidental Death.

To make such a finding I have to find that it is probable that, in this instance, the death resulted from some procedure, process or event, over which there was no human control. I would suggest that such a definition of the term "accident" more than adequately covers the circumstances that led to Mr. Tweddell's premature death.

It is thus my intention to record that the verdict in the Inquest of Joseph Tobias Tweddell is one of Accidental Death.

It is my intention to prepare a Rule 43 Report to the Lord Chancellor concerning Obstructive Sleep Apnoea in an endeavour to reduce the number of deaths that arise annually from this condition. Within this report will be all of the evidence placed before this Inquest.

Christopher K. Sumner  
H.M. Coroner.

5 August 2008.

## Appendix 2: Coroner's Rule 43 Report

IN THE COURT OF HER MAJESTY'S CORONER IN THE COUNTY OF MERSEYSIDE SEFTON, KNOWSLEY & ST HELENS DISTRICT IN THE MATTER OF JOSEPH TOBIAS TWEDDELL DECEASED

### RULE 43 REPORT

I concluded an Inquest into the death of the above-named person on July 25 last.

I am enclosing a copy of my written decision and verdict of "Accidental Death", together with copies of all the evidence adduced at the Inquest.

Sleep related deaths account for approximately 300 of deaths on our roads each year and yet very little appears to be done to prevent a reduction into [sic] such needless waste of life.

In an endeavour to reduce the number of such deaths, I would wish for the appropriate authorities to consider the following matters:

**Lorry Driver Screening.** There is no provision for any lorry driver to have to undergo any form of routine medical examination from the time of his qualification to drive until his 45<sup>th</sup> birthday. I would ask that this be compared to other transport industries such as the rail and airline industries, where regular routine medical examinations are required. Lorry driving involves little physical effort and there is evidence of obesity within the industry. Apart from other medical complications arising from obesity, there is evidence to suggest that overweight people are more likely to suffer from sleep apnoea. In any event obstructive sleep apnoea is no respecter of age.

**Application for LGV and HGV Licenses.** In order to secure such a license, the applicant's General Practitioner must complete a Medical Examination Report on Form D4. One of the questions asks as to whether the applicant suffers from sleep apnoea syndrome. At no stage is the doctor asked as to whether obstructive sleep apnoea is an undiagnosed possibility. Consideration should be given to amending Form D4 forthwith.

**Post Accident Assessment.** There should be a fast track procedure to medically assess commercial drivers involved in road traffic collisions to ascertain if they suffer from sleep apnoea.

**Greater education with regard to tiredness and driving.** We rightly promote that it is both morally wrong and also illegal to drive a motor vehicle whilst impaired through drink or drugs. Little attention, however, is given to the question of tiredness whilst driving. A radical programme of education in this matter is required. It is not sufficient to flash a message on a motorway illuminated sign, that "Tiredness Kills." Drivers should be educated in the same manner as they are concerning drink driving.

**Commercial Drivers education.** Many drivers seem to be of the mind that a diagnosis of sleep apnoea will mean an automatic loss of driving license. They should be made aware that whilst a license might well be temporarily suspended, such suspension would be lifted after the commencement of treatment for the condition. I believe that there is every possibility that some drivers might well be disguising their condition in order to preserve their license.

I would be obliged if the above matters might be considered at your earliest convenience.

Christopher K. Sumner,  
H.M. Coroner.

August 5, 2008

## **Appendix 3: Medical expert report to inquest by Dr Dev Banerjee**

### **CORONERS INQUEST REPORT**

#### **REPORT PREPARED FOR THE COURTS BY**

Dr Dev Banerjee  
 Consultant Respiratory and Sleep physician  
 Department of Respiratory Medicine  
 Sleep and Ventilation Unit  
 Heart of England Foundation NHS Trust  
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Requested 16<sup>th</sup> June 2008 by

HM Coroners Office  
 Whiston Hospital  
 Warrington Road  
 Whiston  
 L35 5DR

The inquest into the Death of Joseph Tobias Tweddell  
 DOB 4<sup>th</sup> July 1986  
 Died 8<sup>th</sup> August 2006  
 Ref K636/06

Report prepared 30<sup>th</sup> June 2008

#### **INSTRUCTIONS**

I am instructed by HM Coroners Office, Whiston Hospital, Warrington Road, Whiston, by Con 8437 George McMillan to provide a report and attend to give evidence on Friday 25<sup>th</sup> July 2008 at 1045hrs regarding the inquest into the death of JOSEPH TOBIAS TWEDDELL (date of birth 4<sup>th</sup> July 1981, address 79 Chapel Road, Sale, Cheshire) who died on 8<sup>th</sup> August 2006 as a result of injuries sustained in a road traffic collision on that date.

#### **REVIEW AND SUMMARY OF THE WITNESS AND MEDICAL STATEMENTS**

**In conclusion I agree with the final diagnosis by Dr Pukalal and Dr Ebrahim that he was suffering from obstructive sleep and also suffering from chronic sleep deprivation.**

#### **OBSTRUCTIVE SLEEP APNOEA (OSA), COMMERCIAL VEHICLE DRIVERS AND ROAD TRAFFIC ACCIDENTS – THE FACTS**

Obstructive sleep apnoea (OSA) is a condition where an individual stops breathing during sleep due to the narrowing of the upper breathing airway (throat), causing fragmented sleep and lowering of oxygen levels in the body (desaturations). As a result of fragmented sleep and variable oxygen levels, the consequences are excessive daytime tiredness (EDS) and an increased risk of cardiovascular disease in the long term especially hypertension.

Approximately 300 people are killed on the roads per annum in the UK because of a driver has fallen asleep at the wheel (*Fitness to Drive: A guide for health professionals by Tim Carter Chief Medical Adviser Department of Transport (2006) Chapter 21: Sleep disorders*). Around 40% of sleep-related crashes involve commercial vehicles and this is most frequent on the motorways. One third of individuals involved in sleep related traffic accidents have had accidents in the preceding five years. Approximately 20% of all traffic accidents in the UK are thought to be sleep-related (*Horne JA et al Sleep related vehicle accidents BMJ 1995; 310:565-567*).

There is substantial evidence that those with OSA have an increased risk of crashes compared to those without OSA. The risk is increased by up to seven fold. (*Young T et al. Sleep disordered breathing and motor vehicle accidents in a population based*

sample of employed adults *Sleep* 1997; 20: 608-613 AND Teran-Santos J et al. The association between sleep apnea and the risk of traffic accidents *New England Journal of Medicine* 1999; 340: 847-851).

Studies particularly in car drivers have shown an increased risk of crashes with those with more than thirty breath holds per hour during sleep. Treatment of OSA with a blowing machine called CPAP (continuous positive airway pressure) has been shown to reduce the incident of crashes down to the same level as the population without sleep apnoea (*George C. Reduction in motor vehicle collisions following treatment of sleep with nasal CPAP. Thorax* 2001; 56: 508-512). In the UK the provision of CPAP has been recently approved by NICE (March 2008).

In my clinic, I have approximately 100 commercial drivers with moderate to severe severity of OSA on CPAP therapy and the vast majority (over 97%) continue to drive and tolerate CPAP well and are symptomatically much improved. A small proportion of my patients do voluntarily discontinue commercial driving and find other employment.

One study estimated that up to 15% of lorry drivers may have sleep apnoea and sleepiness (*Howard ME, Desai AV, Grunstein RR et al. Sleepiness, sleep-disordered breathing, and accident risk factors in commercial vehicle drivers. Am J Respir Crit Care Med.* 2004 Nov 1;170(9):1014-21). In the UK there are approximately 500,000 drivers and that would equate to 75,000 with OSA.

However as OSA is readily treatable with a simple device such as CPAP, it is an unfortunate myth amongst lorry drivers that once they have been diagnosed with OSA, that this may be an end of their job and welfare. DVLA guidelines recommend for Group 2 LGV / PCV license holders that "Driving must cease UNTIL satisfactory control of symptoms has been attained with ongoing compliance with treatment, confirmed by consultant / specialist opinion (ie can restart driving commercial vehicles). Regular, normally annual, licensing review is required" (*At a glance Guide to the current medical standards of fitness to drive issued by the DVLA Feb 2008, <http://www.dvla.gov.uk/media/pdf/medical/aagv1.pdf>*).

Therefore the DVLA do allow drivers to get back to driving once symptoms are controlled. Commonly across the UK, this is usually within 14 days of starting CPAP therapy. Therefore commercial drivers should not fear the undergoing of tests for OSA and should not fear the DVLA of revoking their licenses provided they are compliant with the effective therapy that is available.

Therefore in summary, road traffic accidents due to sleepiness is a serious problem in the UK causing death and destruction at financial cost. Sleep apnoea is one common reason for sleepiness and accidents on the roads, easily rectifiable with minimum impact on the welfare of the lorry driver provided compliance is ensured.

## **THE PROCEDURE FOR ASSESSING COMMERCIAL DRIVERS AND THE DELAYS**

Consultation of the details of the accident is critical particularly if the consultation is done by a defence or prosecuting medical expert. The UK NHS pathway for dealing with OSA patients (from referral to consultation to diagnosis to treatment to reassessment) has improved substantially over the last few years, but I would recommend a fast access to a network of physicians with a specialist interest in sleep disorders and occupational sleep disorders across the nation (either NHS or in the independent sector wherever quickest) to deal with such cases such as commercial driver accidents especially if there may be a pending court case. Such delays in my view would be unacceptable to those involved in the case.

## **THE ROLE OF THE GENERAL PRACTITIONER**

Healthcare practitioners have a duty of care to their patients to provide advice and treatment to the best possible standards. A commercial driver, in general, presenting to his / her doctor complaining of tiredness and / or sleepiness should be warned of the dangers of driving. A referral to a sleep specialist would be appropriate if a medical sleep condition is suspected. Although I can not comment on the exact actions of this particular GP in question, it is disappointing that not all GPs are aware of the risks of sleepiness and driving and the relationship between OSA and road traffic accident risks (highlighted during personal communication with GP colleagues). Better awareness and education of the risks of sleepiness and driving for GPs and GP trainees is recommended with possible involvement of the Royal College of General Practitioners (eg courses / conferences / e-modules / discussion forums etc).

## **POPULATION AWARENESS OF THE RISKS OF DRIVING WHEN SLEEPY AND TIRED**

Although there are numerous websites available for further information on this subject, there must be more public awareness in the UK regarding the risks of driving whilst sleepy and tired. There is little education amongst secondary school children especially at the age of learning to drive plus very little on the subject in the Highway Code. There is evidence that young men have the highest risk of sleep-related crashes (*Fitness to Drive: A guide for health professionals by Tim Carter Chief Medical Adviser Department of Transport (2006) Chapter 21: Sleep disorders*). There have been strives to improve (successfully) the awareness of the dangers of driving without a seatbelt and driving under the influence of alcohol in the UK. Although the Department of Transport has launched a new campaign this year to highlight the dangers of driving whilst tired, I recommend that sleepy/tired driving awareness should be higher in the Department of Transport agenda. Increased information access and

publicity of the risks at motorway service stations may be one area to consider and further enhance. More signs such as those on the motorway eg “tiredness kills” or “revive and survive” would be worth considering.

## **SCREENING COMMERCIAL DRIVERS FOR OSA – THE USA PROGRAM**

In the USA, a report highlighted that in 2001, there were over 400,000 commercial (lorry) accidents of which 5000 of these involved a fatality and that there were 130,000 nonfatal injuries (*National Center for Statistics and Analysis of the National Highway Traffic Safety Administration, US Department of Transportation. Traffic safety facts 2001:large trucks. Washington DC*).

In the 1990's, the Bill Clinton administration wished to see these numbers decrease but as a result of unchanged statistics, the US Department of Transportation Federal Motor Carrier Safety Administration convened in January 2008 to discuss the effect of sleep apnoea on road traffic deaths. The group included Barbara Phillips (Board Member) and Allan Pack (Medical Expert panel representative and Professor of Sleep Medicine University of Pennsylvania). I have had personal communication with both and they tell me that the medical review board has recommended to the US department of Transportation that a screening process for OSA should be implemented. This will involve a two yearly (every two years) assessment (of all drivers) by a qualified practitioner and if certain criteria suggesting the diagnosis of OSA are fulfilled, then the driver should undergo a respiratory monitoring sleep test. If results confirms and point towards a diagnosis of OSA then therapy (CPAP) should be instituted to allow the driver to drive with a valid license. It is intended that the lorry driver companies should fund this with the argument that there will be significant health care savings when proper treatment is implemented to reflect the reduction in road traffic accident deaths and non fatal crashes. (*United States Department of Transportation Federal Motor Carrier Safety Administration Medical Review Board Meeting summary Jan 28 2008*)

[http://www.mrb.fmcsa.dot.gov/documents/Final\\_Meeting\\_Minutes\\_January\\_28\\_2008\\_MRB\\_Meeting\\_certified.pdf](http://www.mrb.fmcsa.dot.gov/documents/Final_Meeting_Minutes_January_28_2008_MRB_Meeting_certified.pdf)

The issue of screening lorry drivers in the UK has been a sensitive and sometimes a contentious issue, but as legislation has not reduced numbers of road fatalities related to sleeping at the wheel, it may be time that relevant bodies including the lorry driving firms, Insurance companies, UK Department of Transport, relevant unions, DVLA, Health and Safety Executive (HSE), Sleep societies (British Sleep Society) and Police Federations met and debated whether a screening process of drivers should be considered in the UK. There will be arguments of costs but cost savings are likely. Whether there should be European legislation on this matter is worth considering as no doubt there are a number of non-UK resident lorry drivers on the UK roads, where UK driving time regulation will not apply in their country of residence whilst they cross the channel. In the UK, drivers must have a compulsory break after 4.5 hours. Therefore I recommend that the issue of lorry driving screening should be debated further amongst the relevant bodies that have an interest in road safety.

## **APPLYING FOR A HGV /LGV LICENCE IN THE UK**

In the UK, in order to apply for a HGV / LGV license, the GP of the potential driver must fill in a Medical Examination Report (D4 - <http://www.dvla.gov.uk/media/pdf/forms/d4.pdf>). This is a 8-page document which covers medical aspects relating to the potential driver. It is my view which I share with other colleagues with an interest in sleep medicine that the form is inadequate to potentially screen out those who may have excessive daytime sleepiness as a result of OSA. The form asks “does the applicant have sleep apnoea syndrome?” If yes date of diagnosis is requested. The form also asks “is there any other medical condition causing excessive daytime sleepiness?” If so the diagnosis is requested. It is believed that in the UK, over 80% of individuals with sleep apnoea are undiagnosed and therefore these questions would not highlight the possibility of OSA. The questions merely confirm if there has been a prior or previous diagnosis made in the past and do not automatically make the GP question whether OSA may be a current undiagnosed possibility.

The other area of concern is that an official medical takes place at the age of 45years old. In my experience there are a lot of lorry drivers under the age of 45years old with undiagnosed OSA and a lengthy gap between a young driver applying for his / her license to the next assessment (aged 45 years old) may be too long. Certainly other medical conditions such as cardiac disease and cerebrovascular disease / stroke are less common under the age of 45 years, but this does not hold true for OSA. I would therefore recommend that the DVLA look again at how these forms can make the GP filling in the document specifically consider the possibility of OSA (so that further specialist assessment can be sought as a result).

## **THE ROLE OF OCCUPATIONAL MEDICAL TEAMS IN ASSESSING FITNESS TO DRIVE**

I have had experience of working with the train industry occupational health teams (BUPA Wellness – who look after London Midland, Chiltern and EWS railways for example) and have been particularly impressed at the occupational involvement in the medical care of their drivers. Airline pilots such as those flying for EasyJet have close collaboration with health teams (Clockwork Consultants Ltd, London) with a specialist interest in fatigue management. Unfortunately a similar health care network covering all lorry drivers does not exist in the UK. Having a company occupational team looking after the health of lorry drivers may assist the health of these individuals particular primary prevention of cardiac disease, sleep and fatigue matters, obesity management, smoking cessation etc. The recent Corporate Manslaughter and Corporate Homicide Bill 2006 indicate a duty of care owed by the organisation to those who are deceased. Employers have duties to those other than their employees as stated in the Health and Safety at Work Act 1974 (<http://www.hse.gov.uk/legislation/hswa.pdf>). Section 3(1)

[http://www.schmoller.net/documents/coroner\\_calls\\_for\\_action\\_on\\_sleep\\_apnoea\\_22Aug2008.pdf](http://www.schmoller.net/documents/coroner_calls_for_action_on_sleep_apnoea_22Aug2008.pdf)

says "It shall be the duty of every employer to conduct his undertaking in such a way as to ensure, so far as is reasonably practicable, that persons not in his employment who may be affected thereby are not thereby exposed to risks to their health or safety." Section 3(2) says "It shall be the duty of every self-employed person to conduct his undertaking in such a way as to ensure, so far as is reasonably practicable, that he and other persons (not being his employees) who may be affected thereby are not thereby exposed to risks to their health or safety."

If a manager notices that one of their drivers is sleepy, or that one of the drivers in confidence conveys information about another driver that he or she may have excessive sleepiness, the company may have a duty of care to have that driver investigated. Therefore I recommend that occupational health is one area where haulage companies may consider investing in to ensure that their drivers are medically fit.

## **FINAL THOUGHTS AND SUMMARY WITH RECOMMENDATIONS**

The case of Joseph Tobias "Toby" Tweddell is a particularly tragic one but unfortunately is not unique and many more like Toby will continue to die in this way causing destruction of lives for all involved. This report has highlighted that sleepiness at the wheel was the most likely reason for the accident as a result of a diagnosis of obstructive sleep apnoea. Whilst, in my view, no blame should be currently placed on any individual involved in this case, I do feel that the whole infrastructure and system of road traffic accident prevention and what we do with sleepy drivers must be revamped in the UK.

Therefore I make the following recommendations that should be considered:

- 1) **ASSESSING COMMERCIAL DRIVERS INVOLVED IN ACCIDENTS FOR OSA** - there must be prompt access for medical review supplied by a network of physicians with a specialist interest in sleep disorders and occupational sleep disorders across the nation (either NHS or in the independent sector) especially if there may be a pending court case.
- 2) **BETTER GP AWARENESS AND EDUCATION OF THE RISKS OF SLEEPINESS AND DRIVING** is recommended with the close involvement of the Royal College of General Practitioners.
- 3) **INCREASING PUBLIC AWARENESS OF THE RISK OF DRIVER FATIGUE AND SLEEPINESS ON ROAD SAFETY.**
- 4) **TO DEBATE THE ROLE OF LORRY DRIVER SCREENING** amongst the relevant bodies with an interest in road safety in order to reduce the number of road deaths related to sleepiness as a result of sleep apnoea (such as this particular case).
- 5) **APPLICATION FOR LGV / HGV LICENSES AND MEDICAL CHECKS** - the DVLA should look again at how these forms can safely highlight to the GP that there may be a possible diagnosis of OSA in the driver applying for a license and therefore further specialist assessment is sought as a result.
- 6) **CONSIDERATION BY HAULAGE COMPANIES OF THE INVOLVMENT OF OCCUPATIONAL HEALTH SERVICES** to ensure that their drivers are medically fit and continue to do so.
- 7) **FURTHER AND CONTINUED CLOSE DIALOGUE BETWEEN THE DVLA, SLEEP PHYSICIANS (BRITISH SLEEP SOCIETY), HAULAGE COMPANIES, HEALTH & SAFETY EXECUTIVE, DEPARTMENT OF TRANSPORT, LOBBYING GROUPS (eg ROYAL SOCIETY FOR THE PREVENTION OF ACCIDENTS), TRADE UNIONS and POLICE FEDERATIONS** are necessary to ensure a that more can be done to prevent unnecessary road traffic fatalities and injuries on the roads of the UK.

## **DUTY OF AN EXPERT**

- 1) I understand my duty is to the Court and I have complied with that
- 2) I understand my duty to the Court is to help the Court on matters within my expertise
- 3) I understand that this duty over-rides any obligations to those by whom I have been instructed
- 4) I confirm that insofar as the facts stated in my report are within my own knowledge, I have made clear which they are and I believe them to be true, and that the opinions I have expressed are my true and complete professional opinion.
- 5) I understand that this report will be the evidence that I will give under oath, subject to any correction or qualification I may make before swearing to its veracity

Signed .....

Name .....

(Dr Dev J Banerjee)

Date .....

## Appendix 4: Previous media release dated 5th August 2008

MEDIA RELEASE – 5 AUGUST 2008

### Coroner and family call for action by Government to reduce road deaths caused by undiagnosed sleep apnoea

The number of people killed on our roads last year fell to below 3,000 for the first time in 80 years; this is good news, but it is still an enormous number. Everything which can be done to reduce the number further must be done.

Road death is a blind spot of our society: if 20 people are killed in a railway accident it is rightly regarded as a national disaster, but a greater number than this are killed on our roads every 3 days throughout the year - and nobody notices except those directly involved.

Our 25 year old son Toby was killed 2 years ago on his way to work in Liverpool. His car was waiting in a morning rush hour queue on the M62 motorway approaching the Rocket Interchange. The queue was hit from behind by a heavy goods vehicle and Toby's car was crushed. The driver of the HGV had fallen asleep at the wheel and was later diagnosed to be suffering from obstructive sleep apnoea<sup>1</sup>. Less than two weeks before the accident the driver had visited his GP for a second time complaining of excessive tiredness, but the GP failed to spot the signs of sleep apnoea.

Wishing to reduce the incidence of such accidents in future, our family has investigated the prevalence and danger of undiagnosed sleep apnoea in drivers; we have found that:

- between October 2007 and February 2008 four cases went before the courts in the UK<sup>2</sup> involving nine people being killed by lorry drivers who had fallen asleep at the wheel and who were later found to be suffering from obstructive sleep apnoea;
- as many as one in six lorry drivers (i.e. about 80,000 of the about 500,000 lorry drivers) may suffer from obstructive sleep apnoea;
- over 80% of individuals with sleep apnoea in the general population are undiagnosed;
- untreated sufferers are between 6 and 15 times more likely to have a road traffic accident than those without the condition;
- untreated sufferers score worse in terms of hazard awareness and reaction time than test subjects who are drunk;
- the DVLA medical examination form that doctors complete prior to the issue or renewal of a vocational licence focuses on whether there has been a diagnosis of sleep apnoea, but not on whether sleep apnoea may be a current undiagnosed possibility;
- the Health and Safety Executive sees the control of sleep apnoea amongst lorry drivers as a matter for DVLA through licensing arrangements rather than as an important legal responsibility of road haulage firms, which HSE should then enforce;
- this year in America a medical expert panel appointed by the US equivalent of the Department for Transport has recommended that all vocational drivers who are judged to be at significant risk of suffering from undiagnosed sleep apnoea should be tested for the condition.

Earlier this year our family produced a briefing document on preventing road accidents caused by drivers with undiagnosed sleep apnoea. This summarised many of the findings listed above. We sent this for comment to relevant Government Departments and Ministers, and to MPs; and we engaged in written dialogue with HSE and with Ministers and Officials in the Transport Department.

The Department for Transport's current position in response to correspondence is "we are not satisfied, on the basis of current evidence, that there is a basis for compulsory screening of all vocational licence holders for sleep apnoea".

<sup>1</sup> Obstructive sleep apnoea is a condition where an individual stops breathing during sleep due to a narrowing of the throat, causing fragmented sleep and lowering of oxygen levels in the body. The effects of this are excessive daytime tiredness and increased long term risk of heart disease.

<sup>2</sup> On 1 August 2005 Alice-Anne Fuge, Nestor Siles and Jessie McCann were killed on the A82 near Alexandria, Scotland. On 21 July 2006 Malcolm, Janice, Richard and George Dowling were killed on the A34, near Bicester. On 8 August 2006 Toby Tweddell was killed while waiting in a traffic queue at the M62 Rocket Interchange, Merseyside. On 14 April 2007 Leonard Nicholls was killed on the A48, Eastern Avenue, Cardiff.

Following the inquest on 25th July into Toby's death, the Coroner has today delivered a verdict of Accidental Death and has stated that "It is my intention to prepare a Rule 43 Report to the Lord Chancellor concerning obstructive sleep apnoea in an endeavour to reduce the number of deaths that arise from this condition." We are pleased that the Coroner will be alerting the Government to the dangers of sleep apnoea, and we look forward to seeing the details of his report. We will be working hard in the coming months to ensure that the Coroner's recommendations are acted on by Government.

As well as being for the good of all road users, the screening we call for is in the best interest of sufferers because:

- almost all drivers found to be suffering from the condition can be back at work very soon after obtaining effective treatment, which is available to all on the NHS;
- the condition is almost certainly bad for the sufferer's general health; successful treatment improves their quality of life as well as that of their families.
- sufferers are at risk of falling asleep at the wheel and killing themselves as well as others;

Nic Tweddell and Monica Tweddell 5 August 2008

[ENDS]

Notes for editors

1. For more information contact Nic Tweddell on 017684 86226 or at [nic.tweddell@virgin.net](mailto:nic.tweddell@virgin.net).
2. For the original detailed briefing document Preventing death and injury caused by lorry drivers falling asleep at the wheel, and the need for a joined up approach by Government to tackle the problem, go to <http://tinyurl.com/5sgr2z> .