INFORMATION

## RIBBLE VALLEY BOROUGH COUNCIL REPORT TO HEALTH & HOUSING COMMITTEE

Agenda Item No.

meeting date:THURSDAY, 5 JUNE 2014title:GENERAL REPORTsubmitted by:CHIEF EXECUTIVEprincipal author:JAMES RUSSELL, HEAD OF ENVIRONMENTAL HEALTH SERVICES

## 1 PURPOSE

- 1.1 To inform Committee of relevant issues which have arisen since the last meeting.
- 1.2 Relevance to the Council's ambitions and priorities:
  - Council Ambitions The following reports generally relate to the Council's ambitions to make people's lives healthier and safer.
- 2 HANSON CEMENT LIAISON MEETING
- 2.1 A liaison meeting was held on 27 March 2014. A copy of the minutes is attached as Appendix A to this report.
- 3 AIR QUALITY ANNUAL ASSESSMENT REPORT 2014
- 3.1 The mandatory annual air quality report has recently been completed and submitted to DEFRA for consideration and validation.
- 3.2 Unexpectedly, the report identifies a significant reduction in average Nitrogen Dioxide monitored in 2013 in the Whalley Road Air Quality Management area, with all monitoring sites being below the national air quality objective of 40 ug/m3. However, this improvement must be viewed with caution at this stage, as monitoring has been impeded by the interference and loss of up to 30% of the sampling tubes at one of the locations.
- 3.3 As such, enhanced monitoring will continue along Whalley Road, with tamper proofing measures being taken to reduce interference and the development of an AQMA Action Plan will continue to progress with relevant agencies/bodies.

## 4 PRIVATE WATER SUPPLIES RISK ASSESSMENT PROGRESS

- 4.1 I am pleased to report that since the appointment and arrival of Heather Coar, Environmental Health Officer (Pollution & Housing), much needed progress is now being made with meeting the EU/Drinking Water Inspectorate 31 December 2014 deadline for completion of the initial Risk Assessment and compliance sampling of our private water supplies.
- 4.2 There has been significant preparatory work and updates to complete with standard letters, notices and information leaflets, which are now in place. The project lead officer Matthew Riding, is relatively confident that providing no major unforeseen circumstances, the inspection schedule of 105 remaining supplies will be achieved by the end of November.
- 5 DOG CONTROL ORDERS
- 5.1 The advertisement and public consultation process for introducing the new Dog Control Orders has now been completed and by the time of this meeting, it is

anticipated that Community Committee, at their meeting of 27 May, will have considered and approved the proposed orders to become operative as of 1 August.

- 5.2 Fixed penalty fines under the new regime to be set at £80 with early payment of £50, if paid within 14 days.
- 6 TOBACCO AND NICOTINE CONTAINING PRODUCTS BRIEFING PAPER
- 6.1 Lancashire County Council Public Health 'Tobacco Control and Stop Smoking Services' has recently released a recommended briefing paper in relation to the use of tobacco and nicotine containing products and relevance to health in Lancashire. A copy of the report is attached for your consideration as Appendix B to this report.

JAMES RUSSELL HEAD OF ENVIRONMENTAL HEALTH SERVICES MARSHAL SCOTT CHIEF EXECUTIVE

For further information please ask for James Russell on 01200 414466.

BACKGROUND PAPERS

None.

JAR/HEALTH & HOUSING/050614

# HANSON CEMENT LIAISON COMMITTEE MEETING DATE – THURSDAY, 27 MARCH 2014

Gary Young	-	Hanson Cement
Sam Wrathall	-	Hanson Cement
Linda England	-	Bellman Committee
Mary Gysbers	-	Bellman Committee
Stephen Booth	-	Chatburn PC
Bill Honeywell	-	West Bradford PC
David Sharp	-	West Bradford PC
Jonathan Haine	-	LCC
Phil Goodwin	-	Environment Agency
Cllr P Dowson	-	RVBC
J Russell	-	RVBC
O Heap	-	RVBC
	Sam Wrathall Linda England Mary Gysbers Stephen Booth Bill Honeywell David Sharp Jonathan Haine Phil Goodwin Cllr P Dowson J Russell	Sam Wrathall-Linda England-Mary Gysbers-Stephen Booth-Bill Honeywell-David Sharp-Jonathan Haine-Phil Goodwin-Cllr P Dowson-J Russell-

- 1 APOLOGIES FOR ABSENCE
- 1.1 Apologies for absence were received from Cllrs Richard Sherras and Ian Brown, and Cty Cllr Fillis.
- 2 MINUTES
- 2.1 The minutes of the meeting held on 26 September 2013 were circulated and approved as a correct record.
- 3. OPERATIONAL ISSUES
- 3.1 Gary gave a brief update on operations at Ribblesdale where production was starting to return towards normal levels. Rail usage was being maximised and there was the development of plastic packed cement market. Nationally the recovery in the construction industry was ongoing particularly driven by activity in the South but positive signs elsewhere. There was significant increases in the use of imports. There were further changes likely in construction materials business due to recent ruling of competition commission. The tidal surge incident at South Ferriby had also had a temporary effect on the market.
- 4 BELLMAN, LANEHEAD AND COPLOW QUARRIES
- 4.1 Sam reported on the current workings of the quarries which were going well. De-watering has continued from Bellman into Worston Brook and Lanehead into the Ribble in compliance with EA permit conditions. They were now ready to go down to another level in Bellman.
- 4.2 Gary presented an overview of blasting data for both Bellman and Lanehead along with the outflow data that confirmed excellent compliance with quarry planning conditions.
- 4.3 Gary gave details of the outflows at Bellman and Lanehead along with suspended solids/ph graphs. He also showed data for the settlement pond.
- 5 QUARRY DEEPENING APPLICATION
- 5.1 This had been submitted on 17.9.12 for the right hand side of Lanehead quarry. There are current reserves of 7 years that would be extended by a further 13 years. This application, in conjunction with existing Bellman reserves, allows for sufficient reserves to support ongoing investment at the plant. For compositional reasons, it will be necessary that both quarries will operate together up to the end of reserve life; estimates for when this will be relate to production volumes but could potentially provide to 2050.
- 5.2 Draft conditions relating to a proposed joint hydrological monitoring scheme with Tarmac were currently being worked on. LCC had approved the application subject to a S106 agreement relating to the de-watering of Chatburn Brook and the simplification of the monitoring regime.

- 5.3 A capital application had been made to invest in pumping using electric rather than diesel.
- 6 SUBSTITUTE FUELS / MATERIALS UPDATE
- 6.1 Gary showed a bar chart of the comparative use of substitute fuels.
- 6.2 A contract had been secured with Lancashire Waste, Thornton to provide SRF. Approx 170 tonnes can be used in one day. A significant % of the waste from Lancashire Waste being used by Hanson Cement at Ribblesdale works the arrangement was working well.
- 6.3 Application had been made to use MBM to the main burner. Trials were ongoing with SRF to the main burner and calciner. An application for capital for SRF to calciner had been made.
- 7 COMMUNITY CONCERNS (COMPLAINTS)
- 7.1 Hanson had received 2 complaints so far in 2014. Linda registered 5 unreported odour/plume grounding complaints that she had received relating to a weekend in February. Gary would investigate these.
- 8 ENVIRONMENTAL PERFORMANCE
- 8.1 Gary gave an overview of continuing monitoring of dust, by dust gauges on Google Earth that were placed all around the site and had been in operation since 2007 (single kiln operation). The results showed correlation between all the gauges (North, South, East and West) and the general trend of deposits was continuing to decrease. Any gauge linked with a complaint is sent off for independent analysis. This often transpired as bird strike. Covers had been installed at the 'duckpond' gauge.
- 8.2 Gary reported that the company were to review the number of monitoring stations that would probably result in a rationalisation and reduction in number.
- 8.3 Gary reported upon the Annual Performance Report for 2013 that is submitted to the EA as one of their operating conditions. The report included an overview of unauthorised releases from site, monitoring, and summary of plant compliance and improvements.
- 9. MPA ALTERNATIVE FUELS CODE OF PRACTICE
- 9.1 A Code of Practice was being formalised by the EA in agreement with the cement industry that would include an approved list of waste types that would mean each site could select what fuels they use without having to apply for a new authorisation each time.
- 9.2 All cement sites had also been asked to do a Risk Assessment Gap Analysis as to their position now compared to the European Directive to confirm that they can meet it by March 2017.
- 10. AOB

#### 10.1 <u>Pigeon Control</u> James reported an increase in the number of pigeons in the town and asked if Hanson had any problems. Hanson have a contract to manage vermin that would include pigeons but had not seen any notable increase in numbers.

- 10.2 Linda reported a leak in the pond on the nature trail and asked if the pond could be moved to another site away from the trees. Sam would investigate.
- 11 DATE OF NEXT MEETING
- 11.1 The next meeting of the Hanson Cement Liaison Committee will be held on Thursday 25 September 2014.



## **Tobacco and Nicotine Containing Products – Briefing Paper**

## What is Illicit Tobacco?

Illicit tobaccos includes cigarettes, hand-rolling tobacco (HRT) or niche products such as shisha, pan, gutkha and nass that have been smuggled, bootlegged or are counterfeit (fake). There are three types of illicit tobacco sources:

- **Smuggling** This forms part of large scale organised crime and involves the illegal transportation, distribution and sale of genuine tobacco products. Legitimately manufactured tobacco products are diverted, usually in the wholesale distribution chain, thus evading payment of tax. The products are cheaper to the consumer, yet profits are still made throughout the supply chain from the manufacturer to the final supplier.
- **Bootlegging** This is also a form of smuggling, often undertaken by the 'white van man'. Tobacco products are purchased in continental countries with lower levels of taxation such as France and Belgium and illegally brought back into countries with higher rates of tobacco taxation such as the UK.
- **Counterfeiting** This involves the illegal production of tobacco products from tobacco rejected by tobacco manufacturers. They are then covertly distributed and sold in order to avoid taxation. Counterfeit products are made from inferior materials to look genuine and can therefore be sold cheap to the consumer. Consequently vast profits are made throughout the supply chain. It is estimated that the profit margin on counterfeit cigarettes is greater than that attained from class A drugs.

#### Impact on Health

Smoking is a major contributor to health inequalities, responsible for half the difference in life expectancy between deprived and more affluent communities<sup>1,2</sup>. The taxation and price of tobacco is an influential factor in smoking population rates and an intrinsic part of tobacco control strategy. The World Bank estimates tobacco elasticity to be around -0.4 for developed countries, which means that a 10% rise in price leads to a 4% reduction in consumption<sup>3</sup>.

Evidence from Canada and Sweden has demonstrated an inverse relationship between levels of tobacco taxation and levels of smoking. Both countries experienced significant increases in smoking rates following tobacco tax reductions<sup>4,5</sup>.

The UK tax on tobacco products including cigarettes, cigars and hand-rolled tobacco is the highest in the European Union. Around 77% of the price of a packet of premium cigarettes consists of taxation and the Treasury earned an estimated £12 billion in revenue from tobacco duties in 2011-2012<sup>6</sup>. This policy has been instituted to help to reduce smoking rates, especially among young people. However, illicit tobacco undermines the impact of taxation and other tobacco control measures such as raising the age of sale to 18 and pictorial health warnings on tobacco packaging.

It is estimated that nationally, one in fourteen manufactured cigarettes (7%) and around a third of hand rolled tobacco (35%) consumed are illicit<sup>7</sup>. Sales of illicit tobacco products in the UK deprives the exchequer of around £1.6 billion each year in lost revenue<sup>7</sup>, which could otherwise be used to fund health, education and other public sector services. However, the current economic downturn may exacerbate the consumption of illicit tobacco as more smokers take advantage of cheaper products.

Both smuggling and counterfeiting increase the availability of tobacco at less than half or a third of legal, duty paid products. Whilst a pack of 20 premium brand cigarettes e.g. Marlboro retail at £8.77 inclusive of tax, local intelligence has found that within Lancashire illicit cigarettes are routinely bought for just £2.50-3.00 (Trading Standards personal communication). Market activity is purposefully targeted to young people and those on low incomes in areas of deprivation who already experience significant health inequalities as a result of smoking<sup>8</sup>. This both maintains smokers in their habit and also encourages children and young people to initiate smoking. Research commissioned by ASH found that one in four of the poorest smokers buy illicit tobacco compared to one in eight of the most affluent<sup>9</sup>. The World Health Organisation (2008) state:

"Illicit trade in tobacco products contributes to the rise in tobacco consumption and poses a serious threat to health. By making cigarettes available at prices two to three times lower than in the shops, smugglers threaten to undermine global efforts to reduce smoking and save lives"

Research conducted in the North of England in 2011 highlighted that nearly one in five adult smokers (18%) had bought illicit tobacco, whilst rates among young people were even higher with one in two 14-17 year olds (46%) purchasing illicit products from street sellers, fag houses and even ice cream vans<sup>10</sup>. Similarly a Trading Standards study of 3,471 young people aged between 14-17 years old across Lancashire County found that 28% buy their cigarettes from other sellers such as neighbours, market stalls, car boots and ice-cream vans, a third (36%) bought cigarettes with health warnings in another language and a fifth (20%) had bought fake cigarettes<sup>11</sup>. Purchasing of illicit tobacco was significantly higher among young people living in Ribble Valley, West Lancashire and Burnley<sup>12</sup>.

National research has shown that four times more people die from the effects of illicit tobacco than from all illicit drugs combined<sup>13</sup>. Moreover, the researchers estimate that eliminating illicit tobacco use could lead to a 5% reduction in total cigarette consumption, resulting in 4,000 fewer premature deaths.

## **Electronic Cigarettes**

Electronic cigarettes, or e-cigarettes, are battery-powered, nicotine delivery devices, which can be bought online, in retail premises, community pharmacists and pubs. They deliver oral doses of nicotine, typically combined with flavouring, to the user in the form of vapour that mimics the look and feel of smoking. Indeed, some products have an indicator light at the end, which glows during use to resemble a lit cigarette. Whilst no side-stream nicotine vapour is released from the device, it is blown out into the surrounding air as the user exhales.

The vapour is considered less harmful than cigarette smoke and is free of some of its damaging substances such as tar. However, nicotine is an addictive drug that can be toxic in relatively low doses. Although the long-term consequences of e-cigarette use on health are unknown, short-term side effects include mouth and throat irritation, vertigo, headaches and nausea<sup>14</sup>.

The availability, advertising and use of electronic cigarettes have increased significantly over the last couple of years, with an estimated 1.3 million users nationally in 2013<sup>15,16</sup>. Although marketed as a healthier alternative to smoking, these products are unregulated and unlicensed in the UK and therefore their safety and efficacy remains undetermined<sup>17</sup>. As a consequence, devices have been shown to contain and deliver inconsistent levels of

nicotine<sup>18</sup> and harmful toxic compounds<sup>19,20</sup>; there have been reports of cartridges leaking<sup>18</sup> and house fires sourced to faulty battery chargers<sup>21</sup>. Between April 2013 and March 2014, Lancashire Fire and Rescue Service responded to six domestic fires caused by e-cigarettes across the County. They are currently undergoing thorough research by the UK's Medicines and Healthcare Regulatory Authority (MHRA) and will be licensed as medicines for public use in 2016.

Anecdotal evidence regarding a reduction in referrals to Stop Smoking Services over the last 18 months, suggests that electronic cigarette use may be averting utilisation of licensed smoking cessation products, such as nicotine replacement therapy (NRT) and retaining some people smoking when they otherwise would have stopped<sup>22</sup>.

Research regarding the clinical effectiveness of e-cigarettes as a stop smoking aid is limited. Laboratory reports have identified that they are inefficient nicotine delivery devices that only result in modest and unreliable increases in plasma nicotine levels<sup>23</sup>. Another study in New Zealand, suggests that smokers who use e-cigarettes to try and quit smoking are at least as likely to succeed in quitting as those who use nicotine patches, however the authors concluded that 'Uncertainty exists about the place of e-cigarettes in tobacco control, and more research is urgently needed to clearly establish their overall benefits and harms at both individual and population levels<sup>24'</sup>.

Furthermore, the World Health Organisation has recommended that 'Until such time as a given electronic nicotine delivery system is deemed safe and effective and of acceptable quality by a competent national regulatory body, consumers should be strongly advised not to use any of these products, including electronic cigarettes<sup>22</sup>.

In view of the dearth in consistent medical evidence and long term population level surveillance to support how e-cigarettes can be used to reduce or stop smoking, they should therefore not be used as a cessation tool<sup>22</sup>. The Department of Health recommends that the best way to stop smoking is through a Stop Smoking Service who provide free face to face support and offer licensed, regulated stop smoking medicines on prescription. This method is proven to be four times more successful at helping people quit long term<sup>25</sup>.

## Electronic Cigarette Use among Young People

Children learn their behaviour from adults and if young people see smoking as a normal part of everyday life, they are more likely to become smokers' themselves<sup>26</sup>. Electronic cigarette devices replicate smoking. In addition to creating confusion and undermining compliance with smokefree policies, they also normalise smoking behaviour for children and young people.

The British Medical Association has stated that the use of e-cigarettes 'normalises smoking behaviour and they shouldn't be marketed to appeal to non-smokers particularly children and young people'.

Certainly, adolescence has been identified as a significant time for the development of risktaking behaviour including initiation of alcohol, tobacco and drug use<sup>27</sup>. This could also extend to experimentation with e-cigarettes. A 2013 Trading Standards Survey with 3,471 young people aged 14-17 years across Lancashire County highlighted that more than one in four (27%) had bought or tried electronic cigarettes<sup>11</sup>. Use was greater among males (31%) and among young people living in Rossendale (36%), Hyndburn (35%), Burnley (35%), Preston (33%) and Pendle (32%)<sup>12</sup>. This could potentially facilitate a lifelong addiction to nicotine and provide a route into smoking conventional cigarettes<sup>28-31</sup>. Indeed, analysis of 5,845 young people participating in the analogous Trading Standards North West survey in Cheshire and Merseyside revealed that one in eight (12.3%) of those who had tried electronic cigarettes had never smoked tobacco cigarettes before<sup>32</sup>.

Furthermore, e-cigarette marketing strategies such as the availability of a wide range of flavourings, brightly coloured designs and celebrity endorsement are focused to appeal towards a youth audience<sup>15</sup>. A recent qualitative research study of 45 young people aged

13-17 years in Cheshire and Merseyside highlighted that e-cigarette use was driven by the choice of flavours, available designs and opportunity to customise devices to reflect individuality<sup>33</sup>.

In response to these concerns, the Government announced its intention to implement legislation to ban sales of e-cigarettes to young people aged under 18 years in January 2014<sup>34</sup>. Additional regulation, including restrictions on the promotion of e-cigarettes to children, could also be introduced at a national level<sup>35</sup>.

However, in view of the relative novelty of e-cigarettes, levels of awareness regarding the potential health risks and the proposed future regulation remain low, particularly amongst young people, with many reporting access to these products via family members, older friends or strangers outside shops<sup>33</sup>.

This identifies a need to increase knowledge levels of the forthcoming legislation with young people under 18 years of age, retailers and adults in order to facilitate compliance and prevent proxy purchasing via training and information provision.

### Shisha

The use of niche tobacco products, such as shisha, pan, gutkha and nass<sup>36</sup>, remain a concern in communities in Lancashire. The 2013 Trading Standards Survey with 3,471 young people aged 14-17 years across Lancashire County<sup>11</sup> showed that on average, nearly one in five (18%) had bought niche tobacco, with escalated use in Ribble Valley (50%) and West Lancashire (44%)<sup>12</sup>.

Shisha water pipes, also known as hookahs, narghiles, or hubble-bubble pipes have been used for smoking tobacco in the Middle East and parts of Africa and Asia for centuries<sup>37</sup>. The wide range of terms used is reflective of the different types of tobacco or herbs used in the water pipe.

Within the water pipe, smoke is created by placing heated coal on pierced aluminium foil over a mixture of tobacco or herbs, honey and fruit flavours, and passed through a water bowl before being inhaled through a hose<sup>38,39</sup>. It is usually smoked collectively by two or more people for 45-60 minutes<sup>40</sup>. The quantity of tobacco used can vary greatly between different mixtures and non-tobacco herbal variants are also available<sup>41</sup>.

Within the BME community, shisha provides a central activity at social gatherings such as weddings or in the home with friends and family<sup>42</sup>. However, it is now increasingly being used in Western countries and over recent years there has been a rise in the popularity of commercial shisha bars and lounges, which serve as safe, alcohol-free environments for young people to socialise with the opposite sex<sup>43</sup>. The British Heart Foundation has documented a 210% increase in the number of shisha bars operating in the UK over five years, from 179 in 2007 to 556 in 2012<sup>44</sup>. Locally, there are currently three licensed premises operating in Preston, although potentially there could be many more functioning illegally underground.

Although shisha users may not identify themselves as smokers, or indeed realise that they are smoking tobacco<sup>43</sup>, research has demonstrated that shisha smoking can result in nicotine levels equivalent to ten stick cigarettes among daily users<sup>45</sup>, and there is growing evidence of nicotine addiction and dependence among regular water pipe users<sup>46,47</sup>.

The upsurge in the popularity of shisha bars has therefore facilitated a route into tobacco use and potential addiction for young people<sup>48,49</sup>, in addition to creating other regulatory issues including: non-compliance with the smokefree legislation; fire and safety hazards; nonconformity with health warnings and tobacco packaging requirements<sup>50,51</sup>; illegal sale of tobacco to under 18's; and use of illicit, non-duty paid tobacco.

The Global Youth Tobacco Survey, which involved more than 500,000 13-15 year olds internationally, found an increase in tobacco use attributed to water pipes in 33 of the 97

participating sites<sup>52</sup>. On a national level, it is estimated that 8% of school children smoke water pipes<sup>48</sup>. However, data from the 2013 Trading Standards Survey with 3,471 young people across Lancashire illustrates that locally one in five (21%) of 14-17 year olds have tried or experimented with shisha smoking<sup>11</sup>. Rates are higher in Preston (32%), Pendle (30%), Hyndburn (30%) and Burnley (29%)<sup>12</sup>.

## Impact of Water Pipe Smoking on Health

Shisha smoking is increasingly seen as an emerging threat to public health and safety, both locally, nationally and beyond. The World Health Organisation states<sup>53</sup>:

'Using a water pipe to smoke tobacco poses a serious potential health hazard to smokers and others exposed to the smoke emitted' and 'second-hand smoke from water pipes is a mixture of tobacco smoke in addition to smoke from the fuel, and therefore poses a serious threat for non-smokers.'

Water pipe smoking produces high levels of toxic compounds including tar, nicotine, heavy metals such as arsenic and beryllium, carbon monoxide and carcinogens e.g. polycyclic aromatic hydrocarbons (PAHs) from the burning coals<sup>45,54,55</sup>. Herbal varieties also contain significant levels of toxic chemicals with the exception of nicotine.

Consequently, research suggests that water pipe smoking is associated with many of the same risks as cigarette smoking including:

- Increased heart rate and blood pressure<sup>56-58</sup>
- Carbon monoxide poisoning<sup>59-63</sup>
- Impaired lung function<sup>64,65</sup> and development of chronic obstructive pulmonary disease (COPD) <sup>66</sup>
- Bladder, throat and oesophageal cancer<sup>67</sup>
- Infertility<sup>67</sup>

The communal sharing of water pipes also carries the additional risk of transmission of infectious diseases such as tuberculosis<sup>68</sup>.

However, there are common misconceptions among water pipe users that it is less harmful to health than smoking conventional cigarettes. A survey of 282 members of the BME community in Lancashire in 2013 highlighted that the majority of shisha users did not realise that the product being smoked usually contained tobacco and nicotine, and many also thought that the water bowl within the pipe filtered out the harmful substances from the smoke prior to inhalation<sup>43</sup>.

This lack of awareness highlights the need to develop and disseminate clear and consistent messages regarding the addictive nature and health harms caused by shisha use, the risks associated with secondhand shisha smoke and carbon monoxide exposure both in commercial venues and recreationally within the home. Research indicates that shisha users welcome such information<sup>43</sup> and those in receipt of it are more likely to want to quit<sup>49</sup>.

In addition, proprietors and employees of commercial shisha venues and those hosting BME events such as weddings also require training to ensure they are fully informed and compliant with the relevant regulatory legislation regarding: smokefree premises; tobacco packaging, duties and trade marks; and point and age of sale, including the legal consequences of contravention.

Paper prepared by Jo McCullagh Public Health Specialist – Tobacco Control and Stop Smoking Services Adult Services, Health and Wellbeing Directorate May 2014 Joanne.McCullagh@lancashire.gov.uk

## References

- 1. Wanless D. (2004) Securing good health for the whole population. London: TSO
- 2. Marmot M et al (2010) Fair Society, Healthy Lives: strategic review of health inequalities in England post 2010. Marmot Review Secretariat London.
- 3. Jha P & Chaloupka FJ (1999) Curbing the Epidemic: Governments and the Economics of Tobacco Control. World Bank.
- 4. Canadian Cancer Society, Non-Smoker's Rights Association, Physicians for a Smoke-Free Canada, Quebec Coalition for Tobacco Control (1999) *Surveying the Damage: Cut-Rate Tobacco Products and Public Health in the 1990s.* Canadian Cancer Society, the Non-Smoker's Rights Association and Physicians for a Smoke-Free Canada, Ottawa.
- 5. Joosens, L et al (2008) *Issues in the smuggling of tobacco products,* World Bank. <u>http://www1.worldbank.org/tobacco/tcdc/393TO406.pdf</u>
- 6. ASH (2014) ASH Facts at a Glance: Tobacco Economics <u>www.ash.org.uk</u>
- 7. HM Revenue and Customs (2013) *Measuring tax gaps 2013 edition: Tax gap estimates for 2011-* 12. 11 October 2013.
- 8. Department of Health (2007) *Presentation on tobacco smuggling*. <u>http://www.freshne.com/content/editor/File/Smuggling%20Summit/Anne%20Grosskurth%20final</u> <u>%20version.ppt</u>
- 9. ASH (2008) Beyond Smoking Kills, Protecting Children, Reducing Inequalities. London: ASH
- 10. NEMS (2011) Consumer Research for North of England Tackling Illicit Tobacco for Better Health Programme. September 2011.
- 11. Trading Standards North West (2013) Young Persons Alcohol and Tobacco Survey 2013, North West Results. TSNW, June 2013.
- 12. Lancashire County Council (2014) *Trading Standards Alcohol and Tobacco Team: Summary of Young People's Tobacco Survey.* March 2014.
- 13. West R et al (2008) Why combating tobacco smuggling is a priority. BMJ 337:a1933
- 14. Pepper JK, Brewer NT (2013) Electronic nicotine delivery system (electronic cigarette) awareness, use, reactions and beliefs: a systematic review. *Tobacco Control* doi:10.1136/tobaccocontrol-2013-051122.
- 15. De Andrade M, Hastings G, Angus K (2013) Promotion of electronic cigarettes: tobacco marketing reinvented? *BMJ* **347**:f7473.
- 16. Action on Smoking and Health (2013) Use of e-cigarettes in Great Britain among adults and young people. <u>http://ash.org.uk/files/documents/ASH\_891.pdf</u>
- 17. Commission on Human Medicines Working Group on Nicotine containing Products. Quality, safety and efficacy of unlicensed NCPs. http://www.mhra.gov.uk/safetyinformation/Generalsafetyinformationandadvice/Product-specificinformationandadvice/Product-
- specificinformationandadvice%E2%80%93M%E"%80%93T/Nicotinecontainingproducts/indexhtm
- 18. Trtchounian A, Talbot P (2011) Electronic nicotine delivery stystems: is there a need for regulation? *Tobacco Control* **20**(1):47-52.
- 19. Westenberg B (2009) *Evaluation of e-cigarettes.* St Louis, MO:Department of Health and Human Services, Food and Drug Administration, Center for Drug Valuation and Research.
- 20. Goniewicz ML, Hajek P, McRobbie H (2013) Nicotine content of electronic cigarettes, its release in vapour and its consistency across batches: regulatory implications. *Addiction* **109**(3):500-507.
- 21. <a href="http://www.mirror.co.uk/news/uk-news/e-cigarette-explosion-sparks-house-fire-3144031">http://www.mirror.co.uk/news/uk-news/e-cigarette-explosion-sparks-house-fire-3144031</a>, <a href="http://www.theargus.co.uk/news/11069856.Care\_home\_fire\_was\_caused\_by\_e\_cigarette\_investigation\_reveals/?ref=mmpg">http://www.theargus.co.uk/news/11069856.Care\_home\_fire\_was\_caused\_by\_e\_cigarette\_investigation\_reveals/?ref=mmpg</a>, <a href="http://www.dailyecho.co.uk/news/10677464.Electronic\_cigarette\_explodes\_and\_sets\_fire\_to\_bed">http://www.theargus.co.uk/news/10677464.Electronic\_cigarette\_explodes\_and\_sets\_fire\_to\_bed</a> room/
- 22. World Health Organisation (2013). Questions and answers on electronic cigarettes or electronic nicotine delivery systems. http://www.who.int/tobacco/communications/statements/electronic cigarettes/en/
- 23. Vansickel AR et al (2010) A clinical laboratory model for evaluating the acute effects of electronic 'cigarettes': nicotine delivery profile and cardiovascular and subjective effects. *Cancer Epidemiol Biomarkers Prev* **19**:1945-53.
- 24. Bullen C et al (2013) Electronic cigarettes for smoking cessation: a randomised controlled trial. *The Lancet* published online September 7, 2013 <u>http://dx.doi.org/10.1016/50140-6736(13)61842-5</u>
- 25. Department of Health (2011) Local Stop Smoking Services: Service Delivery and Monitoring Guidance 2011/12.London: DH
- 26. Buller D et al (2003). Understanding factors that influence smoking uptake. *Tobacco Control* **12** (4):iv16-25.
- 27. Henderson NL et al (2012) *Smoking, drinking and drug use among young people in England in 2012.* London: Health and Social Care Information Centre.

- 28. Cobb NK, Abrams DB (2011) E-cigarette or drug-delivery device? Regulating novel nicotine products. *New England Journal of Medicine* **365**:193-5.
- 29. Choi K et al (2012) Young adult's favourable perceptions of snus, dissolvable tobacco products, and electronic cigarettes: Findings from a focus group study. *American Journal of Public Health* **102**(11):2088-93.
- 30. Wagener TL, Siegel M, Borrelli B (2012) Electronic cigarettes: achieving a balanced perspective. *Addiction* **107**:1545-8.
- 31. De Andrade M, Hastings G (2013) *Tobacco harm reduction and nicotine containing products.* University of Sterling and Cancer Research UK.
- 32. Hughes K et al (2014) *E-cigarette access among young people in Cheshire and Merseyside: Findings from the North West Trading Standards survey.* Liverpool: Centre for Public Health, Liverpool John Moores University.
- 33. Hardcastle K et al (2014) "Most people I know have got one": young people's perceptions and experiences of e-cigarettes. Liverpool: Centre for Public Health, Liverpool John Moores University.
- 34. BBC (2014) *E-cigarettes to be stubbed out for under-18s.* <u>http://www.bbc.co.uk/news/uk-25900542</u>
- 35. Committee of Advertising Practice and the Broadcast Committee of Advertising Practice (2014) Consultation on the marketing of E-cigarettes. <u>http://www.cap.org.uk/News-reports/Consultations/Open-consultations.aspx</u>
- 36. A full directory of niche tobacco products is available at: <u>http://www.ntpd.org.uk</u>
- 37. Maziak W et al (2004) Tobacco smoking using a water pipe: A re-emerging strain in a global epidemic. *Tobacco Control* **13**(4):327-333.
- 38. Maziak W et al (2005) Standardizing questionnaire items for the assessment of water pipe tobacco use in epidemiological studies. *Public Health* **119**(5):400-404.
- 39. Krishkowy B, Amitai Y. Water-pipe (narghile) smoking: an emerging health risk behaviour. *Pediatrics* **116**(1):e113-119.
- 40. Shihadeh A (2003) Investigation of mainstream smoke aerosol of the argileh water pipe. *Food and Chemical Toxicology* **41**(1):143-152.
- 41. Shihadeh A et al (2012) Does switching to a tobacco-free water pipe product reduce toxicant intake? A crossover study comparing CO, NO, PAH, volatile aldehydes, 'tar' and nicotine yields. *Food and Chemical Toxicology* **50**(5):1494-1498.
- 42. Asfar T et al (2005) Comparison of patterns of use, beliefs, and attitudes related to water pipe between beginning and established smokers. *BMC public health* **5**:19 <u>http://www.ncbi.nlm.nih.gov/pmc/articles/PMC553967/</u>
- 43. Molloy E, Morris D (2013) *Reducing the Harms Caused by Illicit Tobacco.* Preston City Council and Lancashire Teaching Hospitals NHS Foundation Trust, November 2013.
- 44. British Heart Foundation (2012) *Rise in 'shisha bars' prompts warning on dangers of water pipe smoking* <u>http://www.bhf.org.uk/default.aspx?page=14417</u>
- 45. Neergaard J et al (2007) Water pipe smoking and nicotine exposure: A review of the current evidence. *Nicotine and Tobacco Research* **9**(10):987-94.
- 46. Auf RA et al (2012) Assessment of tobacco dependence in water pipe smokers in Egypt. *International Journal of Tuberculosis and Lung Disease* **16**(1):132-137.
- 47. Salameh P, Khayat G, Waked M (2012) Lower Prevalence of Cigarette and Water pipe Smoking, But a Higher Risk of Water pipe Dependence in Lebanese Adult Women Than in Men. *Women & Health* **52**(2):135-50.
- 48. Jawad M et al (2013) Water pipe and cigarette smoking among secondary school students in London: a comparison of prevalence, beliefs, cessation and predictors. *Nicotine and Tobacco Research* doi: 10.1093/ntr/ntt103.
- 49. Lipkus IM et al (2011) Affecting perceptions of harm and addiction among college water pipe tobacco smokers. *Nicotine and Tobacco Research* **13**(7):599-610.
- 50. Nakkash R, Khalil J (2010) Health warning labelling practices on narghile (shisha, hookah) water pipe tobacco products and related accessories. *Tobacco Control* **19**(3):235-239.
- 51. Vansickel AR, Shihadeh A, Eissenberg T (2012) Water pipe tobacco products: Nicotine labelling versus nicotine delivery. *Tobacco Control* **21**(3):377-379.
- 52. Warren CW (2009) Change in tobacco use among 13-15 year olds between 1999 and 2008; Findings from the Global Youth Tobacco Survey. *Global Health Promotion.*
- 53. WHO Study Group on Tobacco Product regulation (TobReg) (2005) Water pipe Tobacco Smoking: Health Effects, Research Needs and Recommended Actions by Regulators <u>http://www.who.int/tobacco/global\_interaction/tobreg/Waterpipe%20recommendation\_Final.pdf</u>
- 54. Khater AEM et al (2008) Radiological hazards of Narghile (hooka, shisha, goza) smoking: activity concentrations and dose assessment. *Journal of Environmental Radioactivity* **99**(12):1808-1814.
- 55. Sepetdijan E, Shihadeh A, Saliba NA (2008) Measurement of 16 polycyclic aromatic hydrocarbons in narghile water pipe tobacco smoke. *Food and chemical Toxicology* **46**(5);1582-1590.

- 56. Hakim F et al (2011) The acute effects of water-pipe smoking on the cardiorespiratory system. *Chest* **139**(4):775-781.
- 57. Blank MD et al (2011) Acute effects of water pipe tobacco smoking: A double-blind, placebo control study. *Drug and Alcohol Dependence* **116**(1-3):102-109.
- 58. Cobb CO et al (2012) Acute toxicant exposure and cardiac autonomic dysfunction from smoking a single narghile water pipe with tobacco and with a "healthy" tobacco-free alternative. *Toxicology Letters* **215**(1):70-75.
- 59. Hojer J, Enghag M (2011) Carbon monoxide poisoning caused by water pipe smoking. *Clinical Toxicology* **49**(7):702-703.
- 60. Turkmen S et al (2011) Carbon monoxide poisoning associated with water pipe smoking. *Clinical Toxicology* **49**(7):697-698.
- 61. Ashurst JV, Urquhart M, Cook MD (2012) Carbon Monoxide Poisoning Secondary to Hookah Smoking. *The Journal of American Osteopathic Association* **112**(10):686-688.
- 62. Clarke SFJ et al (2012) Multiple Patients with Carbon Monoxide Toxicity from Water-Pipe Smoking. *Prehospital and Disaster Medicine* **27**(6):612-614.
- 63. La G et al (2012) Carbon monoxide poisoning in narghile (water pipe) tobacco smokers. *CJEM* **14**(1):57-59.
- 64. Raad D et al (2011) Effects of water-pipe smoking on lung function: A systematic review and meta-analysis. *Chest* **139**(4):764-774.
- 65. Boskabady MH et al (2012) Comparison of pulmonary function and respiratory symptoms in water pipe and cigarette smokers. *Respirology* **17**(6):950-956.
- 66. Salameh P et al (2012) Water pipe smoking and dependence are associated with chronic bronchitis: a case-control study in Lebanon. *Eastern Mediterranean Health Journal* **18**(10):996-1004.
- 67. Akl EA et al (2010) The effects of water pipe tobacco smoking on health outcomes: A systematic review. *International Journal of Epidemiology* **39**(3):834-857.
- 68. Munckhof WJ et al (2003) A cluster of tuberculosis associated with use of a marijuana water pipe. *International Journal of Tuberculosis and Lung Disease* **7**(9):860-865.