

# **Devon Drug and Alcohol Action Team**

## **Alcohol Needs Assessment and Service Development Framework**

Making the business case for reducing alcohol  
related harm in Devon

### **Acknowledgements**

This work draws heavily on the Devon and Torbay DAATs' Alcohol Service Framework produced in 2004. It has been amended and updated to take account of local and national evidence on alcohol misuse, recent guidance on developing local improvement programmes for alcohol services and to reflect the contemporary context in which these services will need to be developed.

Thanks to Corinne Tuck at Devon County Council and to Matthew Dominey at Devon Primary Care Trust for their support with drawing together and analysing the information presented in Part Two.

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## **PART ONE – BACKGROUND, CONTEXT AND DEFINITIONS**

### **1 KEY AIMS AND OBJECTIVES OF THIS FRAMEWORK**

#### ***Aim***

To make the business case for investment in a needs led, evidenced based alcohol service model for Devon.

#### ***Objectives***

- ♦ To provide a summary of some of the harms caused by alcohol misuse across Devon with a particular emphasis on health, social care and crime and disorder.
- ♦ To highlight the financial cost to health, social care and criminal justice budgets of alcohol misuse.
- ♦ To demonstrate the cost effectiveness of investing resources to develop alcohol services in Devon.
- ♦ To model the investment needed in the alcohol treatment system.
- ♦ To propose alcohol targets linked to PSAs achievable with the recommended investment during 2008/09.

### **2 EXECUTIVE SUMMARY**

Addressing alcohol misuse is not optional. The publication of the New Performance Framework for Local Authorities & Local Authority Partnerships: Single Set of National Indicators<sup>1</sup> provides a clear indication of the Governments intent to encourage local areas to address the harms caused by alcohol misuse. Consultations on the Devon Sustainable Communities Strategy have consistently highlighted the need to address alcohol misuse.

This paper presents a range of evidence, supporting the need for an increased investment in services to address alcohol misuse and how this investment should be managed.

Approximately 110,991 people between the ages of 16 and 64 in New Devon, will drink at hazardous or harmful levels and would benefit from a Tier 1 or Tier 2 intervention. Presently there is capacity to deliver around 660 interventions or 0.59% of the potential need.

There are in the region of 2,832 people aged 16-64 in New Devon with an alcohol dependence who would benefit from structured intervention at Tier 3. Provision currently exists to deliver 220 interventions per year, 7.76% of need.

Evidence demonstrating the harms caused by alcohol misuse is presented in Part Two show:

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<sup>1</sup> The New Performance Framework for Local authorities and Local Authority Partnerships: Single Set of National Indicators. Communities and Local Government 2007

- ♦ The total number of hospital admissions where any diagnosis cause is specific to alcohol consumption has increased by 30% over the last 4 years for males and females and currently stands at 5,200 per year.
- ♦ Up to 35% of attendances at A&E are alcohol related. For Devon this equates to 57,185 in one year, 1,099 a week or 160 per day
- ♦ There are 4,000 'Children in Need' in Devon. Up to 2,400 will be living with a parent or carer with a alcohol misuse problem
- ♦ 37.7% of recorded violent crime in Devon is alcohol related, a total of 3,904 offences during 2006/07. Violent crime accounted for 8.1% of all crime during 2006/07, 10,366 offences.
- ♦ Evidence shows that investment in alcohol interventions saves money. The UK Alcohol Treatment Trial shows that for every £1 spent on treatment, £5 was saved across health and social care and crime and disorder.

### **3 RECOMMENDATIONS**

- ♦ Investment to be raised to £1.57 million as indicated by the Government's "Alcohol Strategy, Sensible. Safe. Social".
- ♦ Commissioning and budget to be managed by the Drug and Alcohol Action Team
- ♦ Establish an evidence based alcohol treatment model including:
  - ↳ Development of low-threshold community based interventions (Tiers 1&2) to reduce the demand on secondary acute/inpatient services and subsequent costs to the health and social care community
  - ↳ Enhanced capacity at Tier 3 to manage complex cases
  - ↳ To develop service level agreements, care pathways and appropriate performance management systems
  - ↳ To increase availability of Tier 4 rehab and inpatient detox
  - ↳ Develop an information campaign by including a web-based tool to help individuals screen and refer themselves for modalities of support and provide harm reduction information
  - ↳ Provide a rolling training programme for health and social care professionals to provide low level interventions to individuals who are using alcohol problematically

### **4 TARGETS ACHIEVABLE WITH ADDITIONAL INVESTMENT**

- ♦ Reduce waiting time for alcohol treatment to 6 weeks by the end of year 1 – 2008/09 and to 3 weeks by the end of year 2 – 2009/2010. Current wait for Tier 2, 4-5 months. Tier 3 up to 12 months.
- ♦ Reduce alcohol related attendance at A&E by 5% during 2008/09. Baseline 2006/07
- ♦ To reduce alcohol specific hospital admissions by 5% by 2010/11. Baseline 2005/06 – 4,818
- ♦ Reduce recorded alcohol related violent crime by 10% during 2008/09. Baseline 2006/07 = 3,904
- ♦ To reduce fear of people being drunk or rowdy in public places by 5% by 2008/09. Baseline 2006 – 24% (Local Government Survey)
- ♦ Increase treatment capacity and reduce unit costs –
- ♦ Train 400 front line workers to deliver screening and brief interventions

## **5 INTRODUCTION AND CONTEXT**

The framework shows how it makes good business sense to invest in alcohol services and what that service should look like. The business case is based on:

- ♦ The extent of alcohol related harm in Devon
- ♦ The cost to the Devon public purse of not responding to these harms and
- ♦ The positive impact that reducing alcohol related harms has on key performance targets across partner agencies.

It shows how money can be saved in different parts of the health, social care and criminal justice system by investing in lower level, preventative alcohol services.

### **5.1 Harm Reduction**

The framework recognises the necessity of developing effective treatment services but its primary focus is on early intervention and prevention of alcohol related harms. It recognises that the majority of people who have 'problems' with alcohol will have a sufficient degree of self-efficacy to moderate their own behaviour. It further stresses that, in every event, individuals should be provided with a service at the lowest Tier suitable to meet their needs.

It also acknowledges that there are significant acute needs in Devon which are currently not being met, resulting in at the extreme, people dying on waiting lists. The development of alcohol services in Devon will need to strike a balance between responding to these extreme cases and chronic needs and gradually expanding the range and penetration of Tier 1 and 2 services.

The framework advocates a 'whole community' approach focussing on situational approaches to minimising alcohol misuse, for instance by the design of public spaces and layout of bars, management of the evening and night time economy and consistency in the delivery of public messages about alcohol.

### **5.2 Focus on Areas of Greatest Need**

There is a wealth of evidence to show that the negative impacts of alcohol misuse to the individual, family and community are felt more keenly in areas of higher deprivation.

This framework is will focus on those areas of highest deprivation in support of the principles of the LAA and public health targets to narrow the gap between the health outcomes of Devon's communities.

### 5.3 Policy Context

This section presents some of the key policy areas where addressing alcohol misuse is either directly related or adds significant value.

### 5.4 National Drivers

#### ***The New Performance Framework for Local Authorities & Local Authority Partnerships: Single Set of Indicators***

- ✦ PSA18 Better health and well-being for all
- ✦ PSA23 make Communities Safer
- ✦ PSA25 Reduce the harm caused by alcohol and drugs

#### ***National Alcohol Strategy – Safe. Sensible. Social – June 2007 has four themes:***

- ✦ Improved education and communication
- ✦ Better identification and treatment
- ✦ Alcohol-related crime and disorder
- ✦ Supply and industry responsibilities

***Choosing Health – making healthy choices easier*** (published November 2004) highlights action on reducing alcohol-related harm and encouraging sensible drinking as one of its six priorities and places alcohol firmly in the realm of public health practice.

***The Crime and Disorder Act 1998*** (as amended by the Police Reform Act 2002)

Action in support of the local Crime and Disorder Strategies may impact positively on a range of national NHS priorities, including:

- ✦ Reducing health inequalities
- ✦ Positive patient satisfaction
- ✦ Positive staff satisfaction
- ✦ Improvement in the life chances for children
- ✦ Increasing the participation of problem drug users in treatment
- ✦ Implementation of the National Service Framework for Mental Health
- ✦ Reductions in waiting times

***The Licensing Act 2003*** is intended to provide:

- ✦ A clear focus on the prevention of crime and disorder;
- ✦ A clear focus on public safety;
- ✦ The prevention of public nuisance; and
- ✦ The protection of children from harm

#### ***Respect agenda***

The key objective of the new unit will be to drive forward the Respect agenda including:

- ✦ Working together on the neighbourhood renewal and anti-social behaviour agendas, highlighting respect for others and respect for the community
- ✦ Supporting parents and guardians to build their skills and accept responsibility for the impact that the behaviour of their children has on others

#### ***Creating a Patient-led NHS***

In order to be patient led the NHS will develop new service models which build on current experience and innovation to:

- ✍ Give patients more choice and control wherever possible
- ✍ Offer integrated networks for emergency, urgent and specialist care to
- Ensure that everyone throughout the country has access to safe, high-quality care

## 5.5 Impact of Alcohol Misuse on Public Service Agreements (PSAs)

Annex B – presents a range of solid evidence of the impact of alcohol misuse across Government Department PSAs.<sup>2</sup>

The table below presents some of the evidence which shows how alcohol misuse impacts negatively on DoH, HO and CLG Public Service Agreements. At the time of writing, PSAs for the 2007 Spending Review are being produced.

PSA	Links to Alcohol
DoH Substantially reduce mortality rates by 2010:	<p>Among 6,544 middle-aged British men without previous CVD, regular heavy drinkers had a 74% higher risk of a major coronary event and a 133% increase in the risk of stroke than occasional drinkers (Emberson et al, 2005).</p> <p>Heavy alcohol consumption is associated with many forms of cancer. Strong links are reported between alcohol and cancers of the oral cavity, pharynx, oesophagus and larynx, while weak associations are reported for stomach, colon, rectum, liver, female breast cancers and cancer of the ovaries (Bagnardi, 2001).</p> <p>Alcohol consumption is strongly related to incidents of suicide, attempted suicide, and fatal injury, especially among heavy drinkers:</p> <ul style="list-style-type: none"> <li>▪ A study of 349 suicides in Scotland reported that 45% had consumed alcohol prior to committing suicide (Crombie, 1998);</li> <li>▪ Lifetime risk of suicide is estimated to be 7% for people with alcohol dependency (Inskip et al, 1998);</li> <li>▪ Among psychiatric patients, high levels of alcohol use are strongly associated with suicide ideation and previous self-harm (McCloud et al, 2004);</li> </ul>
2. Reduce health inequalities by 10% by 2010 as measured by infant mortality and life expectancy at birth.	<p>Heavy parental alcohol use, both during and after pregnancy, can play an important contributory role in the risk of infant mortality. Prenatal exposure to alcohol can prevent the foetus from obtaining sufficient amounts of oxygen and nourishment to allow the brain and other organs to develop normally. Consequently, for some pregnancies neurological and other developmental abnormalities can develop, known as Foetal Alcohol Syndrome (FAS) or Foetal Alcohol Effects (FAE) (Burd and Wilson, 2004)</p>
4. To improve health outcomes for people with long term conditions	<p>Individuals with long term conditions may be at greater risk from alcohol problems since emotional difficulties experienced coming to terms with illness may induce heavy drinking as an avoidant coping strategy (Myllykangas-Luosujarvi et al, 1998). For these individuals, understanding how alcohol can affect illness progression and the ability to look after one's self, and developing the skills necessary to cope with a chronic illness, has the potential to help improve health outcomes in the longer term.</p>
HO 1. Reduce crime by 15%, and further within high crime areas, by 2007-08 -	<p>Among 18-24 year olds, binge drinkers were almost three times more likely to have committed an offence than other drinkers, and five times more likely to have been involved in a fight (Richardson and Budd, 2003).</p> <p>Among victims of violent offending, around half (48%) believed their attacker to have been under the influence of alcohol, rising to 60% in incidents of stranger violence</p>

<sup>2</sup> <http://www.nwph.net/alcohol/psa/>

PSA	Links to Alcohol
	<p>(Nicholas et al, 2005). Areas that have the highest number of alcohol outlets per 100,000 population also see the highest rates of criminal violence (Norstrom, 2000).</p> <p>Alcohol may have direct links to criminal behaviour by affecting cognitive and physical functioning, reducing self-control, facilitating aggression and impairing the ability to process incoming information (Peterson et al, 1990; Graham, 2003). This can make a person more likely to resort to violence in confrontation. Alcohol can also affect crime indirectly; for instance alcohol may be used to provide the courage to commit crimes (e.g. Hunt and Laidler, 2001). Furthermore, alcohol and criminal behaviour may be related through other common risk factors (e.g. anti-social personality disorder; Moeller and Dougherty, 2001) that contribute to the risk of both occurring.</p>
<p>2. Reassure the public, reducing the fear of crime and anti-social behaviour, and building confidence in the Criminal Justice System without compromising fairness -</p>	<p>In a Local Authority survey of problems experienced with evening and night-time activities, urinating on the street was rated as being a severe problem by 30% of local authorities, along with: threatening or unsafe areas (29%), noise disturbing local residents (28%), rowdiness or fighting in the street (24%) and vandalism (16%) (The Civic Trust, 2004).</p> <p>Feelings of safety are often associated with public perceptions of the criminal justice system, with those who believe the police to be controlling crime in the local area much more likely to report feeling safe than others (Johnson, 2005). This is important in the night-time economy, where the presence of police and other security services, and enforcement of penalties for alcohol-related disorder may increase feelings of safety and reduce fear of victimisation.</p>
<p>CLG 2: - Make sustainable improvements in the economic performance of all English regions</p>	<p>Alcohol consumption plays an important role in the UK economy. The alcohol industry offers economic benefits to society through increased employment, generating approximately one million extra jobs from farming through to serving alcohol in restaurants and bars (IAS, 2003).</p> <p>However, adverse consequences of excessive alcohol use such as those spent treating alcohol-related problems, benefits to those unable to work through alcohol-related causes, costs to social and judicial systems and costs to the workplace can be problematic, costing an estimated £18-20 billion each year in England and Wales (Strategy Unit, 2003). Costs include:</p> <p>Additionally, although evidence is mixed, some studies suggest that alcoholism can have a negative relationship with household income, with estimates of between 17 and 31% reductions in income among those with problematic drinking habits (Mullahy and Sindelar, 1993).</p>
<p>CLG 3: By 2010, reduce the number of accidental fire-related deaths in the home by 20% and the number of deliberate fires by 10%.</p>	<p>Alcohol consumption is often implicated in fire-related accidental injuries, particularly those that are smoke-related. An estimated 38-45% of injuries from fire are related to alcohol (Strategy Unit, 2003). For instance:</p> <p>The use of alcohol can affect the risk of fire and fire-related death in a number of ways. Impaired judgement and co-ordination may increase the risk of a fire being started and make it much harder to escape once a fire is out of control. Importantly, the use of alcohol can increase the risk of a house fire injury up to seven times (Warda et al, 1999), while victims of burns that have been drinking are more than five times as likely to die from their injuries than other burns victims (Levy et al, 2004).</p> <p>While alcohol plays an important role in criminal behaviour generally, specific links have been reported between heavy alcohol use and deliberate fires, with problematic drinking frequently reported as a characteristic of arsonists: In a study of 283 arsonists in the US, 64% had been abusing alcohol or drugs at the time of their fire setting (Ritchie and Huff, 1999). Among 401 arsonists referred for psychiatric treatment in Finland, 61% suffered from alcohol abuse or dependency and 68% had committed an arson attack under acute alcohol intoxication (Lindberg et al, 2005).</p>



## 6 WHO WILL THE FRAMEWORK TARGET?

In its broadest sense, this framework will target the whole community. Unlike illegal drugs, alcohol is a legal, freely available, culturally acceptable substance. Individuals of their own free will can consume as much alcohol as they wish within the constraints of civil and criminal law. The large majority (90%) of adults in Devon, around 670,000 people, will consume alcohol on a regular basis.

The vast majority of these will consume alcohol in a way unlikely to lead to adverse consequences for themselves or other people. However, approximately 110,991 people in Devon aged 16 – 64 drink at hazardous or harmful levels and around 18,883 people aged 16-64 have an alcohol dependency<sup>3</sup>.

There are many patterns of alcohol consumption and some forms of harm are more associated with particular problems than others. For example, some chronic health problems, such as alcohol related liver cirrhosis, will almost always be associated with long term heavy drinking. Other acute alcohol related problems, such as violence, accidents or vandalism might result from an occasional bout of heavy drinking.

The acute harms are common among the large number of people who regularly binge drink, yet these people are not necessarily alcohol dependent and do not conform to the popular stereotype of the alcoholic.

This focus on individual drinkers will be combined with support to the families and others caring for people with alcohol related harms. Alcohol is a significant factor in a range of domestic problems including domestic violence, relationship breakdown and child abuse.

Beyond services to individuals and their families, some alcohol related problems are best addressed at a population level. For example, some behavioural or health problems need to be tackled, at least in part, through the use of health education and other preventative campaigns. Others, such as public disorder, vandalism and the many accidental injuries related to alcohol, are better addressed through approaches involving the context in which drinking takes place, such as management of the licensed premises or the availability of public transport late at night.

The principle focus of this framework is on adult alcohol misuse in recognition that Devon has produced an alcohol strategy for young people and has well established specialist substance misuse services which address alcohol misuse. It is recognised however that it is neither possible nor desirable to concentrate solely on 'adult issues', given the nature and extent of alcohol use and misuse. The framework will consider areas where issues and alcohol related harms transcend ages. For example, where adult alcohol use impacts on young people, as identified in 'Hidden Harm', or where young people's alcohol use impacts of adult fears of crime and disorder. A further issue as the alcohol

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<sup>3</sup> Figures extrapolated from Alcohol Needs Assessment Research Project 2005

service model develops will be how to 'manage' young people through substance misuse and alcohol treatment services as they grow up.

For a range of up to date evidence supporting this approach, please see the following web sites.

[www.dh.gov.uk/assetRoot/04/09/47/59/04094759.pdf](http://www.dh.gov.uk/assetRoot/04/09/47/59/04094759.pdf)

[http://www.pm.gov.uk/files/pdf/SU%20interim\\_report2.pdf](http://www.pm.gov.uk/files/pdf/SU%20interim_report2.pdf)

## 7 DEFINITIONS

This paper uses the definitions offered by the Alcohol Needs Assessment Research Project (ANARP; Department of Health, 2005) which identifies three categories of problematic alcohol consumption used to assess the level of need in the population. These are defined as:

- ♦ *Hazardous drinking* - Drinking above recognised sensible levels, but not yet experiencing harm (measured by consumption of between 22 and 50 units per week for males and between 15 and 35 units per week for females);
- ♦ *Harmful drinking* - Drinking above recognised sensible levels and experiencing harm, such as an alcohol-related accident, acute alcohol poisoning, hypertension, cirrhosis (measured by consumption of over 50 units per week for males and over 35 units per week for females);
- ♦ *Alcohol dependence* - Drinking above recognised sensible levels and experiencing harm and symptoms of dependence (measured by an Alcohol Use Disorder Identification Test (AUDIT) score greater than 10 and a Severity of Alcohol Dependence Questionnaire (SAD-Q) score greater than 3).

In addition, it is worth considering the language used in the Government's Alcohol Strategy, Safe. Sensible. Social, which refers to:

- ♦ *Sensible drinking* - The Government advises that adult men should not regularly drink more than 3-4 units of alcohol a day and adult women should not regularly drink more than 2-3 units of alcohol a day.
- ♦ *Binge drinking* - defined as drinking **over double** the daily recognised sensible levels in any one day (over eight units a day for men and over six units a day for women).

## PART TWO – EVIDENCING THE IMPACT OF ALCOHOL MISUSE IN DEVON

### 8 THE PURPOSE OF THIS SECTION IS TO:

- ♦ Provide evidence of a range of alcohol related harms across health, social care and crime and disorder
- ♦ Begin to establish some base lines to measure the impact of increased investment in alcohol services
- ♦ To link the alcohol related harms with Government Department Public Service Agreement Targets – For more detail see Appendix ?

#### 8.1 Levels of Drinking – Tier 1, 2 and 3 Treatment Needs

Table 1 below shows approximately 110,991<sup>4</sup> people aged 16 – 64 drink at hazardous or harmful levels in Devon.

Approximately 18,883<sup>5</sup> people aged 16-64 have an alcohol dependency.

Rush and Godfrey<sup>6</sup> estimate that 15% of this population would seek an alcohol intervention in any one year, that is 16,649 people at Tiers 1 and 2 and 2,832 at Tier 3.

**Table 1: Population – 16-64**

Total District population 16-64			Hazardous or harmful			Alcohol dependent		
	Female 16 – 64	Male 16 – 64	Female 15%	Male 32%	Total	Female 2%	Male 6%	Total
East Devon	40,196	38,191	6,029	12,221	18,250	803	2,291	3,094
Exeter	40,262	40,703	6,039	13,024	19,063	805	2,442	3,247
Mid Devon	23,985	24,128	3,597	7,720	11,317	479	1,447	1,926
North Devon	29,939	30,186	4,490	9,659	14,149	598	1,811	2,409
South hams	27,487	26,852	4,123	8,592	12,715	549	1,611	2,160
Teignbridge	39,639	39,424	5,945	12,615	18,560	792	2,365	3,157
Torridge	19,808	19,862	2,971	6,355	9,326	396	1,191	1,587
West Devon	16,334	16,285	2,450	5,211	7,611	326	977	1,303
	237,650	235,631	35,644	75,397	110,991	4,748	14,135	18,883
			Estimated treatment need at Tier 1 and/or 2 @15% of total*			Estimated treatment need at Tier 3 @15%		
			16,649			2,832		

Population figures taken from Devon County Council estimates 2005. Multipliers taken from Alcohol Needs Assessment Research Project

<sup>4</sup> Based on ANARP 2005 and Devon population figures – Devon County Council 2005

<sup>5</sup> Based on ANARP 2005

<sup>6</sup> In 'Alcohol and the Community – a systems approach' H.D Holder. IRMA. 1998

## 8.2 Impact of Alcohol Misuse on Health and Social Care

**Table 2 – A&E attendances – non alcohol specific**

A+E Attendances	Total number			Alcohol related at 35% of total	Per 100,000		
	Female	Male	Total		Female	Male	Total
LA Code	2006/07	2006/07			2006/07	2006/07	
East Devon	8596	8211	16807	5,882	12300.2	12962.3	12615.0
Exeter	17385	14715	32100	11,235	30183.9	26332.7	28287.4
Mid Devon	4776	4285	9061	3,171	12806.3	11747.8	12282.9
North Devon	10913	12760	23673	8,285	22635.4	27200.4	24886.7
South Hams	7710	6968	14678	5,137	17618.4	16708.6	17174.5
Teignbridge	23797	21688	45485	15,919	36845.4	35231.2	36057.7
Torridge	8499	10328	18827	6,589	26865.8	33412.1	30101.0
West Devon	1518	1238	2756	964	5821.7	4919.9	5378.8
Devon	83194	80193	163387	57,185	21948.3	22155.9	22049.7

- Up to 35% of all A&E and ambulance attendances may be alcohol-related<sup>7</sup>. For Devon this equates to 57,185 attendances at A&E per year. (or 1,099 per week or 160 per day).

### ***In A&E departments at peak times<sup>8</sup>:***

- 41% of all attendees were positive for alcohol consumption
- 14% of attendees were intoxicated
- 43% were identified as problematic drinkers after screening
- 70% of attendances between midnight and 5 am are alcohol related

### ***Hospital Admissions***

- In the four years between 2003/04 – 2006/07 there were 907,257 admissions to hospital in Devon. 150,000 or 16.5% were alcohol related. This does not include road injuries, fire injuries and suicide attempts
- In the three years between 2003/04 – 2006/07, there were 4,285 hospital admissions where an alcohol specific condition was the primary diagnosis and a further 17,384 where an alcohol specific condition was noted as a diagnosis for admission<sup>9</sup> - Table 3
- East Devon and Exeter have the highest per capita alcohol specific crude admission rate, Torridge and West Devon the lowest
- North Devon ranks in the highest quartile nationally for mortality from chronic liver disease, 283<sup>rd</sup> out of the 354<sup>th</sup> Districts within England

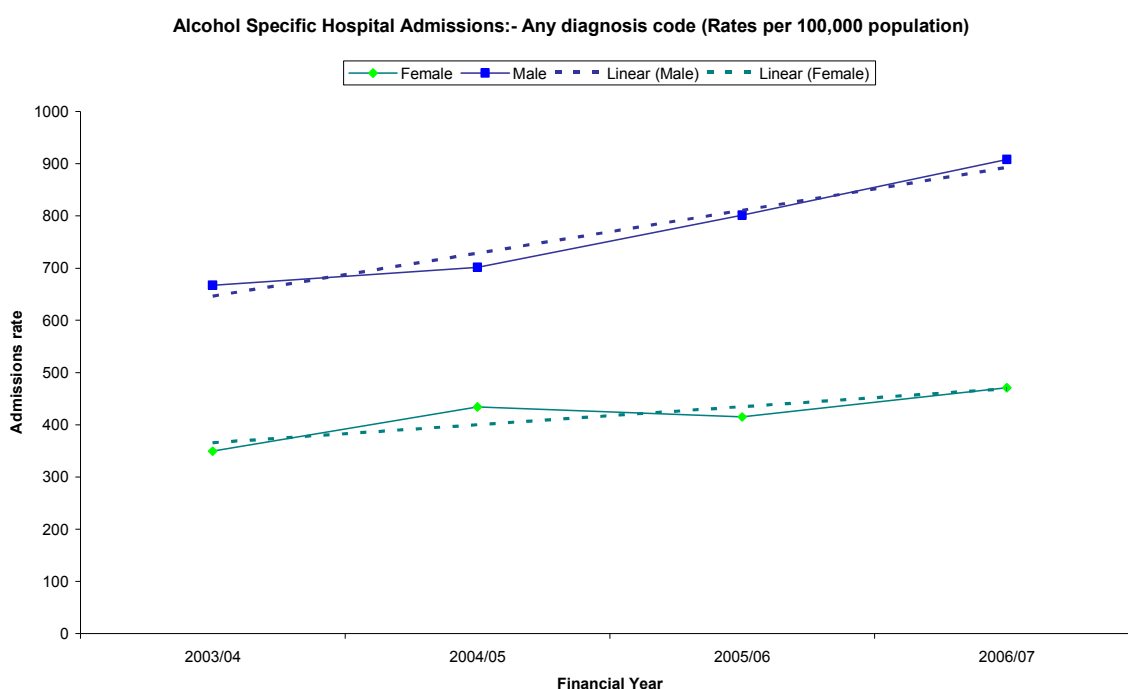
<sup>7</sup> ANARP 2005

<sup>8</sup> Strategy Unit Alcohol Harm Reduction Project Interim Analytical Report - 2003

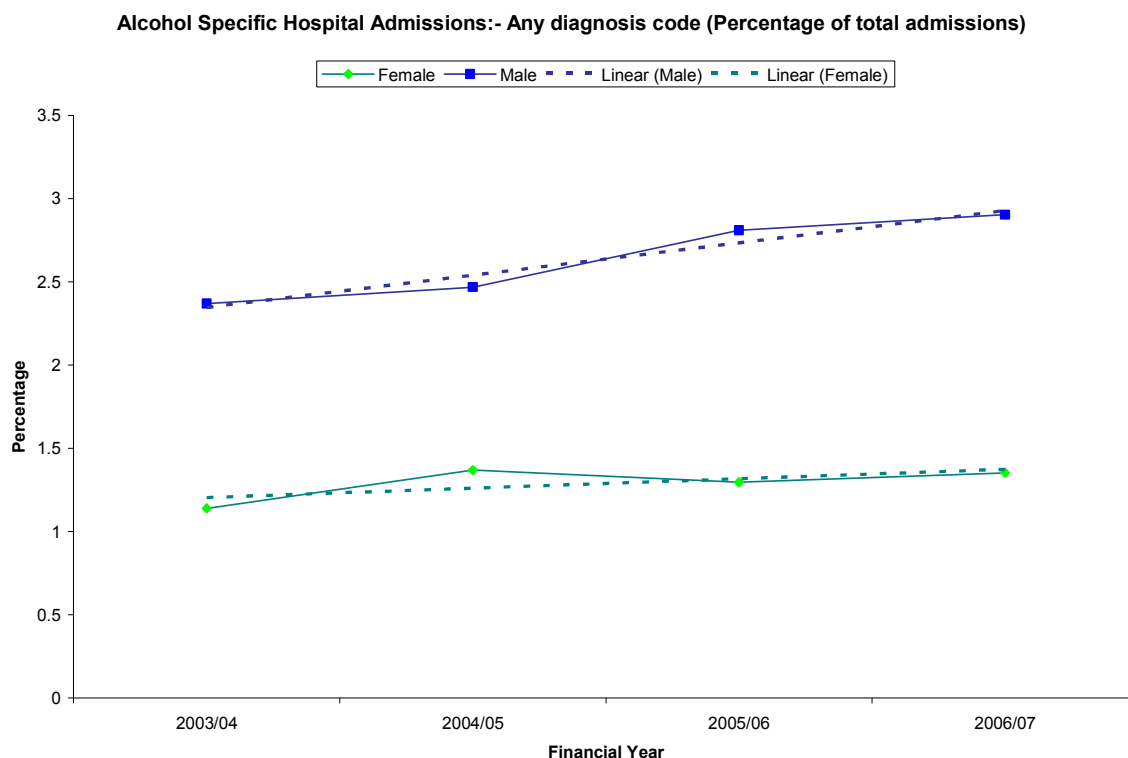
<sup>9</sup> See Appendix A For a list of alcohol specific and related conditions

<sup>10</sup> NWPFO – Local alcohol profiles - 2007

**Table 3** below shows the total number of admissions where any diagnosis cause is specific to alcohol consumption has increased by over 30% during the past 4 years for both females and males.



**Table 4** below shows the admission rate (per 100,000 population) where the primary diagnosis cause is specific to alcohol consumption has also increased significantly over the past 4 years for both females and males.



The proportion of admissions with a diagnosis code specific to alcohol consumption as compared to the total number of admissions for all causes has increased for both females and males over the past 4 years. This increase has been greater for males than females although in both cases the increases in the proportion of admissions is around 20%. Table 5 shows the figures broken down by District.

**Table 5**

Any Code	Female				Male				
LA Code	2003/04	2004/05	2005/06	2006/07	2003/04	2004/05	2005/06	2006/07	
East Devon	217	317	332	319	326	383	536	639	3069
Exeter	252	274	299	329	573	646	674	613	3660
Mid Devon	188	324	201	239	278	181	249	376	2036
North Devon	187	223	165	228	378	454	382	436	2453
South Hams	115	155	137	151	199	189	261	336	1543
Teignbridge	176	174	248	337	308	334	446	447	2470
Torridge	130	127	112	114	172	230	178	347	1410
West Devon	52	49	76	68	146	102	158	92	743
Devon	1317	1643	1570	1785	2380	2519	2884	3286	17384

Table 6 below shows the number of deaths and hospital admissions for alcoholic liver disease in Devon over 5 years.

**Table 6**

<b>Number of Alcoholic liver disease deaths, CD10 code K70 (calendar years):</b>	
2006:	61
2005:	44
2004:	40
2003:	50
2002:	39
<b>Hospital admissions for chronic liver disease in Devon<sup>11</sup>:</b>	
2006/07:	321
2005/06:	259
2004/05:	269
2003/04:	279

### ***Alcohol Related Hospital Bed Days used***

750,000 bed days were used by Devon PCT patients for elective and non-elective stays in hospital during the financial year 06-07. Evidence shows that 1 in every 8 of these bed days will be taken by a patient with alcohol related treatment needs<sup>12</sup>

### ***North West Public Health Observatory Data***

<http://www.nwph.net/alcohol/lape/regions.htm>

<sup>11</sup> Dr Foster <http://www.drfooster.co.uk/>

<sup>12</sup> ANARP - 2007

Data from the North West Public Health Observatory shows that alcohol misuse issues are proportionally worse in North Devon than in the rest of the County and that against a number of indicators, North Devon scores features within the worst quartile. For example of the 354 Districts within England, North Devon ranks.

- ♦ 324<sup>th</sup> for Alcohol Attributable Hospital Admissions amongst females
- ♦ 283<sup>rd</sup> for Mortality from Chronic Liver disease within males and
- ♦ 273<sup>rd</sup> for Alcohol specific mortality within males

[354 is the worst performing. 1 is the best]

### **Children and families**

- ♦ There are 4,000 'Children in Need' in Devon. 575-600 of these are in care, 310-320 are at 'significant risk'. Alcohol Misuse will be a significant contributor (needing an alcohol intervention) in between 40- 60% of cases<sup>13</sup> – that is 1,600 to 2,400 cases

Some households are responsible for a very high proportion of anti-social behaviour, causing major problems for their community. These families also often have multiple problems including mental health problems, drug and alcohol abuse, low educational achievement, poor basic and life skills, low income, homelessness and difficult family relationships. These will be families who are well known to agencies and can cost services up to £250,000 – £333,000 per family per year<sup>14</sup>. However, the way services sometimes currently intervene with these families does not always improve things for the children in the family, the family themselves or equally importantly the community around them.

EDP's family support worker is engaging intensively with a small number of families for between 7 and 10 hours a week each providing a 'whole family' intervention. Social Services in Exeter have been involved with Family A since 2002. At the time the EDP's family support worker became involved as a result of the increasingly violent and anti-social behaviour of the 12 year old son, the two children living at home were on the child protection register. In the 6 months since December that the worker has been engaged with Family A, the following outcomes have been achieved:

- Assisting parent A secure the tenancy of the home, which was in jeopardy due to debts.
- Assisting with weekly budgeting and equipping parent A to continue this without support including assisting with payment plans and county court judgements
- Support YP1 with his intergration into a pupil referral unit following his exclusion from mainstream education.
- Parent A has stated a desire to return to work now that family life is

<sup>13</sup> David Monks Review of Devon Child Protection cases - 2003

<sup>14</sup> DCLG/Sheffield Hallam University (2006) *Anti-social behaviour intensive family support projects: an evaluation of six pioneering projects*. DCLG: London

becoming more manageable and has agreed to work with EDP to meet this goal on an ongoing basis.

- Referral to the Exeter Woman's Aid for support and counselling for Parent A with regards to domestic violence issues with a view to her attending the pattern changing programme.
- We encouraged Parent A to consider positive activities that would enable her to develop more positive social networks and coping mechanisms.
- The parent has largely remained abstinent from alcohol and has engaged well with the EDP treatment plan. She has been open and honest with EDP regarding her alcohol use and has taken on board alternative coping strategies.
- We supported Parent A in accessing medical treatment for previously undiagnosed physical health problems, and have sought further information to support her in managing this problem. This was a significant outcome for Parent A who has struggled with physical health symptoms for several years without medical diagnosis.

### ***Street Drinkers***

There is a visible street drinking population in Exeter. This population's needs are not well served by existing alcohol services. Subsequently street drinkers make inappropriate demands on the full range of urgent care services. Additionally, this population can have a disproportionate effect on people's feelings of safety and well being in the City Centre.

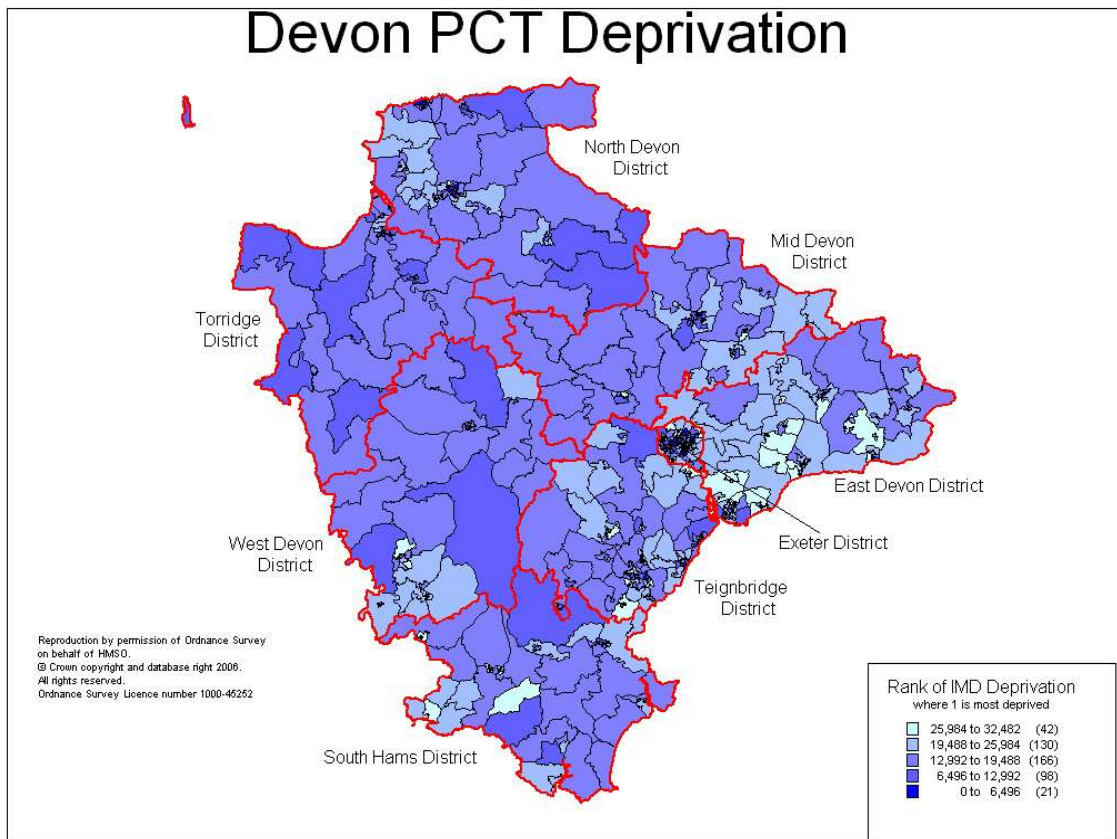
### ***Deprivation***

- ♦ There is a strong correlation between poor health outcomes and deprivation. Evidence from ONS indicates that alcohol related death rates are 45% higher in areas of highest deprivation<sup>15</sup>.

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<sup>15</sup> Office of National Statistics 2006





### ***Diversity***

Furtehr work is needed to understand patterns of alcohol consumption and harms amongst Devon's dicerse communities.

There is some anecdotal evidence of more common harmful and hazardous drinking within East European communities however this requires further exploration.

### **8.3 Impact on Crime and Disorder**

This section focuses on impact of alcohol misuse on crime and disorder with a particular emphasis on violent crime

- ♦ During 2006/07 there were 3,904 recorded alcohol related violent crimes across New Devon – this makes up 37.7% of all recorded violent crime in New Devon
- ♦ Recorded violent crime accounts for 21.4% of all recorded crime in new Devon
- ♦ Alcohol related violent accounts for 8.1% of all recorded crime in New Devon

### **Proportion of Total Offences which are Alcohol Related Violent Crimes**

Table 7 shows both types of proportion following similar patterns i.e. a dip in 2005/06.

**As a percentage of violent crime**

- ♦ 2006/07 saw the highest figure at 37.7% previous years were considerably lower with 2005/06 seeing a dip in this percentage to 30.4%.

**As a percentage of total crime**

- ♦ 2006/07 saw the highest figure at 8.1% previous years were lower however 2005/06 was the lowest at 6.8%.

**Table 7**

DCC	2004/05	2005/06	2006/07
Total alcohol related violent crime	3822	3242	3904
*Total violent crime	11495	10678	10366
ARVC as % of violent crime	33.2	30.4	37.7
*Total offences	51281	47791	48360
ARVC as % total offences	7.5	6.8	8.1

*\*Total offences and total violent crime obtained from Devon and Cornwall Constabulary Internet Site*

*Note:*

- ♦ *The proportion of alcohol related crime (compared to total crime) is unavailable due to there being no specific code which isolates alcohol related crime.*
- ♦ *Violent crime types include – murder/ other violent crime/ sexual offences/ robbery – as taken from Home Office Internet Site*

**District Comparison**

Table 8 shows alcohol related violent crime as a proportion of violent crime

**Table 8**

District	2004/05	2005/06	2006/07
East Devon	35.4	32.2	40.0
Exeter	32.7	29.0	36.8
Mid Devon	32.7	28.7	35.4
North Devon	33.1	30.6	39.4
South Hams	30.4	32.5	39.7
Teignbridge	35.0	30.8	35.6
Torridge	31.9	31.2	37.8
West Devon	31.9	28.7	35.7

Table 9 shows alcohol related violent crime as a proportion of total crime

**Table 9**

District	2004/05	2005/06	2006/07
East Devon	7.3	6.4	7.9
Exeter	6.9	6.4	7.3
Mid Devon	7.8	7.1	7.2
North Devon	7.8	7.1	9.7
South Hams	6.2	6.1	7.7
Teignbridge	8.3	7.3	7.6
Torridge	8.0	7.6	9.8
West Devon	8.1	6.6	8.2

Table 10 shows proportion of alcohol related violent crimes which are Domestic violence related – by quarter.

**Table 10**

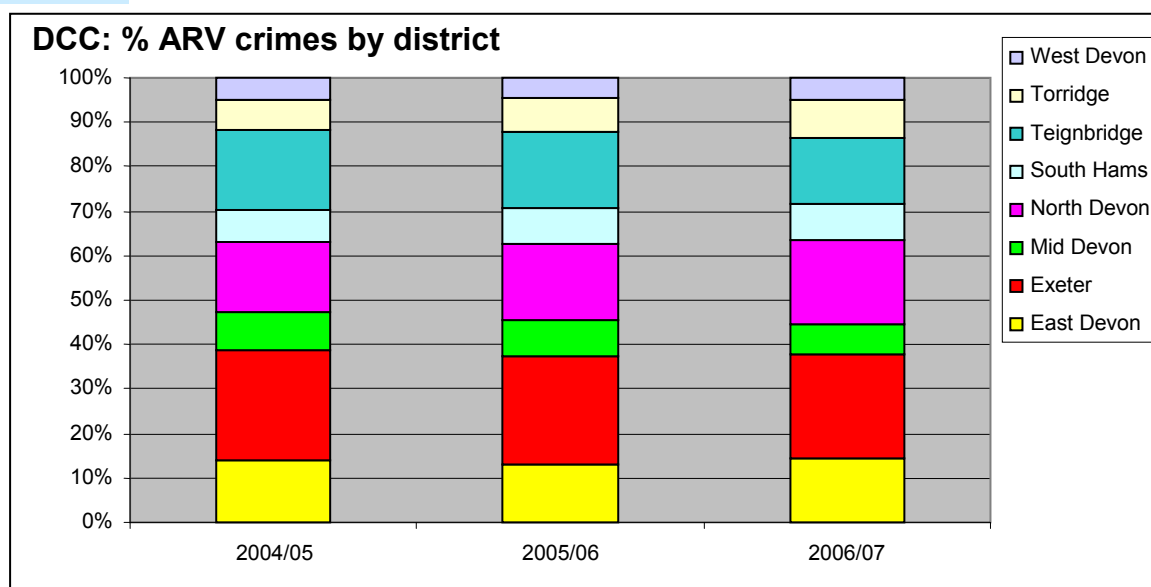
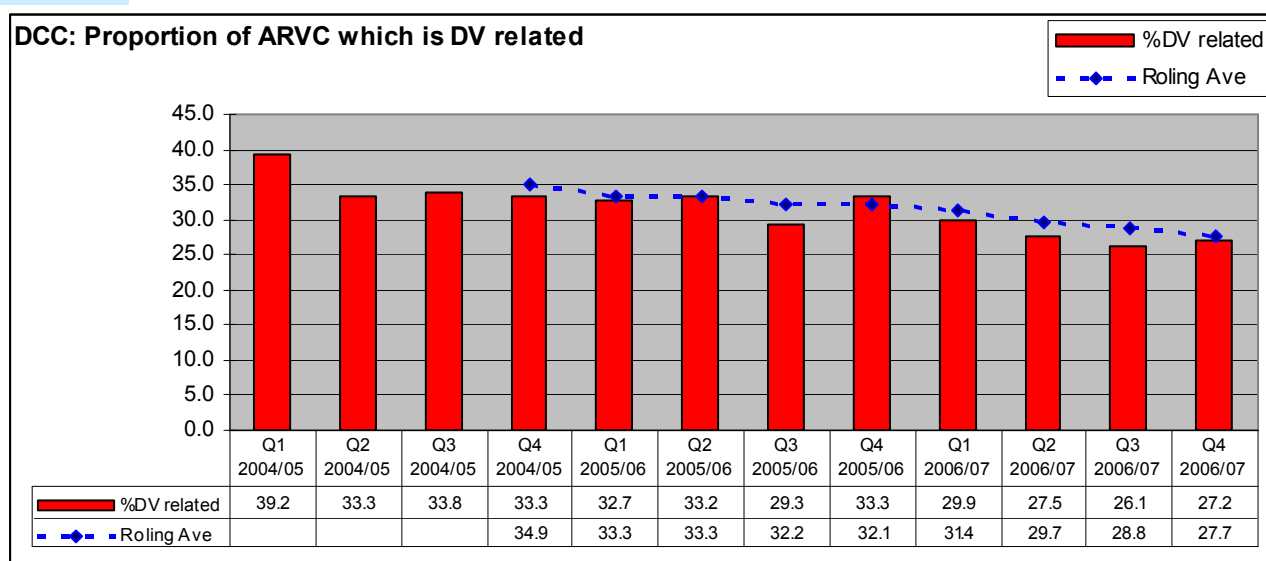


Table 11 below shows proportion of alcohol related violent which is DV related by quarter:

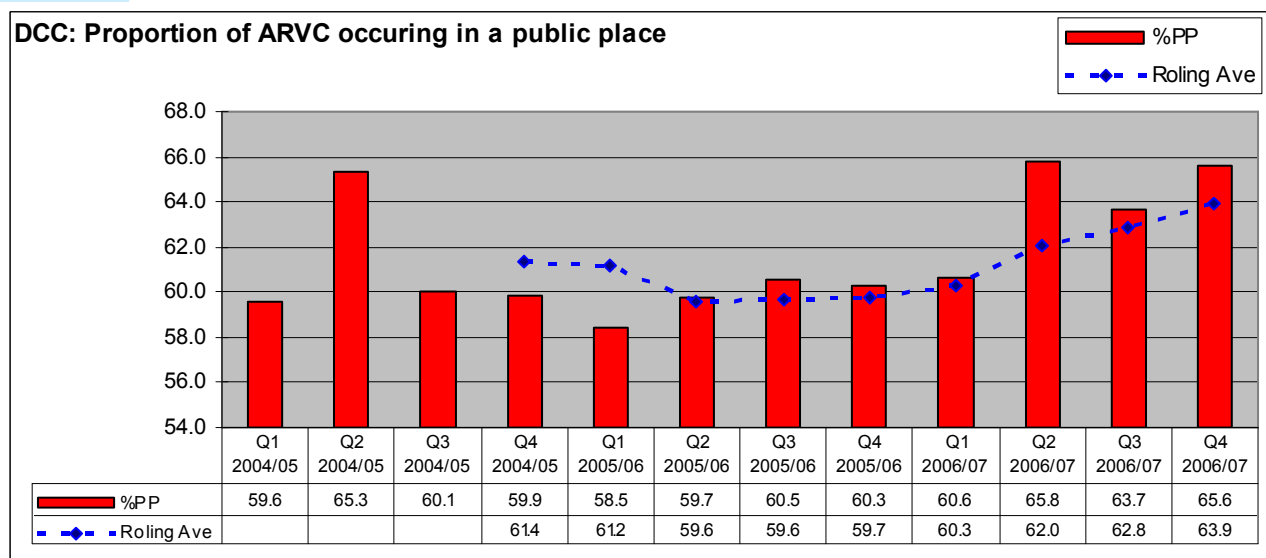
**Table 11**



- ♦ The proportion is gradually falling.
- ♦ The most recent figure is the second lowest to date ie 27.2%.
- ♦ A peak of 39.2% was seen in Q1 2004/05
- ♦ The rolling average confirms the fall and currently stands at 27.7%

Table 12 below shows the number of detected alcohol/ drug related offence per offender – repeat offenders:

**Table 12**



- ♦ A very clear upwards trend in the last three quarters of 2006/07.
- ♦ The most recent quarter to have had the second highest proportion i.e. 65.6%
- ♦ The lowest proportion was seen in Q1 2005/06
- ♦ The rolling average is showing a large increase recently and currently stands at 63.9% which is still below actual

Table 13 shows the number of detected offences each offender has been involved with in each year.

This is helpful in that it illustrates that the large majority, 74% of alcohol related offenders will only be charged with an alcohol related offence once. However, 26% or 1,066 people have been involved more than once in alcohol related violent crimes.

*Note:*

*That each column looks only at the period specified. For example, if an offender only committed an offence in 2004/05 they would be included in both the 2004/05 total and the 3 year total as having committed one offence however if they committed one offence in 2004/05 then three in 2006/07 they would be included in 2004/05 as having committed one offence, in 2006/07 as having committed three offences and in the 3 year total as having committed four offences.*

**Table 13**

Year	2004/05	2005/06	2006/07	3 years 2004/05 to 2006/07
No offenders	1999	1559	1984	5056
No relevant offences	2421	1869	2409	6699
Rate of offences per offender	1.2	1.2	1.2	1.3
No offenders involved in:				
1 offence	1696	1323	1668	3990
2 offences	248	188	239	721
3 offences	49	32	54	216
4 offences	1	10	17	72
5 offences	2	3	4	27
6 offences	1	2	1	18
7 offences	2	1	1	9
8 offences				2
9 offences				1

\* Relevant offences – each crime has been duplicated for each offender involved e.g. offence 1 has two offenders A and B attached and so is counted twice whilst offence 2 has three offenders A, C and D attached and is counted three times – this allows a rate of 5 offences/4 offenders i.e. 1.25 offences per offender.

- ♦ Rates are similar for all years though actual numbers differ quite considerably particularly in 2005/06.
- ♦ 2004/05 and 2006/07 had the highest number of repeat offenders ie over 300. The main difference is the number of offenders involved in four or more offences being much higher in 2006/07.
- ♦ Overall the 3 year saw the most prolific offender committing 9 offences.

## 8.4 Fear of Crime and Anti Social Behaviour

Table 14 shows the extent to which people fear particular aspects of crime and / or anti social behaviour.

**Table 14**

	2006	2003
<b>Base</b>	<b>2473</b>	<b>2263</b>
1 High level of perceived anti-social behaviours (derived from responses to the 7 individual asb strands)	16	To be calculated by RESPECT Office
1a Noisy Neighbours or loud parties	10	14
1b Teenagers hanging around on the streets	41	47
1c Rubbish and litter lying around	31	47
1d People being drunk or rowdy in public spaces	24	45
1e Abandoned or bunt out cars	5	25
1f Vandalism, graffiti and other deliberate damage to property or vehicles	26	51
1g People using or dealing drugs	27	47

(Source –British Crime Survey 2006)

### **MOSAIC ANALYSIS**

Percentage of people who think the following are problems in their local area:

- ♦ People being drunk or rowdy in public spaces
- ♦ ASB / alcohol related disorder
- ♦ Number of licensed premises

The following two Mosaic Types D24 and G42 both (according to the Experian and the British Crime Survey BCS) consider ‘drunk and rowdy behaviour’ to be a ‘very big problem’.

Table 15 (taken from Experian’s Mosaic Guide to UK Consumers) outlines brief details about the two types:

**Table 15**

<b>D24</b>	Young working class – unmarried - young children - low incomes - high unemployment - cheap terraces - provincial cities - social problems – health problems
	Comprises younger people in their twenties and early thirties with limited incomes living in cheap terraced housing close to the centres of less prosperous provincial cities. These people are likely to be unable or unwilling to take out a mortgage on a new house; they opt for old fashioned Victorian Terraces. Many are not yet married or do not intent to marry but are in long-term relationships, often with young children. Although people move in and out the social fabric of these communities remains constant.
<b>G42</b>	Families - school age children - low incomes - council housing - public transport - poor health - financial worries - careful budgets
	Comprises families on low incomes who are particularly dependent on city councils of housing and transport. These are not areas of acute social deprivation or high dependency on state benefits but residents lack the optimistic self reliance of lower occupational groups in small towns. Few have exercised their right to buy and most people work in semi skilled, routine jobs that demand few qualifications and offer modest wages. The scale and uniformity of these estates is part of the problem, limiting residents ‘ horizons by restricting

contact with self-reliant groups such as owner occupiers and the self employed. There may be small pockets where economic and social conditions are conducive to optimism, but the critical mass of these areas tend to create a marked pessimism about life and future prospects.

The following Tables 16 and 17 and the map give details of the locations in Devon County Council (DCC) of these two types.

*RDPs* - Residential Delivery Point data indicates the number of letter boxes within a postcode and gives an indication of the number of households within a postcode

*LSOA (Lower Super Output Area)* – a geographical area with minimum population 1000, mean 1500

**Table 17 shows:**

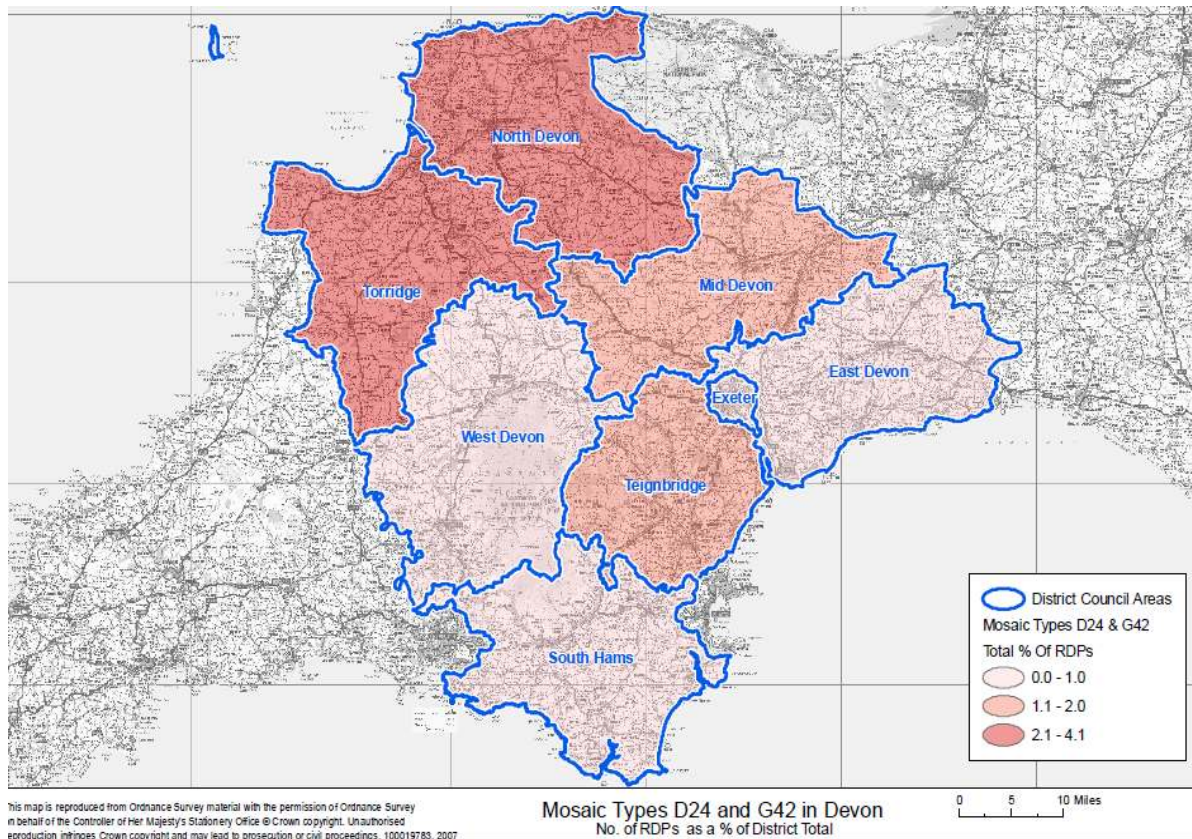
- ♦ D24 is present in 7 of the 8 DCC districts (not South Hams) mostly in North Devon (32.1%) followed by Torridge (27.1%) and Teignbridge (17.9%). In total there are 3703 RDPs with this classification in DCC
- ♦ G42 is present in only 5 districts; mostly in North Devon (41.6%) followed by Exeter (28.5%) and Mid Devon (18.6%). There are 1123 RDPs in DCC with this classification
- ♦ Overall these two groups are seen mostly in North Devon (34.3%) where they comprise 4.1% of the total RDP population. In Torridge they comprise 3.6% of the total population

**Table 17 - DCC**

Sum of RDPs	Mosaic Type	% of all D24 present	Mosaic Type	% of all G42 present	D24 + G42		Total RDPs	% of D24 and G42 in area
					Grand Total	%		
Ward Name	D24	%	G42	%	Grand Total	%	Total RDPs	Total %
East Devon	66	1.8%		0.0%	66	1.4%	61,852	0.1%
Exeter	166	4.5%	320	28.5%	486	10.1%	48,580	1.0%
Mid Devon	433	11.7%	209	18.6%	642	13.3%	32,343	2.0%
North Devon	1,190	32.1%	467	41.6%	1,657	34.3%	40,553	4.1%
South Hams		0.0%	18	1.6%	18	0.4%	40,909	0.0%
Teignbridge	661	17.9%	109	9.7%	770	16.0%	55,109	1.4%
Torridge	1,003	27.1%		0.0%	1,003	20.8%	28,101	3.6%
West Devon	184	5.0%		0.0%	184	3.8%	22,252	0.8%
<b>Grand Total</b>	<b>3,703</b>		<b>1,123</b>		<b>4,826</b>		<b>329,699</b>	<b>1.5%</b>



The following map shows at district level where the higher proportions of the two groups lie in DCC.



### ***Types of Offences and Some Estimate of Costs***

- ♦ In all three years 'assault occasioning Actual Bodily Harm (ABH)' followed by 'common assault and battery' were the most common offences; all fell in number on yearly basis.
- ♦ 'Assault on a constable' offences fell over the three years.
- ♦ 'Harassment alarm or distress' offences rose dramatically in 2006/07 along with racially aggravated harassment.
- ♦ 'Wounding without intent' and 'with intent' both fell over the period.
- ♦ The 'cost' of alcohol related assault, wounding and robbery alone during 2007/08 is £5,384,263<sup>16</sup>

<sup>16</sup> The economic and social costs of crime – Home Office June 2005



Table 17 shows the cost of alcohol related assault

**Table 17**

OFFENCE	2004/05	2005/06	£cost	2006/07	£cost
ASSAULT # OCCASIONING ABH - S.47	2598	2258	£1,695 per incident - = £3,993,420	2180	3,896,805
ASSAULT # ON A CONSTABLE - POLICE ACT 1996	121	94		105	
ASSAULT # ON CONSTABLE - LOCAL ACTS				1	
ASSAULT # W/I RESIST ARREST OR PERSON ASSIST PC	1	2		8	
ASSAULT # WITH INTENT ROBBERY - PERSONAL PROPER	3	2		5	
ASSAULTING A DESIGNATED/ACCREDITED PERSON IN THE EXECUTION OF THEIR DUTY				2	
CAUSE FEAR OR PROVOCATION OF VIOLENCE S.4	2			74	
CAUSE INTENTIONAL HARASSMENT ALARM DISTRESS S4A		1		8	
COMMON # ASSAULT AND BATTERY	874	702		742	
CRUELTY # TO PERSON UNDER 16		1		1	
HARASSMENT / STALKING # BREACH OF INJUNCTION		1			
HARASSMENT / STALKING # BREACH RESTRAINING ORDR				2	
HARASSMENT / STALKING # PUT IN FEAR OF VIOLENCE		1		11	
HARASSMENT / STALKING # WITHOUT FEAR VIOLENCE				13	
HARASSMENT ALARM OR DISTRESS S.5	1			529	
RACIALLY # AGGRAVATED ACTUAL BODILY HARM	20	23		13	
RACIALLY # AGGRAVATED COMMON ASSAULT	13	14		9	
RACIALLY # AGGRAVATED WOUNDING OR INFLICIT GBH	2	1		2	
RACIALLY AGGRAVATED FEAR PROVOCATION VIOLENCE				5	
RACIALLY AGGRAVATED HARASSMENT ALARM DISTRESS	1			35	
RACIALLY AGGRAVATED INTENTIONAL ALARM DISTRESS				5	
RACIALLY OR RELIGIOUSLY AGGRAVATED ACTUAL BODILY HARM				1	
RAPE # OF A FEMALE AGED 16 OR OVER	1			4	
ROBBERY # - BUSINESS PROPERTY	1	3	@ 9,883 =256,958	1	=286,607
ROBBERY # - PERSONAL PROPERTY	23	15		21	
SEXUAL # ASSAULT ON A FEMALE 13 YRS OR OVER	5	8		7	
SEXUAL ACTIVITY INVOLVING A FEMALE CHILD UNDER 16 OFFENDER 18 AND OVER				1	
THREAT # TO KILL	16	8		6	1,200.851
WOUND # OR CAUSE GBH WITH INTENT TO DO GBH S.18	67	50	@10,627 = 1,147,716	60	1,200.851
WOUND # OR INFLICT GBH WITHOUT INTENT S.20	73	58		53	
<b>GRAND TOTAL</b>	<b>3822</b>	<b>3242</b>	<b>£5,398,094</b>	<b>3904</b>	<b>£5,384,263</b>

## PART THREE – HOW MUCH INVESTMENT IS NEEDED

### 9 THE PURPOSE OF THIS SECTION IS TO:

- ♦ Describe the activities carried out at different Tiers
- ♦ Show current levels of investment and capacity at the different tiers and consider some benefits from growing the system
- ♦ Provide a gap analysis of need against current provision and estimate the cost of meeting this need
- ♦ Present some evidence showing the cost benefits of investing in alcohol services

#### 9.1 Recommendations

- ⇒ Investment to be raised to £1,570,000 as indicated by the Government's 'Alcohol Strategy, Sensible. Safe. Social'.
- ⇒ Commissioning and budget to be managed by the Drug and Alcohol Action Team

#### 9.2 Description of Service Tiers

<b>Tier 1 interventions: alcohol-related information and advice; screening; simple brief interventions; and referral</b>	<b>Definition</b> Tier 1 interventions include provision of: identification of hazardous, harmful and dependent drinkers; information on sensible drinking; simple brief interventions to reduce alcohol-related harm; and referral of those with alcohol dependence or harm for more intensive interventions.
<b>Tier 2 interventions: open access, non-care-planned, alcohol-specific interventions</b>	<b>Definition</b> Tier 2 interventions include provision of open access facilities and outreach that provide: alcohol-specific advice, information and support; extended brief interventions to help alcohol misusers reduce alcohol-related harm; and assessment and referral of those with more serious alcohol-related problems for care-planned treatment
<b>Tier 3 interventions: community-based, structured, care-planned alcohol treatment Definition</b>	Tier 3 interventions include provision of community-based specialised alcohol misuse assessment, and alcohol treatment that is care co-ordinated and care-planned.
<b>Tier 4 interventions: alcohol specialist inpatient treatment and residential rehabilitation Definition</b>	Tier 4 interventions include provision of residential, specialised alcohol treatments which are care-planned and co-ordinated to ensure continuity of care and aftercare.

#### 9.3 Current Services; Investment, Capacity and Development Issues

Alcohol services in Devon have developed in an ad hoc, opportunistic way, funded year to year. PCT and District led funding arrangements have resulted in large geographic inequalities in service delivery. Little attention has been paid to either developing a comprehensive assessment of need or to the strategic commissioning of services to meet this need. Many of the services which do exist have developed their own performance management systems in the absence of clear expectations from

commissioners. Future investments in alcohol services will need to address these issues in keeping with evidence of what works presented in Part Four.

Table 18 shows the investment at Tiers 1 to 4 in the alcohol treatment system in Devon:

**Table 18**

Investment 2007/08	Description	Unit Cost	Comments
<b>Tier 1</b>			
<b>Safer Devon Partnership £25,000</b>	Funding to develop Training package delivering Tier 1 and 2 screening and brief interventions for generic workers. 70 probation officers will be trained during 2007/08.	£357 per training session. Unit costs reflect development of training package	Roll out of training to deliver screening and brief interventions is a very cost effective way of meeting Tier 1 and 2 needs.
<b>Tier 2</b>			
<b>Safer Devon Partnership £185,000</b> <b>DPCT - £150,000</b>	Screening and referral service and 660, 6 week interventions for clients needing a Tier 2 service via community or criminal justice routes	£507 per 6 week intervention	Opportunities to develop 'stepped' interventions at Tier 2. Delivering larger numbers of 1 and 2 session interventions to larger numbers of people.
<b>Tier 3</b>			
<b>DPCT - £171,000</b>	220 structured interventions for complex cases	£777 per structured intervention	Group work sessions will become viable as client base increases. Tier 3 development can
<b>Tier 4</b>			
<b>Budget on a case by case basis</b>	7 residential rehab places paid for during 2006/07	£1,600 to £3,000 per week.	Limited opportunities to access Tier 4 services

#### 9.4 Modelling Investment - Safe. Sensible. Social

The Government's 'Alcohol Strategy, Safe. Sensible. Social' begins to model investment in alcohol services<sup>17</sup> and offers a useful guide to levels of investment and cost benefits at the PCT level. It proposes that investing £24 million in implementing identification and brief interventions at the national level could return a saving of £40million to the NHS. The Review of the Effectiveness of Treatment for Alcohol Problems<sup>18</sup> suggests that provision of alcohol treatment for 10% of the dependent drinking population in the UK would reduce public sector resource costs by between £109 and £56 million each year. Analysis from the UK Alcohol Treatment Trial proposes that for every £1 invested in alcohol treatment services, £5 is saved across the public and private purse<sup>19</sup>

<sup>14</sup> Safe. Sensible. Social p 51.

<sup>18</sup> Review of the effectiveness of treatment for alcohol problems, NTA, 2006

<sup>19</sup> Effectiveness of treatment for alcohol problems: findings of the randomised UK alcohol treatment trial (UKATT) BMJ 2005;331:541 (10 September)

The illustration below is adapted from the Government's Alcohol Strategy Model using Devon PCT figures. It shows a cost saving of £6.53 for an investment of £3.60 at Tiers 1 and 2 and a saving of £103 for each £62,08 invested at Tier 3 and 4. Population figures based on numbers in Table 1.

DEVON PCT ECONOMY			
110,991 hazardous and harmful drinkers in Devon	Cost to health economy @ £180 per person is  <b>£19,978,380</b>	Invest £3.60 each in identification and advice  <b>£399,567</b>	Save - £6.53 each – total  <b>£724,771</b>
18,883 dependent drinkers in Devon	Cost to health economy @£378.57 per person  <b>£7,148,537</b>	Invest £62,08 in treatment –  <b>£1,172,256</b>	Save £103 each – total –  <b>£1,944,949</b>
		<b>Invest £1.57 million</b>	<b>Save £2.67 million</b>

Safe. Sensible. Social. Page 51.

## 9.5 How Much Investment Would Clear the Waiting List?

A second method of modelling the investment needed in alcohol services is to consider the resources needed to impact on current waiting lists. Of course this method comes with a health warning. Referrals are highest in areas where there is a service. Careful consideration will need to be given to how to grow the system to manage expectations and upwards pressure.

The capacity of workers has been calculated using the assumption based on Tables 22 and 23.

### Tier 2 - Community Alcohol Service Current

Table describes the current capacity at Tier 2 of the open access alcohol service against the number of referrals received:

**Table 19**

Area	Current waiting list –Oct 07	Average monthly referral rate	Annual referrals -	Community service places in each area	Criminal Justice Places	Gap	Expected waiting times	Additional staff needed based on Table 22
Exeter	80	25	300	140		160	4-5 months	1
East*	39	8	96	40		56	4 – 5 months	.4 fte
Mid*	19	8	96	40		56	3 months	.4 fte
Northern	15	12	144	140		4	6 weeks	
South and West*	4	16**	192**	20		172	N/A	1.2 fte
Criminal Justice referrals			500		325		No wait – referrals based on capacity	
<b>Totals</b>	<b>157</b>	<b>53</b>	<b>1328</b>	<b>380</b>	<b>325</b>	<b>623</b>		<b>3 fte plus 1 admin =</b>
<b>Total Cost</b>								<b>£140k***</b>

\* Outreach service delivered from primary care, other venues by arrangement

\*\* Estimates based on population figures

\*\*\* Based on £35k per worker and £20k admin and 12% on costs

- ☐ Annual Referral = 1,200
- ☐ Capacity of Service = 660
- ☐ Capacity Gap = 540
- ☐ Investment of 3.5fte T2 staff + admin = **£157,000**

### Tier 3

Table 20 describes the current capacity at Tier 3 for complex alcohol treatment needs

**Table 20**

Area	Current waiting list – Oct 07	Average monthly referral rate	Annual referrals -	Community service places in each area	Gap	Expected waiting times	Additional Staff – based on box
Exeter East Mid	108	32	384	100 assessment p/a	284	Longest wait 12 months	3.5
Northern	25	7	84	68	16	N/a	.2
South and West*	-	19	230	68	162	N/a	2

<b>Totals</b>	<b>133</b>	<b>48</b>	<b>698</b>	<b>236</b>	<b>462</b>		<b>5.7 Additional staff + 2 admin =</b>
<b>Total Cost</b>							<b>£544k **</b>

\* Figures based on estimates due to service only just developing. Three fifths of Exeter, East and Mid Devon used.

\*\* Based on £38k per worker, £40k for 2 admin posts and 12% on costs.

## 9.6 Modelling Investment Against Meeting 15% of Tier 2 and 3 Treatment Needs

**Table 21**

District	Estimated need – 15% of figures in Table 1	Provision*	Gap	Staff and costs estimates based on Tables 22 and 23
<b>Tier 2 – includes access via alcohol arrest referral</b>				
<b>Exeter, East and Mid</b>	7,293	360	6,933	44 Tier2 - 9 admin
<b>Northern Devon</b>	3,520	220	3,300	21 Tier2 - 4 admin
<b>South and West Devon</b>	5,832	80	5,752	37 Tier2 - 7 admin
<b>Total</b>		660	15,985	102 T2 and 20 admin =
<b>Total cost</b>				<b>£4,446,400</b>
<b>Tier 3 -</b>				
<b>Exeter, East and Mid</b>	1,240	100	1,140	14 Tier3 – 3 admin
<b>Northern Devon</b>	599	60	539	6.5 Tier3 – 1.5 admin
<b>South and West Devon</b>	993	60	933	11 Tier3 – 2 admin
<b>Total</b>				31.5 T3 – 6.5 admin =
<b>Total cost</b>				<b>£1,486,240</b>

Figures are based on drinking 'type' estimates from the Alcohol Needs Assessment Research Project 2007 overlaid against Devon population – It has been assumed that people drinking at 'hazardous and harmful' levels will benefit from a Tier 1 or 2 intervention and that dependent drinkers will require a Tier 3 intervention (defined by Models of Care for Alcohol Misuse 2006).

Rush and Godfrey<sup>20</sup>, estimate that between 10 and 20% of this population will seek, or be exposed to potential alcohol interventions in any one year. This table uses a mid figure estimate of 15%

<sup>20</sup> In 'Alcohol and the Community – a systems approach' H.D Holder. IRMA. 1998

**Table 22**

**Tier 2 worker: Workload estimates based on**

- A 40 week year – 12 weeks taken out for, Annual Leave, Training – own training and delivery of Tier 1 worker (with Tier 3 staff) and miscellaneous.
- Case load of 15 individuals at any one time, based on an average 6 week intervention at 1 hour per week = 100 clients per year
- 2 hours group work per week (2 separate groups) average 8 clients per 6 week session (7 groups per year) = 112 clients (run by 2 staff) therefore total divided by 2 = 56
- Tier 2 worker can work with 156 clients per year

This represents 17 direct client contact hours per week. This will leave time for case recording, travel, joint agency / partnership meetings, management and training preparation. It is acknowledged that in order to optimise client engagement around 0.2 admin time should be linked with each worker.

As stated, the 156 figure is based on an assumption that all clients will engage and undertake a 6-week intervention. ADDACTION performance monitoring at Tier 2 shows an attrition rate of between 50 – 60%

- **Training element – 4 weeks training per year – (20 sessions per year @ 15-20 trainees per 1 day course = 300 to 400 trainees per year)**

**Table 23**

**Tier 3 workers: Workload estimates based on**

- 40 week client year – 12 weeks taken out for, Annual Leave, Training – own training and delivery of Tier 1 worker and Tier 2 training with (with Tier 2 staff) and miscellaneous.
- Case load of 14 individuals at any one time, based on an average 12 week intervention at 1 hour per week = 46 clients per year
- 3 hours group work per week (1 group of clients) average 8 clients per 12 week session (3 groups per year) = 72 clients (run by 2 staff) therefore total divided by 2 = 36
- Tier 3 worker can work with 82 clients per year

This represents 17 direct client contact hours per week. This will leave time for case recording, travel, joint agency / partnership meetings, management, and training preparation. It is acknowledged that in order to optimise client engagement around 0.3 admin time should be linked with each worker.

Clients requiring Tier 3 interventions will have diverse needs which cannot be neatly quantified. Some clients will require intervention for considerably longer than 12 weeks.

**Training element – 4 weeks training per year – (20 sessions per year @ 15-20 trainees per 1 day course = 300 to 400 trainees per year)**

## **PART FOUR – MAKING THE INVESTMENT DELIVER**

### **10 THE PURPOSE OF THIS SECTION IS TO:**

- ♦ Outline the principles underpinning the alcohol service framework
- ♦ Outline guidance on developing local programmes
- ♦ Propose a model/framework for local implementation

#### **10.1 RECOMMENDATIONS**

- ♦ Investment to be raised to £1.57 million as indicated by the Government's "Alcohol Strategy, Sensible. Safe. Social".
- ♦ Commissioning and budget to be managed by the Drug and Alcohol Action Team
- ♦ Establish an evidence based alcohol treatment model including:
  - ⇒ Development of low-threshold community based interventions (Tiers 1&2) to reduce the demand on secondary acute/inpatient services and subsequent costs to the health and social care community
  - ⇒ Enhanced capacity at Tier 3 to manage complex cases
  - ⇒ To develop service level agreements, care pathways and appropriate performance management systems
  - ⇒ To increase availability of Tier 4 rehab and inpatient detox
  - ⇒ Develop an information campaign by including a web-based tool to help individuals screen and refer themselves for modalities of support and provide harm reduction information
  - ⇒ Provide a rolling training programme for health and social care professionals to provide low level interventions to individuals who are using alcohol problematically

#### **10.2 TARGETS ACHIEVABLE WITH ADDITIONAL INVESTMENT**

- ♦ Reduce waiting time for alcohol treatment to 6 weeks by the end of year 1 – 2008/09 and to 3 weeks by the end of year 2 – 2009/2010. Current wait for Tier 2, 4-5 months. Tier 3 up to 12 months.
- ♦ Reduce alcohol related attendance at A&E by 5% during 2008/09. Baseline 2006/07
- ♦ To reduce alcohol specific hospital admissions by 5% by 2010/11. Baseline 2005/06 – 4,818
- ♦ Reduce recorded alcohol related violent crime by 10% during 2008/09. Baseline 2006/07 = 3,904
- ♦ To reduce fear of people being drunk or rowdy in public places by 5% by 2008/09. Baseline 2006 – 24% (Local Government Survey)
- ♦ Increase treatment capacity and reduce unit costs –
- ♦ Train 400 front line workers to deliver screening and brief interventions



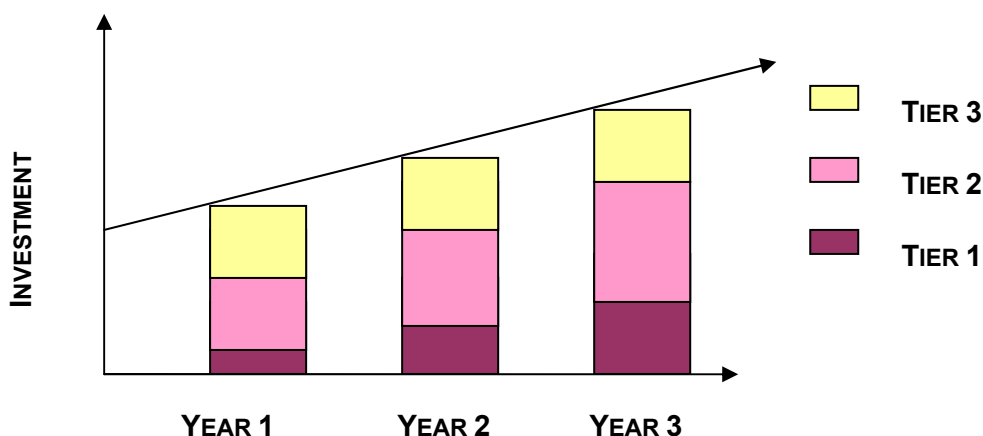
### 10.3 Principles Underpinning the Development of Alcohol Harm Reduction Services

The following principles were agreed at a meeting of the Drug and Alcohol Action Teams, Alcohol Development Steering Group on the 18<sup>th</sup> of September and are consistent with the DoH Alcohol Misuse Interventions – Guidance on developing a local programme of improvement

- ✚ Primary Care led
- ✚ 'Whole community' approach – i.e. Tiers 0 – 4
- ✚ Consistent Community education
- ✚ Least intrusive, most routine/opportunistic intervention
- ✚ Find the balance to preventative escalation and management of most complex
- ✚ Address chronic needs
- ✚ Open accessibility –
  - ▲ Challenge stigma
  - ▲ Rural access
  - ▲ Diversity and equality
- ✚ Accept people's ability and skill to self manage / self efficacy
- ✚ Marketing and publicity of services, alcohol harms at the community level
- ✚ Consider community courts and sentencing options
- ✚ Grow all parts of the system at the same time
- ✚ Pan Devon consistency
- ✚ Evidence based!

It makes sense to see investment in alcohol services over time. For example year 1 would be an investment to impact on waiting list and address acute harms, over the next two year a more preventative model would emerge with proportionally larger amounts of funding being targeted at larger numbers of people at Tiers 1 and 2.

**TABLE ? – GROWING THE ALCOHOL SERVICE MODEL**



## 10.4 Developing Effective Alcohol Treatment

The treatment model will recognise that there are opportunities to address significant aspects of alcohol misuse at **Tier 0**, through focussing on the wider population, for example working with licensees or providing opportunities for workplace interventions.

The model emphasises the primacy of opportunistic, early intervention at **Tier 1** and the importance of developing referral routes for chronic drinkers who appear at **Tier 4b**. It is recognised, evidentially, that very brief interventions at 'teachable moments', which can be delivered to large numbers of hazardous drinkers in Tier 1, can have significant and lasting impacts. The framework will require an open access **Tier 2**, community based service, with referral routes in from Tier 1 and down from **Tier 3**. Referral to **Tier 4** inpatient detox and residential rehabilitation services will be managed by a rehab panel.

The framework recognises that many people with alcohol misuse issues will have mental health difficulties and it will be necessary to identify a dual diagnosis component. The model also needs to recognise that a number of people with alcohol dependency and/or mental health issues will neither be willing nor able to engage with formal, structured services. It will be necessary to consider the development of an 'assertive outreach' component of this model to facilitate individual harm reduction.

The framework provides a service for families/carers of people who have alcohol misuse problems. This will not only assist affected others but also enhance their ability to support the person experiencing alcohol difficulties.

The prevalence of alcohol misuse makes it necessary to provide for a wide range of capture points at locations where alcohol related problems are likely to appear, such as at work, at Accident and Emergency departments or in the Criminal Justice System. It is important that those working in such environments are skilled in providing screening, advice, information and brief interventions and referral where appropriate.

The elements of the framework will function as an integrated whole both through the development of Integrated Care Pathways for individuals and through the establishment of coherent and consistent communications. The framework will be based on a harm reduction approach.

## 10.5 Evidence Base

The development of the treatment model will be aligned to Models of Care for Alcohol Misusers (MoCAM) (DH, 2006) and the Review of the Effectiveness of Treatment for Alcohol Problems (NTA 2006).

Both the recent *Alcohol Misuse Interventions* document<sup>21</sup> and NTA effectiveness review<sup>22</sup> provide practical guidance on developing and implementing evidence based programmes that can improve the care of hazardous, harmful and dependent drinkers. Both provide evidence of alcohol related harm to the NHS, individuals, families and communities, and presents powerful economic reasons for taking action.

This model uses the best emerging evidence to develop an 'information, education, support and treatment system'. The evidence proposes that people with alcohol misuse issues can be divided into 4, broad categories, each benefiting from a different type of intervention as shown in Table 25:

**Table 25**

Type	Response
Hazardous drinkers	Brief interventions in Tier (1 – 5 minutes)
Harmful drinkers	Brief Counselling in GP surgery/open access drop-in (20-30 minutes)
Dependent drinkers	Less intensive interventions at Tier 2, such as Motivational Enhancement Thinking (MET)
High Dependent drinkers	More intensive treatment at Tier 2/3 such as Social Behaviour & Network Therapy

Evidence shows there are no differences in effectiveness between Social Behaviour & Network Therapy, and Motivational Enhancement Therapy (MET), but because MET consists of fewer sessions it is more cost effective and should therefore be the therapy of choice. Project Match<sup>23</sup> also found that the 12 steps treatment, Cognitive Behaviour Therapy and MET were equally effective in alcohol treatment, although again MET has fewer sessions than the others so is more cost effective.

In terms of screening tools, the Alcohol Use Disorders Identification Test (AUDIT) rates the highest in terms of effectiveness. Targeted screening is advocated over general screening and drug treatments (eg Acamprosate, Antabuse) can also be useful adjuncts to treatment.

#### **Other Effective Longer-Term Treatments Include:**

- ☞ Cognitive Behavioural Therapy
- ☞ Community Reinforcement Approach – this is particularly effective with street drinkers or people that have had several previously unsuccessful attempts at treatment in the past
- ☞ Behavioural Self-control Training – effective for people who want to control their drinking
- ☞ Coping/Social Skills training
- ☞ Relapse Prevention

<sup>21</sup> Alcohol Misuse Interventions. Guidance on developing a local programme of improvement  
Department of Health 2005

<sup>22</sup> Review of the effectiveness of treatment for alcohol problems, NTA 2006

<sup>23</sup> Project Match reference

- Extended Case Monitoring – this involves holding open clients cases for extended periods of time and perhaps following them up with occasional phone calls. Evidence suggests it may be useful to provide smaller bits of treatment over a longer time.

Self-help and mutual aid groups can also be effective, especially when used in conjunction with the many useful resources available on the internet.

Approximately 10% of the investment made by Devon PCT in Year 1 will be used to pilot models of service delivery that will deliver the best results across Devon. The findings from evaluating the pilots will be used to inform service development in Years 2 and 3.

### 10.6 Audit of Current System against Requirements for a Whole System Treatment Approach in Devon (Tiers 1, 2 and 3)

REQUIREMENT	Current Position – Devon	Proposed Development Required	Estimated Investment Required year 1. – 2007/08	Impact of investment
<b>Tier 1</b>				
<b>1.1 Screening Tool for all health and social care professionals</b>	No Screening Tool / single assessment framework across generic health and social care services	Adopts Screening Tool	Build on existing tools. Build into a rolling 3-Day Training Programme for Tier 1 staff (see below)	Achievement of consistent standards and messages.
<b>1.2 All health and social care professionals able to provide basic level of advice and information</b>	Advice is ad hoc as there isn't a standard training programme to support workers in delivering appropriate advice and information  Some leaflets/ information can be acquired at Tier 1 services. No single point of contact to support Tier 1 workers in delivering appropriate advice	Develop a rolling Training Programme for Tier 1 staff in Devon to support provision of standard and consistent advice and information	Implement a 3-day rolling training programme to cover Brief Interventions / Using a screening tool / providing effective advice and information <b>Cost: £40,000 per annum</b>	Potential to deliver large numbers of brief intervention and harm reduction information. This will be enough to support large numbers of people to moderate their drinking
<b>1.3 All health and social care professionals able to provide very brief interventions including guided self-help</b>	Some training is provided but not coordinated, consistent of validated.	Develop a rolling training programme for Tier 1 staff in Torbay to enable workers to provide short 'brief interventions' and support 'guided self-help'	AS ABOVE	AS ABOVE

REQUIREMENT	Current Position – Devon	Proposed Development Required	Estimated Investment Required year 1. – 2007/08	Impact of investment
<b>Tier 1</b>				
<b>1.4 All health and social care professionals able to make appropriate referrals</b>	Limited confidence in referral process due to long waits at specialist tier 3 service No screening tool exists to inform referral No over arching training programme = Tier 1 workforce with limited confidence to intervene where appropriate which increases tendency to refer	AS ABOVE	AS ABOVE	AS ABOVE
<b>1.5 To develop an information campaign including a web-based tool to help individuals screen and refer themselves for modalities of support and provide harm reduction information</b>	Ad hoc, inconsistent information available. Torbay developing web based system	Review of information. Development of a consistent communications campaign. Discuss with Torbay the adoption of web based tool	<b>£20,000</b>	There is a unwillingness or inability for a number of people to raise concerns they may have about their drinking. An anonymous, web based tool provides another cost effective model of providing information
<b>Tier 2</b>				
<b>2.1 Comprehensive direct access advice and information service</b>	There is no single point of contact / direct access service available in Devon for people concerned about their own or another's alcohol use. Tier 2 services have developed against a 6 PCT model resulting in significant differences in the availability of services	Develop a robust Tier 2 service across Devon offering: <ul style="list-style-type: none"> <li>• brief interventions</li> <li>• direct access advice and information service</li> <li>• support to GPs in the community</li> <li>• Comprehensive Assessment</li> <li>• Group Work</li> <li>• Family support</li> <li>• Mental health liaison</li> <li>• Housing support</li> </ul>	<b>Development of a team of alcohol workers aligned to primary care offering a 'stepped' programme of intervention</b>  <b>£770,000</b>	Primary Care link will engage large number of people in the alcohol service framework.  Capacity to address mental health needs, dual alcohol and drug misuse.  Family support can act to add value to the support of other agencies

REQUIREMENT	Current Position – Devon	Proposed Development Required	Estimated Investment Required year 1. – 2007/08	Impact of investment
<b>Tier 2</b>				
<b>2.2 Brief Interventions on a ‘stepped’ 6 session basis (Solution Focused / Motivational models)</b>	There is limited capacity to deliver this service	AS ABOVE	AS ABOVE	Stepped approach i.e. screening and brief intervention at session 1, then follow up as required, allows for self efficacy and is shown to be cost effective model
<b>2.3 Comprehensive Assessment to support onward referral as required</b>	There is limited capacity to deliver this service	AS ABOVE	AS ABOVE	AS ABOVE
<b>2.4 Group Work interventions</b>	There is limited capacity to deliver this service	AS ABOVE	AS ABOVE	AS ABOVE
<b>2.5 Outreach Services (including A&amp;E)</b>	There is limited capacity to deliver this service	AS ABOVE	AS ABOVE	AS ABOVE
<b>2.5 Support for carers / those affected by another’s alcohol use</b>	ALANON (several meetings across Devon for carers / those affected by another’s alcohol use)  Carers Support Group – Carers One to One Link	Development needed of carers and peer support projects	<b>£40,000</b>	Social Network therapy has been shown to deliver effective and efficient outcomes
<b>Tier 3</b>				
<b>3.1 Structured Care Planned interventions</b>	Service provided by Devon Partnership Trust. Small Team with large case loads. No effective Tier 1 strategy and limited Tier 2 service means high numbers of referrals and dilutes specialist input. Total funding from DPCT aggregated from former PCTs to DPT for Tier 3 service is £171,000	Service needs to be reconfigured and redefine alongside development of Tier 1 and 2 to provide specialist services for people with the most complex level of need in the community.	Additional resource needed to address waiting list  <b>£655,000</b>	Only a small proportion of people with complex needs are being met by the current system resulting in acute health care needs.
<b>3.2 Structured Counselling Support</b>	Limited as outlined above	AS ABOVE	AS ABOVE	AS ABOVE

REQUIREMENT	Current Position – Devon	Proposed Development Required	Estimated Investment Required year 1. – 2007/08	Impact of investment
<b>Tier 3</b>				
<b>3.3 Structured Group Work / Day Programme</b>	Group work has been used to address waiting lists however, drop out rates have made it unviable. Increasing Tier3 Only group interventions are provided by Addaction via probation for offenders (ASRO programme 'Addressing Substance Related Offending)	AS ABOVE	AS ABOVE	AS ABOVE
<b>3.4 GPwSI to support Generalists, oversee community detox / prescribing interventions</b>	No GP with Specialist Interest (GPwSI) service provided which could impact on Generalist GPs wanting to provide Local Enhanced Service model	Review Local Enhanced Service (LES) being developed by Teignbridge Primary Care Trust Review need for LES / GPwSI subject to impact of improvements at Tier 1 and 2	AS ABOVE	AS ABOVE
<b>3.5 Consultant Psychiatrist Support - specialist medical intervention for complex cases (community based)</b>	In place but limited as outlined 3.1	AS ABOVE	AS ABOVE	AS ABOVE
<b>TOTAL RESOURCE INVESTMENT REQUIRED</b>	£		<b>£1,570,000</b>	

## Appendix A – Alcohol Specific and Related health conditions

Category	Name	ICD-10
Specific	Alcoholic Psychosis, dependence, abuse	F10
Specific	Alcohol Polyneuropathy	G62
Specific	Alcohol Cardiomyopathy	I426
Specific	Alcohol Gastritis	K292
Specific	Alcoholic Liver Cirrhosis	K70 - Alcoholic liver disease K73 - Chronic hepatitis not elsewhere classified K74 - Fibrosis and cirrhosis of liver
Specific	Toxis effect of alcohol	T51
Specific	Alcohol Beverage Poisoning	X45 equivalent
Related	Respiratory tuberculosis	A15 - A19
Related	Lip Cancer	C00
Related	Oropharyngeal Cancer	C01 to C14 exc. C11
Related	Oesophageal Cancer	C15
Related	Stomach Cancer	C16
Related	Colorectal Cancer	C17 - C21
Related	Liver Cancer	C22
Related	Laryngeal Cancer	C32
Related	Breast Cancer	C50
Related	Diabetes	E10 - E14
Related	Epilepsy	G40 - G41
Related	Hypertension	I10 - I15
Related	Ischaemic Heart Disease	I20 - I25
Related	Supra Ventricular Cardiac arrhythmias	I470, I471, I479, I48
Related	Heart Failure	I50, I51
Related	Stroke	I60 - I69
Related	Oesophageal Varices	I85
Related	Pneumonia and Influenza	J12 - J18
Related	Gastro - Oesophageal	K226
Related	Peptic Ulcer	K25 - K27
Related	Cholelithiasis	K80
Related	Acute Pancreatitis	K85
Related	Chronic Pancreatitis	K860, K861
Related	Spontaneous Abortion	O03
Related	Low Birth Weight	P05, P07
Related	Psoriasis	L40 exc. L405
Related	Road Injuries	V01 - V89
Related	Other Road Accidents	V01 - V89
Related	Water Transport Accidents	V90 - 94
Related	Air / Space Transport Accidents	V95 - V97



Related	Fall Injuries	W00 - W17
Related	Fire Injuries	X00 - X09
Related	Accidental Excessive Cold	X31
Related	Drowning	W65 - W74
Related	Aspiration	W79
Related	Work / Machine Injuries	W24 - W31
Related	Accidents with Firearms	W32 - W34
Related	Suicide	X60 - X84, Y10 - Y34 (exc. Y33)
Related	Assault and Child Abuse	X93 - Y09, Y33

**Definition:** Attributable fractions (AF) are the proportions of admissions and deaths attributable to alcohol i.e. 1 = 100% and 0.25 = 25% of cases are due to alcohol.

AFs were reported in the WHO publication *International Guide for Monitoring Alcohol Consumption and Harm*.

## Appendix B – Links to PSAs

PSA targets – by Government Department	Evidence
DOH	
1. Substantially reduce mortality rates by 2010:	Evidence suggests that heavy alcohol consumption can increase the risk of mortality from many conditions, including cardiovascular disease (CVD), cancer, suicide and injury. Alcohol is estimated to contribute to a significant percentage of deaths from these complications (Strategy Unit, 2003):
a. From heart disease and stroke and related diseases by at least 40% in people under 75, with at least a 40% reduction in the inequalities gap between the fifth of areas with the worst health and deprivation indicators and the population as a whole;	
b. From cancer by at least 20% in people under 75, with a reduction in the inequalities gap of at least 6% between the fifth of areas with the worst health and deprivation indicators and the population as a whole; and	
c. From suicide and undetermined injury by at least 20%.	

Condition	% Deaths attributed to alcohol	
	Males	Females
Cardiovascular Disease		
<i>Hypertension</i>	5-11	1-6
<i>Stroke</i>	2-14	0.1-16
<i>Ischemic Heart Disease</i>	0.5	0.5
Cancer		
<i>Oropharyngeal</i>	21-29	8-15
<i>Oesophageal</i>	14-38	6-22
<i>Liver</i>	18-29	12-16
<i>Laryngeal</i>	41	26
<i>Female breast</i>	-	3-4
<i>Stomach*</i>		20
<i>Colorectal*</i>		20
<i>Lip*</i>		50
Suicide	27-41	16-17
Injuries/Trauma		
<i>Road injuries</i>	37-43	18-43
<i>Fall injuries</i>	24-34	15-34
<i>Fire injuries</i>	38-44	38-44
<i>Drownings</i>	30-34	23-34

\* Attributable fractions are not available by sex

	<p>For all-cause mortality, the level of deaths attributable to alcohol vary geographically, with areas of higher deprivation seeing increased rates of alcohol attributable mortality (Wood et al, 2006). Such discrepancies could contribute to the inequalities gap in levels of cardiovascular disease and cancer seen between highly deprived areas and the population as a whole.</p> <p><b>Heart disease, stroke and related diseases</b></p> <p>The relationship between alcohol use and CVD is dependent on the level of alcohol consumed. While many studies suggest light to moderate use of alcohol can offer protective benefits against developing or dying from CVD (Elkind et al, 2006; Djousse et al, 2002; Murray et al, 2002; Reynolds et al, 2003), heavy use significantly increases the risk of developing or dying from CVD:</p> <ul style="list-style-type: none"> <li>▪ In a prospective cohort study involving 5766 Scottish men, drinkers of over 35 units a week had double the risk of mortality from stroke compared with non-drinkers (Hart et al, 1999).</li> <li>▪ Among 6,544 middle-aged British men without previous CVD, regular heavy drinkers had a 74% higher risk of a major coronary event and a 133% increase in the risk of stroke than occasional drinkers (Emberson et al, 2005).</li> <li>▪ In a prospective cohort study in the US involving 38,156 male health professionals, heavier drinkers (drinking 3 drinks daily) were almost one and a half times more likely to develop ischemic stroke than non-drinkers (Mukamal et al, 2005).</li> <li>▪ A meta-analysis of studies examining the association between alcohol use and CVD reported that compared to non-drinkers, consumption of more than 60g of alcohol per day increased the risk of total stroke (relative risk 1.64), ischemic stroke (1.69) and hemorrhagic stroke (2.18) (Reynolds et al, 2003).</li> <li>▪ In general, research reports either a J or U shape relationship between CVD risk and consumption, with heavy drinkers (and sometimes non-drinkers) having the highest risk of morbidity and mortality from CVD, and light to moderate drinkers having the lowest risk (Emberson et al, 2005, Britton and Marmot, 2004). However, this association has been found to vary with a number of factors such as age (protective benefits of alcohol are only found among middle-aged and older people), drinking patterns (protective benefits only found for steady drinkers, not binge drinkers), and type of beverage (there is some evidence to suggest wine drinkers have lower rates of mortality than beer or spirit drinkers) (Gronbaek, 2006).</li> </ul> <p><b>Cancer</b></p> <p>Heavy alcohol consumption is associated with many forms of cancer. Strong links are reported between alcohol and cancers of the oral cavity, pharynx, oesophagus and larynx, while weak associations are reported for stomach, colon, rectum, liver, female breast cancers and cancer of the ovaries (Bagnardi, 2001).</p> <p>In general, greater use of alcohol is associated with increased risk. Alcohol consumption of at least 50g (4 drinks) per day can significantly increase the risk of developing any form of cancer compared to no alcohol use. However, for some cancer types, even moderate levels of alcohol (25g a day) can increase the risk of disease (Bagnardi, 2001). Further, for people diagnosed with cancer, heavy alcohol use can have a detrimental effect on the progression of disease and survival (Paull et al, 2005).</p> <p><b>Suicide and undetermined injury</b></p> <p>Alcohol consumption is strongly related to incidents of suicide, attempted suicide, and fatal injury, especially among heavy drinkers:</p> <ul style="list-style-type: none"> <li>▪ A study of 349 suicides in Scotland reported that 45% had consumed alcohol prior to committing suicide (Crombie, 1998);</li> </ul>
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	<ul style="list-style-type: none"> <li>▪ Lifetime risk of suicide is estimated to be 7% for people with alcohol dependency (Inskip et al, 1998);</li> <li>▪ Among psychiatric patients, high levels of alcohol use are strongly associated with suicide ideation and previous self-harm (McCloud et al, 2004);</li> <li>▪ Among deliberate self-harmers, alcohol use is significantly associated with subsequent suicide (Cooper et al, 2005).</li> <li>▪ A Finnish study of mortality over a 16 year periods found that drinking more than four drinks in one session significantly increased the risk of a fatal injury, with greatest risk found among frequent heavy drinkers (Paljarvi, et al 2005).</li> <li>▪ Among those admitted to Emergency Departments, individuals who have consumed alcohol sustain more severe injuries than others (Johnston and McGovern, 2004; Levy et al, 2004).</li> </ul> <p>Reasons for these associations are manifold. Alcohol misuse may contribute to social problems such as the break up of a marriage, unemployment or financial difficulties, which can increase the risk of suicide (Conner and Duberstein, 2004). Heavy drinking can increase impulsiveness and aggression, which contribute to suicidal behaviour (Sher and Oquendo, 2001). Disinhibition that occurs through the use of alcohol can facilitate feelings of suicide and increase the risk of suicide ideation being carried out (Crombie et al, 1998). Additionally, impairment in co-ordination and cognitive skills seen with alcohol consumption can increase the risk of an accident occurring (see also PSA targets for <a href="#">road traffic accidents</a> Department for Transport; <a href="#">fire-related accidents</a> Office of the Deputy Prime Minister, <a href="#">workplace risks</a> Department for Work and Pensions).</p>
<p>2. Reduce health inequalities by 10% by 2010 as measured by infant mortality and life expectancy at birth.</p>	<p><u>Heavy parental alcohol use, both during and after pregnancy, can play an important contributory role in the risk of infant mortality. Prenatal exposure to alcohol can prevent the foetus from obtaining sufficient amounts of oxygen and nourishment to allow the brain and other organs to develop normally. Consequently, for some pregnancies neurological and other developmental abnormalities can develop, known as Foetal Alcohol Syndrome (FAS) or Foetal Alcohol Effects (FAE) (Burd and Wilson, 2004). Estimates from the US suggest that between 0.5 and 2 cases per 1,000 births result in FAS (May and Gossage, 2001).</u></p> <p><u>The effects of the syndrome in infancy such as irritability, colic, sleep disorders and immune system deficiencies contribute to a higher risk of infant mortality (Clifford et al 2002; Abel, 1998), with a fatality rate amongst affected children of around 5-6% (Habbick et al, 1997). Additionally, maternal alcohol use in the three months prior to conception, and binge drinking during the first trimester of pregnancy, has been associated with Sudden Infant Death Syndrome (SIDS) (Iyasu et al, 2002).</u></p> <p><u>Postnatal alcohol use by parents can also contribute to infant mortality by increasing the risk of infant maltreatment (WHO, in press). Heavy alcohol use is commonly cited as a problem in child welfare cases, with for example parental substance use being a cause of concern in 52% of families on the Child Protection Register in London, and alcohol being the principle substance used (Forrester, 2000). Heavy drinking can diminish parental responsibility and prevent an adequate response to illness or trauma (Burd and Wilson, 2004). Additionally, heavy drinking by parents is associated with other parental problems such as poor mental health (Bays, 1990) and anti social personality characteristics (Mulder, 2002), factors that increase the risk of infant maltreatment. Evidence suggests that siblings of children</u></p>

	<p><u>with FAS experience significantly higher rates of all-cause mortality, mortality from infectious diseases and SIDS compared to controls (11.4% compared with 2%), despite showing no symptoms of FAS themselves (Burd et al, 2004).</u></p> <p>-</p> <p><u>For all individuals, regular heavy alcohol use is related to increased morbidity and mortality (Bellis et al, 2005; see also PSA target for <a href="#">mortality</a> Department of Health). Levels of alcohol-attributable mortality have been found to vary geographically, with areas of higher deprivation seeing greater rates of alcohol-attributable mortality (Wood et al, 2006). Thus, alcohol consumption may contribute to variation in life expectancy at birth seen between higher and lower areas of deprivation.</u></p>
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<p><b>Department of Health - Target 3:</b></p> <p>Tackle the underlying determinants of ill health and health inequalities by:</p> <ol style="list-style-type: none"> <li>Reducing adult smoking rates to 21% or less by 2010, with a reduction in prevalence among routine and manual groups to 26% or less;</li> <li>Halting the year-on-year rise in obesity among children under 11 by 2010 in the context of a broader strategy to tackle obesity in the population as a whole - <i>joint with the Department for Education and Skills and the Department for Culture, Media and Sport</i>; and</li> <li>Reducing the under-18 conception rate by 50% by 2010 as part of a broader strategy to improve sexual health - <i>joint with the Department for Education and Skills</i>.</li> </ol>	<p><b>Smoking rates</b></p> <p>There are strong links between alcohol use and tobacco use, with evidence suggesting that the heaviest drinkers are also the heaviest smokers:</p> <ul style="list-style-type: none"> <li>Rates of smoking among alcohol dependent individuals are estimated to be as high as 88% (Batel et al, 1995, Miller and Gold, 1998);</li> <li>Nicotine dependence appears more severe in smokers with a history of alcohol dependence (Marks et al, 1997);</li> <li>Alcohol dependence is estimated to be ten times more prevalent among smokers than non-smokers (DiFranza and Guerrera, 1990);</li> <li>Among adolescents aged 11-16, those who have ever tried alcohol are more likely to have ever tried smoking, and similarly those who have recently used alcohol are more likely to have recently used tobacco (Fuller, 2005).</li> <li>Young people that smoke are almost twice as likely to drink on five or more days per week than non-smokers (Bellis et al, 2001).</li> <li>Youth exposed to high levels of alcohol availability are over three times as likely to smoke than youth not exposed (Weitzman et al, 2005).</li> </ul> <p>Close links between alcohol consumption and smoking behaviour can be explained, in part, by the effect of alcohol on cravings for cigarettes. For instance, among smokers, alcohol consumption has been found to increase the urge to use tobacco (Sayette et al, 2005), possibly due to the combined effects of alcohol and nicotine on the brain (Tizabi et al, 2002). However, nicotine may also have an effect on alcohol use by reducing the intoxicating effects of alcohol (Johnson et al, 1991). Therefore, for individuals seeking those effects, greater quantities of alcohol will need to be consumed (Room, 2004).</p> <p>High levels of drinking can hamper attempts to quit smoking. For instance among participants in a smoking cessation programme, those with a history of binge drinking (drinking eight or more drinks per session) were more likely to be current smokers in the 12 months following the intervention, and to smoke more cigarettes per day, than those without such histories (Murray et al, 1995). Additionally, those who have quit smoking report a higher likelihood of being tempted to smoke again when drinking than when sober (Shiffman et al, 1996).</p> <p><b>Under 18 conception rate</b></p> <p>Evidence suggests that alcohol plays a contributory role in risky sexual practices among young people that have the potential to result in unplanned pregnancy. While the acute effects of alcohol consumption increase the likelihood of a young person having unprotected sex, those who drink alcohol are more likely to take risks generally in life, including risky sexual behaviours (Alcohol Concern, 2002):</p> <p>Among sexually active 13 and 14 year olds, 40% say they were drunk or stoned at first intercourse (Wight et al, 2000);</p> <p>In a survey of 15-16 year olds, 9% report having sex after drinking that they later regretted, while 6% report having engaged in unprotected sex after drinking alcohol (Hibell et al, 2004);</p> <p>Among 16-20 year olds, over four fifths of those who had sex while feeling strongly intoxicated failed to use contraception, compared with 40% of those who felt moderately intoxicated and 25% of those who felt sober (Traeen and Kvaem, 1996);</p> <p>Women with unintended pregnancies are more likely to have engaged in binge drinking in the preconception period (Naimi et al, 2003);</p>
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	<p>Adolescents with alcohol misuse disorders have been found to be more sexually active than other adolescent drinkers, to have had greater numbers of sexual partners and to have sex at slightly younger ages (Bailey et al, 1999).</p> <p>Links between alcohol consumption and unplanned pregnancy are manifold. Alcohol may be used deliberately to reduce inhibitions, enhancing sexual performance and increasing confidence with potential sexual partners (Taylor et al, 1999). The effects of alcohol can reduce a young person's ability to assess risks, making them more likely to engage in unprotected sex (Alcohol Concern, 2002). Additionally, often the places where potential sexual partners are met are in contexts where alcohol is available and a major part of social interaction, such as pubs, bars and nightclubs (Taylor et al, 1999).</p>
<p><b>4. To improve health outcomes for people with long term conditions by offering a personalised care plan for vulnerable people most at risk; and to reduce emergency bed days by 5% by 2008, through improved care in primary care and community settings for people with long-term conditions</b></p>	<p>Excessive drinking can contribute to the development of many chronic disorders including cancer, cardiovascular disease, mental health problems (see PSA target for <a href="#">mortality Department of Health</a>) and liver cirrhosis (Corrao et al, 2004). Alcohol-related chronic conditions place huge burdens on the NHS each year, with between 31,000 and 91,000 hospital admissions for chronic disorders annually in England and Wales associated with alcohol (Strategy Unit, 2003).</p> <p>For individuals with these and other long-term conditions such as diabetes, arthritis and asthma, having the knowledge, skills and confidence to look after their condition effectively and to adequately care for themselves through their illness is essential. The use of alcohol may have an important role to play in achieving this:</p> <p>Alcohol consumption can have adverse effects on illness progression and the need for emergency care by affecting a person's ability to take prescribed drugs (Weiss, 2004). An estimated 10% of hospital admissions are the result of medication non-adherence (Schlenk et al, 2004).</p> <p>Even if medication is taken correctly, alcohol may interact with these drugs, decreasing their effectiveness and causing adverse reactions (Pollow et al, 1994).</p> <p>Heavy alcohol use can also affect health outcomes by increasing the risk of falls and accidents (see also PSA target for <a href="#">mortality Department of Health</a>), which for some conditions can be problematic and even fatal. In a study of deaths from accidents and violence among patients with ankylosing spondylitis (AS), which increases the vulnerability of the spine to fractures, over half were alcohol-related (Myllykangas-Luosujarvi et al, 1998).</p> <p>Individuals with long term conditions may be at greater risk from alcohol problems since emotional difficulties experienced coming to terms with illness may induce heavy drinking as an avoidant coping strategy (Myllykangas-Luosujarvi et al, 1998). For these individuals, understanding how alcohol can affect illness progression and the ability to look after one's self, and developing the skills necessary to cope with a chronic illness, has the potential to help improve health outcomes in the longer term.</p>
<p><b>6. Increase the participation of problem drug users in drug treatment programmes by 100% by 2008 and increase year on year the proportion of users successfully sustaining or completing treatment programmes.</b></p>	<p>Strong links have been found between the use of alcohol and illegal drugs. Those using illegal drugs are more likely than others to drink more heavily and frequently, while alcohol use often predates initiation into harder drugs later in life (see also PSA target for <a href="#">illicit drug use Action Against Illegal Drugs</a>). Heavy alcohol use is often a problem cited among those presenting to drug treatment programmes. For instance, the National Treatment Outcome Research Study (NTORS) reported that the most common drug problem among clients was opiate dependence, often</p>



	<p>in conjunction with polydrug and/or alcohol problems. Furthermore, 29% of people entering residential drug treatment were drinking above the recommended weekly limits, and more than a third of patients who reported using alcohol had problematic or highly problematic drinking patterns (Gossop et al, 2001).</p> <p>Despite this, heavy alcohol use remains a relatively neglected problem in drug treatment programmes, with many patients reporting little improvement in drinking levels following treatment, even though levels of problematic drug use have declined (Gossop et al, 2001). Although evidence is limited, this may have important implications for drug treatment outcomes. Some authors have suggested that problematic drinking may lead to involuntary discharge of patients from drug treatment (Gossop et al, 2001). Others suggest that alcohol may be used as a substitute for drugs as levels of drug use decrease during treatment (Anglin et al, 1989).</p>
<p><b>8 Improve the quality of life and independence of vulnerable older people by supporting them to live in their own homes where possible by:</b></p> <p><b>a. Increasing the proportion of older people being supported to live in their own home by 1% annually in 2007 and 2008; and</b></p> <p><b>b. Increasing by 2008 the proportion of those supported intensively to live at home to 34% of the total of those being supported at home or in residential care.</b></p>	<p>Heavy alcohol use can have significant impacts on the health and quality of life of older people (Oslin, 2000), impinging on their ability to adequately look after themselves and lead independent lives. Changes in body composition that occur with age make older people less tolerant to alcohol consumption, meaning that over time, equivalent drinking levels result in higher blood alcohol concentrations and greater negative effects (Reid and Anderson, 1997). Consequently, even small amounts of alcohol can affect bodily function in older age. Among older people, evidence suggests that alcohol use is associated with:</p> <p>Increased risk of developing chronic conditions such as stroke or cancer (Mukamal et al, 2005; Reynolds et al, 2003; Bagnardi, 2001, see also PSA target for <a href="#">mortality</a> <i>Department of Health</i>);</p> <p>An increased risk of accidental injuries and falls (Mukamal et al, 2004; Fletcher and Hirdes, 2005; see also PSA target for <a href="#">mortality</a> <i>Department of Health</i>);</p> <p>Reduced cognitive and intellectual functioning such as memory loss (Edelstein et al, 1998);</p> <ul style="list-style-type: none"> <li>▪ Dementia (Thomas and Rockwood, 2001);</li> <li>▪ Increased risk of depression and suicide (Blow et al, 2004);</li> </ul> <p>Self neglect, including malnutrition, neglect of risks that could cause harm, and neglect of psychosocial needs (Blondell, 1999). Additionally, for those with chronic conditions, alcohol consumption can have adverse effects on illness progression and the need for care by affecting a person's ability to take medication (Weiss, 2004; see also PSA target for <a href="#">long-term conditions</a> <i>Department of Health</i>). An estimated 10% of hospital admissions are the result of medication non-adherence (Schlenk et al, 2004). Moreover, the use of prescribed drugs often interacts with alcohol consumption, increasing the risk of adverse health effects and reducing the effectiveness of medications (Stevenson, 2005).</p> <p>Alcohol may be a particular problem for older people as they are more likely to experience higher rates of stress such as bereavement of a spouse or family member, physical ill health, mental stress, loneliness or isolation, and loss of occupation or income. These personal stressors may encourage individuals to use alcohol as a way of coping or self-medicating (Alcohol Concern, 2002).</p>
<b>1. Reduce crime by 15%, and further within high crime</b>	<p>While some criminal offences are directly related to alcohol use, for example being drunk and disorderly or drink driving (see PSA target for</p>

<p><b>areas, by 2007-08 - Target contributing to the Criminal Justice System PSA.</b></p>	<p><a href="#">road accidents</a> <i>Department of Transport</i>), alcohol has been linked to the perpetration of many other forms of violent and non-violent crime. These include sexual violence, intimate partner violence, child maltreatment, youth violence and elder abuse (WHO, 2005), as well as theft, criminal damage (Richardson and Budd, 2003) and arson (see PSA target for <a href="#">fire-related deaths</a> <i>Office of the Deputy Prime Minister</i>). Offending behaviour is more likely amongst those who drink more frequently, and amongst those that drink to excess:</p> <p>Among 18-24 year olds, binge drinkers were almost three times more likely to have committed an offence than other drinkers, and five times more likely to have been involved in a fight (Richardson and Budd, 2003).</p> <p>Fifteen percent of 12-17 year olds had been involved in some form of anti-social behaviour (e.g. argument, fight, vandalism, theft) during or following drinking, and frequent drinkers were the most likely to have been involved in such behaviour (Harrington, 2000).</p> <p>In the Youth Lifestyles Survey, men under 21 who drank regularly were more likely to be offenders than those who drank occasionally or who did not drink, while for those aged 22-30, those who drank at least five days a week were more likely to have committed violent offences than others (Flood-page et al, 2000).</p> <p>Among victims of violent offending, around half (48%) believed their attacker to have been under the influence of alcohol, rising to 60% in incidents of stranger violence (Nicholas et al, 2005).</p> <p>Areas that have the highest number of alcohol outlets per 100,000 population also see the highest rates of criminal violence (Norstrom, 2000).</p> <p>Alcohol use can also increase the likelihood of becoming a victim of crime. For instance among victims of serious sexual assault, 17% occurred when the woman was incapable of consent due to alcohol (Walby and Allen, 2004).</p> <p>Violent crimes typically occur at night, particularly weekend nights when most drinking occurs, and in and around pubs and clubs. For instance the British Crime Survey found that 44% of violent incidents occurred at the weekend and 63% during the evening or night, and analysis of emergency department admissions for assaults report that peak periods are evening/early morning weekend hours (Anderson, 2005).</p> <p>Furthermore, 21% of all violent incidents occurred in or around a pub or club (Allen et al, 2003).</p> <p>Alcohol may have direct links to criminal behaviour by affecting cognitive and physical functioning, reducing self-control, facilitating aggression and impairing the ability to process incoming information (Peterson et al, 1990; Graham, 2003). This can make a person more likely to resort to violence in confrontation. Alcohol can also affect crime indirectly; for instance alcohol may be used to provide the courage to commit crimes (e.g. Hunt and Laidler, 2001). Furthermore, alcohol and criminal behaviour may be related through other common risk factors (e.g. anti-social personality disorder; Moeller and Dougherty, 2001) that contribute to the risk of both occurring.</p>
<p><b>2. Reassure the public, reducing the fear of crime and anti-social behaviour, and building confidence in the Criminal Justice System</b></p>	<p>Alcohol consumption has been associated with many forms of crime (see PSA targets for <a href="#">road accidents</a> <i>Department of Transport</i> and <a href="#">fire-related deaths</a> <i>Office of the Deputy Prime Minister</i>), but heavy drinking is also related to anti-social behaviour, particularly in the night-time economy. For instance in a Local Authority survey of problems experienced with</p>



<p><b>without compromising fairness - Target contributing to the Criminal Justice System PSA.</b></p>	<p>evening and night-time activities, urinating on the street was rated as being a severe problem by 30% of local authorities, along with: threatening or unsafe areas (29%), noise disturbing local residents (28%), rowdiness or fighting in the street (24%) and vandalism (16%) (The Civic Trust, 2004).</p> <p>Heavy drinking plays an important role in the public's fear of crime and anti-social behaviour. Public drunkenness and street drinking can create feelings of intimidation in the community and fear of becoming a victim of crime:</p> <p>In the 2004/05 British Crime Survey, 22% of respondents perceived people being drunk or rowdy in public places to be a significant problem in their local area (Nicholas et al, 2005).</p> <p>In a review of experiences and perceptions of security on public transport, the presence of rowdy people under the influence of alcohol caused anxieties for men and women alike, more commonly when travelling in the evening or at night. In particular, individuals felt threatened by the unpredictable behaviour of intoxicated individuals and the potential to become a victim of alcohol-related violence (Department for Transport, 2004; see also PSA target for <a href="#">public transport Department for Transport</a>).</p> <p>A survey of 10-15 year olds found that 35% of boys and 48% of girls were worried about crime. Forty percent reported being frightened of drunks (Crimestoppers, 2002).</p> <p>Furthermore, perceived levels of alcohol-related crime among members of the public are increasing. For instance, 52% of people believe that alcohol-related violence in pubs and bars has risen in recent years, 61% believe this has increased on the streets, and 40% in the home (Strategy Unit, 2003).</p> <p>Feelings of safety are often associated with public perceptions of the criminal justice system, with those who believe the police to be controlling crime in the local area much more likely to report feeling safe than others (Johnson, 2005). This is important in the night-time economy, where the presence of police and other security services, and enforcement of penalties for alcohol-related disorder may increase feelings of safety and reduce fear of victimisation.</p>
<p><b>Taarget 3 - Reduce the under-18 conception rate by 50% by 2010 as part of a broader strategy to improve sexual health - Joint with the Department of Health.</b></p>	<p>Evidence suggests that alcohol plays a contributory role in risky sexual practices among young people that have the potential to result in unplanned pregnancy. While the acute effects of alcohol consumption increase the likelihood of a young person having unprotected sex, those who drink alcohol are more likely to take risks generally in life, including risky sexual behaviours (Alcohol Concern, 2002):</p> <p>Among sexually active 13 and 14 year olds, 40% say they were drunk or stoned at first intercourse (Wight et al, 2000);</p> <p>In a survey of 15-16 year olds, 9% report having sex after drinking that they later regretted, while 6% report having engaged in unprotected sex after drinking alcohol (Hibell et al, 2004);</p> <p>Women with unintended pregnancies are more likely to have engaged in binge drinking in the preconception period (Naimi et al, 2003);</p> <p>Among 16-20 year olds, over four fifths of those who had sex while feeling strongly intoxicated failed to use contraception, compared</p>

	<p>with 40% of those who felt moderately intoxicated and 25% of those who felt sober (Traeen and Kvaem, 1996);</p> <p>Adolescents with alcohol misuse disorders have been found to be more sexually active than other adolescent drinkers, to have had greater numbers of sexual partners and to have sex at slightly younger ages (Bailey et al, 1999).</p> <p>Links between alcohol consumption and unplanned pregnancy are manifold. Alcohol may be used deliberately to reduce inhibitions, enhancing sexual performance and increasing confidence with potential sexual partners (Taylor et al, 1999). The effects of alcohol can reduce a young person's ability to assess risks, making them more likely to engage in unprotected sex (Alcohol Concern, 2002). Additionally, often the places where potential sexual partners are met are in contexts where alcohol is available and a major part of social interaction, such as pubs, bars and nightclubs (Taylor et al, 1999).</p>
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<p><b>Department for Education and Skills - Target 6:</b></p> <p><b>Raise standards in English and Maths so that:</b></p> <ul style="list-style-type: none"> <li><b>a. By 2006, 85% of 11 year olds achieve level 4 or above, with this level of performance sustained to 2008; and</b></li> <li><b>b. By 2008, the proportion of schools in which fewer than 65% of pupils achieve level 4 or above is reduced by 40%.</b></li> </ul>	<p>Frequent use of alcohol in adolescence has been associated with school absenteeism, truancy, exclusion and drop-out (see PSA target for <a href="#">school attendance</a> <i>Department for Education and Skills</i>), which in the longer term could affect school achievement. Many studies have reported an association between poor school performance indicators and risky drinking patterns. For instance:</p> <p>Among 15-16 year old school students in the UK, lifetime alcohol use was related to low perceived school performance (Miller and Plant, 1999).</p> <p>Among 14-16 year old schoolchildren in London, heavy drinking was associated with low educational aspirations (Best et al, 2006).</p> <p>In a study of alcohol and drug use among 15-16 year olds in Europe, 3% reported that they performed poorly at school as a direct result of alcohol use and 2% reported problems in their relationships with teachers (Hibbel et al, 2000).</p> <p>In a study of Norwegian school students, alcohol intoxication in the last four weeks was associated with fewer hours spent on homework and poorer school grades (Wishstrom, 1998).</p> <p>Among adolescents in the US, 45% of those with an 'A' grade average had drunk alcohol in the last 30 days, compared with 58% of those with a 'B-' or lower grade average (O'Malley et al, 1998).</p> <p>The risk of academic failure among Spanish high school students was almost three times higher for pupils consuming more than 150g of alcohol per week (Lopez-Frias, 2001).</p> <p>Heavy drinking may be related to school performance in a number of ways. Alcohol use in adolescence can damage brain development and impair cognitive abilities such as learning and memory. For instance, adolescent drinkers score worse on vocabulary, memory, memory retrieval and general information tests than their non-drinking peers (IAS, 2005). Additionally, the acute effects of heavy alcohol use such as hangovers or lack of sleep can affect a pupil's ability to concentrate in lessons, or lead to absence from school (see PSA target for <a href="#">school attendance</a> <i>Department for Education and Skills</i>). However, alcohol use and absenteeism may be related via other confounding or mediating factors that are related to both. For instance, some studies have found that the association between alcohol use and perceived school performance is largely accounted for by other related variables such as having a sociable/delinquent lifestyle, lack of parental care, lack of hobbies or tobacco use (Miller and Plant, 1999).</p> <p>From a wider perspective, parental use of alcohol is also related to child school performance. Prenatal alcohol exposure (see also PSA target for <a href="#">health inequalities</a> <i>Department of Health</i>) has been associated with learning difficulties and academic achievement in adolescence, with alcohol-affected youth having significantly lower IQs than others (Howell et al, 2006).</p>
<p><b>Department for Education and Skills - Target 7:</b></p> <p><b>Raise standards in English, maths, ICT and science in secondary education so that:</b></p> <ul style="list-style-type: none"> <li><b>a. By 2007, 85% of 14 year olds achieve level 5 or above in English,</b></li> </ul>	<p>Frequent use of alcohol in adolescence has been associated with school absenteeism, truancy, exclusion and drop-out (see PSA target for <a href="#">school attendance</a> <i>Department for Education and Skills</i>), which in the longer term could affect school achievement. Many studies have reported an association between poor school performance indicators and risky drinking patterns. For instance:</p> <p>Among 15-16 year old school students in the UK, lifetime alcohol use was related to low perceived school performance (Miller and Plant, 1999).</p> <p>Among 14-16 year old schoolchildren in London, heavy drinking was</p>

<p><b>maths and ICT (80% in science) nationally, with this level of performance sustained to 2008; and</b></p> <p><b>b. By 2008, in all schools at least 50% of pupils achieve level 5 or above in each of English, maths and science.</b></p>	<p>associated with low educational aspirations (Best et al, 2006).</p> <p>In a study of alcohol and drug use among 15-16 year olds in Europe, 3% reported that they performed poorly at school as a direct result of alcohol use and 2% reported problems in their relationships with teachers (Hibbel et al, 2000).</p> <p>In a study of Norwegian school students, alcohol intoxication in the last four weeks was associated with fewer hours spent on homework and poorer school grades (Wishstrom, 1998).</p> <p>Among adolescents in the US, 45% of those with an 'A' grade average had drunk alcohol in the last 30 days, compared with 58% of those with a 'B-' or lower grade average (O'Malley et al, 1998).</p> <p>The risk of academic failure among Spanish high school students was almost three times higher for pupils consuming more than 150g of alcohol per week (Lopez-Frias, 2001).</p> <p>Heavy drinking may be related to school performance in a number of ways. Alcohol use in adolescence can damage brain development and impair cognitive abilities such as learning and memory. For instance, adolescent drinkers score worse on vocabulary, memory, memory retrieval and general information tests than their non-drinking peers (IAS, 2005). Additionally, the acute effects of heavy alcohol use such as hangovers or lack of sleep can affect a pupil's ability to concentrate in lessons, or lead to absence from school (see PSA target for <a href="#">school attendance</a> <i>Department for Education and Skills</i>). However, alcohol use and absenteeism may be related via other confounding or mediating factors that are related to both. For instance, some studies have found that the association between alcohol use and perceived school performance is largely accounted for by other related variables such as having a sociable/delinquent lifestyle, lack of parental care, lack of hobbies or tobacco use (Miller and Plant, 1999).</p> <p>From a wider perspective, parental use of alcohol is also related to child school performance. Prenatal alcohol exposure (see also PSA target for <a href="#">health inequalities</a> <i>Department of Health</i>) has been associated with learning difficulties and academic achievement in adolescence, with alcohol-affected youth having significantly lower IQs than others (Howell et al, 2006)</p>
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<p><b>Department for Education and Skills - Target 8:</b>  <b>Improve levels of school attendance so that by 2008, school absence is reduced by 8% compared to 2003.</b></p>	<p>Evidence suggests there is a positive association between adolescent alcohol use and levels of school attendance. Adolescents who drink alcohol are more likely than others to truant, for instance:</p> <p>Among 14-16 year olds in London , more than two-thirds of frequent excessive drinkers reported having repeatedly truanted from school (Best et al, 2006).</p> <p>Among 15 year olds in Scotland , 64% of pupils who drank alcohol in the last week had truanted at least once in the last year compared with 22% of pupils who had never drunk alcohol (CAHRU, 2005).</p> <p>Among American adolescents, those with high truancy rates were more than twice as likely to have reported being drunk in the last 30 days compared with their non- or low-truanting colleagues (O'Malley et al, 1998).</p> <p>A study of 15-16 year olds across 32 countries in Europe found a consistently positive correlation between the number of days a student had skipped school in the past 30 days and the number of times he or she had used alcohol (Hibbel et al, 2004).  Those that drink excessively are more likely to be excluded, or to drop out of school:</p> <p>In Scotland, 13% of 13 year olds and 16% of 15 year olds who had ever been drunk had been excluded from school compared with 5% of 13 year olds and 7% of 15 year olds who had never been drunk (CAHRU, 2005).</p> <p>Among Norwegian students aged 12-20, those who dropped out of school were twice as often intoxicated than those who stayed and completed education (Wichstrom, 1998).</p> <p>A US study found that increases in the incidence of frequent drinking, and in liquor and wine consumption significantly reduced the probability of high school graduation (Yamada et al, 1996).</p> <p>Additionally, absence from school may be related to the use of alcohol:</p> <p>A study of first year undergraduate students found that in the year prior to attending university, 42% of men and 36% of women missed at least half a day of study as a result of alcohol intake. Furthermore, those who engaged in binge drinking were over twice as likely as others to have been absent from school through alcohol (Newbury-Birch et al, 2000).</p> <p>The acute effects of heavy alcohol use such as hangover or lack of sleep may encourage students to truant (Wichstrom, 1998), but alcohol use is often a direct and indirect (through alcohol-related anti-social behaviour) cause of student exclusions from school. In England and Wales, between 13-15% of suspensions from school were for drinking alcohol on site (Youth Justice Board, 2002).</p> <p>Additionally, alcohol use and absence from school may be related via other confounding or mediating factors that affect the propensity for both to occur ( Duarte and Escario, 2006). For instance, some studies have found that the association between alcohol use and truancy is largely accounted for by other related variables such as having a sociable/delinquent lifestyle, lack of hobbies, tobacco or cannabis use (Miller and Plant, 1999), or lack of parental care (Wichstrom, 1998).</p>
<p><b>Department for Education and Skills - Target 10:</b></p>	<p>Frequent use of alcohol in adolescence has been associated with school absenteeism, truancy, exclusion and drop-out (see PSA target for <a href="#">school</a>)</p>

<p><b>By 2008, 60% of those aged 16 to achieve the equivalent of 5 GCSEs at grades A* to C; and in all schools at least 20% of pupils to achieve this standard by 2004, rising to 25% by 2006 and 30% by 2008.</b></p>	<p><a href="#">attendance</a> <i>Department for Education and Skills</i>), which in the longer term could affect school achievement. Many studies have reported an association between poor school performance indicators and risky drinking patterns. For instance:</p> <p>Among 15-16 year old school students in the UK, lifetime alcohol use was related to low perceived school performance (Miller and Plant, 1999).</p> <p>Among 14-16 year old schoolchildren in London, heavy drinking was associated with low educational aspirations (Best et al, 2006).</p> <p>In a study of alcohol and drug use among 15-16 year olds in Europe, 3% reported that they performed poorly at school as a direct result of alcohol use and 2% reported problems in their relationships with teachers (Hibbel et al, 2000).</p> <p>In a study of Norwegian school students, alcohol intoxication in the last four weeks was associated with fewer hours spent on homework and poorer school grades (Wishstrom, 1998).</p> <p>Among adolescents in the US, 45% of those with an ‘A’ grade average had drunk alcohol in the last 30 days, compared with 58% of those with a ‘B-’ or lower grade average (O’Malley et al, 1998).</p> <p>The risk of academic failure among Spanish high school students was almost three times higher for pupils consuming more than 150g of alcohol per week (Lopez-Frias, 2001).</p> <p>Heavy drinking may be related to school performance in a number of ways. Alcohol use in adolescence can damage brain development and impair cognitive abilities such as learning and memory. For instance, adolescent drinkers score worse on vocabulary, memory, memory retrieval and general information tests than their non-drinking peers (IAS, 2005). Additionally, the acute effects of heavy alcohol use such as hangovers or lack of sleep can affect a pupil’s ability to concentrate in lessons, or lead to absence from school (see PSA target for <a href="#">school attendance</a> <i>Department for Education and Skills</i>). However, alcohol use and absenteeism may be related via other confounding or mediating factors that are related to both. For instance, some studies have found that the association between alcohol use and perceived school performance is largely accounted for by other related variables such as having a sociable/delinquent lifestyle, lack of parental care, lack of hobbies or tobacco use (Miller and Plant, 1999).</p> <p>From a wider perspective, parental use of alcohol is also related to child school performance. Prenatal alcohol exposure (see also PSA target for <a href="#">health inequalities</a> <i>Department of Health</i>) has been associated with learning difficulties and academic achievement in adolescence, with alcohol-affected youth having significantly lower IQs than others (Howell et al, 2006).</p>
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<p><b>Department for Education and Skills - Target 12:</b> Reduce the proportion of young people not in education, employment or training by 2 percentage points by 2010.</p>	<p>Evidence suggests a strong relationship between unemployment and alcohol consumption (see PSA target for <a href="#">unemployment</a> <i>Department for Work and Pensions</i> and <i>HM Treasury</i>). For young people specifically, unemployment is a risk factor for increased alcohol consumption (e.g. Janlert and Hammarstrom, 1992, Hammarstrom, 1994, Dooley and Prause, 1998), and around 13% of 16-18 year olds not in education, training or employment are alcohol-dependent, compared with 5% of those who are (Meltzer et al, 1995).</p> <p>Alcohol use is related to youth unemployment in a number of important ways. Drinking is often a direct and indirect cause (through alcohol-related anti-social behaviour such as violence or crime) of student exclusions from school (see PSA target for <a href="#">school attendance</a> <i>Department for Education and Skills</i>). Alcohol use can also affect school performance and risk of school dropout or failure (see PSA target for <a href="#">school achievement</a> <i>Department for Education and Skills</i>), which can hinder a young person's chance of finding employment or training following education.</p> <p>For those already in employment, problem drinking can influence a young person's ability to hold down a job (see PSA target for <a href="#">workplace productivity</a> <i>Department of Trade and Industry</i> and <i>HM Treasury</i>). Research suggests that heavier drinkers are more likely to change jobs more often, and have reduced weeks of employment compared with others (Booth and Feng, 2002). The acute effects of heavy alcohol use such as a hangover or drowsiness can adversely affect productivity and performance, contribute to workplace accidents (see PSA target for <a href="#">workplace risks</a> <i>Department for Work and Pensions</i>), and increase the likelihood of absenteeism (see PSA target for <a href="#">unemployment</a> <i>Department for Work and Pensions</i> and <i>HM Treasury</i>), all of which may impact on the likelihood of remaining in work, and on the chances of finding future employment.</p>
<p><b>Office of the Deputy Prime Minister - Target 2:</b> Make sustainable improvements in the economic performance of all English regions by 2008, and over the long term reduce the persistent gap in growth rates between the regions, demonstrating progress by 2006 - joint with the Department of Trade and Industry and HM Treasury.</p>	<p>Alcohol consumption plays an important role in the UK economy. The alcohol industry offers economic benefits to society through increased employment, generating approximately one million extra jobs from farming through to serving alcohol in restaurants and bars (IAS, 2003). The revenue collected from taxation of alcoholic beverages is an additional benefit. For instance, in 2004/05 excise duties and VAT collected from alcoholic beverages amounted to almost £14 billion (BBPA, 2005). Consumer expenditure of alcoholic drinks in the UK has been gradually increasing since the 1970s and is currently worth over £30 billion a year (AC Nielson, 2002).</p> <p>However, adverse consequences of excessive alcohol use such as those spent treating alcohol-related problems, benefits to those unable to work through alcohol-related causes, costs to social and judicial systems and costs to the workplace can be problematic, costing an estimated £18-20 billion each year in England and Wales (Strategy Unit, 2003). Costs include:</p> <p><b>Costs to health services</b> The costs to health services of treating alcohol-related illness and injuries (see also PSA target for <a href="#">mortality</a> <i>Department of Health</i>) have been estimated to be between £1.4 and £1.7 billion per annum. This includes costs of e.g. ambulance services, A&amp;E attendance, GP consultations and hospital treatment (Strategy Unit, 2003).</p> <p><b>Costs to criminal justice services</b> Alcohol-related crime (see also PSA targets for <a href="#">road accidents</a> <i>Department of Transport</i>, <a href="#">fire-related deaths</a> <i>Office of the Deputy Prime Minister</i>, and <a href="#">crime</a> <i>Home Office</i>) costs the</p>

	<p>economy an estimated £12 billion each year. This includes costs to the criminal justice system as a consequence of crime, costs in anticipation of crime, costs of lost productive output, costs of emotional impact to the victim, and costs of serious or slight injury from drink driving (Strategy Unit, 2003).</p> <p><b>Costs to the workplace</b> An estimated £6.4 billion is lost to the economy each year through decreased workplace activity, including £1.5 billion through increased sickness and absenteeism, £1.9bn through alcohol-related unemployment or early retirement, and £2.4 billion through premature alcohol-related death (Strategy Unit, 2003; see also PSA target for <a href="#">workplace productivity</a> <i>Department of Trade and Industry</i> and <i>HM Treasury</i>).</p> <p>Additionally, although evidence is mixed, some studies suggest that alcoholism can have a negative relationship with household income, with estimates of between 17 and 31% reductions in income among those with problematic drinking habits (Mullahy and Sindelar, 1993).</p>
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<p><b>Office of the Deputy Prime Minister - Target 3:</b> By 2010, reduce the number of accidental fire-related deaths in the home by 20% and the number of deliberate fires by 10%.</p>	<p>Alcohol consumption is often implicated in fire-related accidental injuries, particularly those that are smoke-related. An estimated 38-45% of injuries from fire are related to alcohol (Strategy Unit, 2003). For instance:</p> <p>In Scotland, a total of 85 people were killed in house fires during 2000. Forty-one cases (54%) reported alcohol as a contributory factor (Scottish Executive, 2001).</p> <p>In a review of fire-related fatalities in London between 1996 and 2000, 29% had some alcohol in their blood system. Twenty one percent had drunk enough to exceed the legal driving limit (80mg per 100ml) and 14% were highly intoxicated (Holburn, 2001).</p> <p>In a review of unnatural deaths in Sweden from 1992-1996, 44% of fire-related deaths involved alcohol (Sjogren et al, 2000).</p> <p>Among fatal and non-fatal accidents in Oklahoma between 1988 and 1992, victim alcohol use was found in 17% of fire burns and 4% of scald burns. Alcohol involvement was particularly high among cases involving tobacco (44%) (Levy et al, 2004).</p> <p>The use of alcohol can affect the risk of fire and fire-related death in a number of ways. Impaired judgement and co-ordination may increase the risk of a fire being started and make it much harder to escape once a fire is out of control. Additionally, the effects of drinking may cause drowsiness, increasing the risk of falling asleep while smoking, and impairing the ability to smell smoke or hear a smoke alarm (Scottish Executive, 2001; Howland and Hingson, 1987). Importantly, the use of alcohol can increase the risk of a house fire injury up to seven times (Warda et al, 1999), while victims of burns that have been drinking are more than five times as likely to die from their injuries than other burns victims (Levy et al, 2004).</p> <p>While alcohol plays an important role in criminal behaviour generally (see PSA target for <a href="#">crime</a> <i>Home Office</i>), specific links have been reported between heavy alcohol use and deliberate fires, with problematic drinking frequently reported as a characteristic of arsonists: In a study of 283 arsonists in the US, 64% had been abusing alcohol or drugs at the time of their fire setting (Ritchie and Huff, 1999). Among 401 arsonists referred for psychiatric treatment in Finland, 61% suffered from alcohol abuse or dependency and 68% had committed an arson attack under acute alcohol intoxication (Lindberg et al, 2005).</p>
<p><b>Department for Transport - Target 3:</b>  By 2010, increase the use of public transport (bus and light rail) by more than 12% in England compared with 2000 levels, with growth in every region.</p>	<p>Alcohol consumption has been associated with many forms of crime (see PSA targets for <a href="#">road accidents</a> <i>Department of Transport</i> and <a href="#">fire-related deaths</a> <i>Office of the Deputy Prime Minister</i>), but heavy drinking is also related to anti-social behaviour, particularly in the nighttime economy. For instance in a Local Authority survey of problems experienced with evening and night-time activities, urinating on the street was rated as being a severe problem by 30% of local authorities, along with: threatening or unsafe areas (29%), noise disturbing local residents (28%), rowdiness or fighting in the street (24%) and vandalism (16%) (The Civic Trust, 2004).</p> <p>Heavy drinking plays an important role in the public's fear of crime and anti-social behaviour. Public drunkenness and street drinking can create feelings of intimidation in the community and fear of becoming a victim of crime:</p> <p>In the 2004/05 British Crime Survey, 22% of respondents perceived</p>

	<p>people being drunk or rowdy in public places to be a significant problem in their local area (Nicholas et al, 2005).</p> <p>In a review of experiences and perceptions of security on public transport, the presence of rowdy people under the influence of alcohol caused anxieties for men and women alike, more commonly when travelling in the evening or at night. In particular, individuals felt threatened by the unpredictable behaviour of intoxicated individuals and the potential to become a victim of alcohol-related violence (Department for Transport, 2004; see also PSA target for <a href="#">public transport</a> <i>Department for Transport</i>).</p> <p>A survey of 10-15 year olds found that 35% of boys and 48% of girls were worried about crime. Forty percent reported being frightened of drunks (Crimestoppers, 2002).</p> <p>Furthermore, perceived levels of alcohol-related crime among members of the public are increasing. For instance, 52% of people believe that alcohol-related violence in pubs and bars has risen in recent years, 61% believe this has increased on the streets, and 40% in the home (Strategy Unit, 2003).</p> <p>Feelings of safety are often associated with public perceptions of the criminal justice system, with those who believe the police to be controlling crime in the local area much more likely to report feeling safe than others (Johnson, 2005). This is important in the nighttime economy, where the presence of police and other security services, and enforcement of penalties for alcohol-related disorder may increase feelings of safety and reduce fear of victimisation.</p>
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<p><b>Department for Transport - Target 5:</b> Reduce the number of people killed or seriously injured in Great Britain in road accidents by 40% and the number of children killed or seriously injured by 50%, by 2010 compared with the average for 1994-98, tackling the significantly higher incidence in disadvantaged communities.</p>	<p>Alcohol has an important role to play in the number of road traffic accidents seen in the UK each year, with an estimated 18-43% of deaths from road traffic accidents thought to be due indirectly to alcohol (Strategy Unit, 2003). Drink driving (over a 80mg% Blood Alcohol Concentration limit) is a major issue: In a recent Home Office survey of drivers in England and Wales, 44% had driven under the influence of alcohol in the previous year, with 12% admitting to driving whilst over the limit (Brasnett, 2004). The number of casualties in road accidents that involve alcohol has been steadily rising since 2000, and the latest figures from 2004 report a total of 590 fatal casualties in collisions where one or more drivers were over the legal drinking limit (Department for Transport, 2004).</p> <p>In 2002, around a fifth of drivers killed in Great Britain on the roads whose blood alcohol level could be determined were found to be over the limit (Department for Transport, 2003). Alcohol use can increase the risk of being in a collision through impairing the cognitive skills and co-ordination needed to safely drive a vehicle. Intoxicated individuals have slower reaction times; reduced ability to perform two tasks at the same time; impaired vision; impaired driving skills such as steering; and increased feelings of sleepiness. Furthermore, for those involved in an accident, the use of alcohol increases the likelihood of sustaining a severe and extensive injury (Ogden and Moskowitz, 2004).</p> <p>While alcohol use can affect driving ability, the effects of drinking can also be a problem for pedestrians. For instance in 2004, 38% of pedestrian fatalities in Great Britain had blood alcohol concentration levels over the legal limit for driving. Again, reduced cognitive and co-ordination skills caused by intoxication can increase the likelihood of an accident occurring, and increase the severity of injuries sustained (Bradbury, 1991).</p>
<p><b>Department for Constitutional Affairs - Target 2:</b> Reassure the public, reducing the fear of crime and anti-social behaviour, and building confidence in the Criminal Justice System without compromising fairness - <i>target contributing to the Criminal Justice System PSA.</i></p>	<p>Alcohol consumption has been associated with many forms of crime (see PSA targets for <a href="#">road accidents</a> <i>Department of Transport</i> and <a href="#">fire-related deaths</a> <i>Office of the Deputy Prime Minister</i>), but heavy drinking is also related to anti-social behaviour, particularly in the night-time economy. For instance in a Local Authority survey of problems experienced with evening and night-time activities, urinating on the street was rated as being a severe problem by 30% of local authorities, along with: threatening or unsafe areas (29%), noise disturbing local residents (28%), rowdiness or fighting in the street (24%) and vandalism (16%) (The Civic Trust, 2004).</p> <p>Heavy drinking plays an important role in the public's fear of crime and anti-social behaviour. Public drunkenness and street drinking can create feelings of intimidation in the community and fear of becoming a victim of crime:</p> <p>In the 2004/05 British Crime Survey, 22% of respondents perceived people being drunk or rowdy in public places to be a significant problem in their local area (Nicholas et al, 2005).</p> <p>In a review of experiences and perceptions of security on public transport, the presence of rowdy people under the influence of alcohol caused anxieties for men and women alike, more commonly when travelling in the evening or at night. In particular, individuals felt threatened by the unpredictable behaviour of intoxicated individuals and the potential to become a victim of alcohol-related violence (Department for Transport, 2004; see also PSA target for <a href="#">public transport</a> <i>Department for Transport</i>).</p>

	<p>A survey of 10-15 year olds found that 35% of boys and 48% of girls were worried about crime. Forty percent reported being frightened of drunks (Crimestoppers, 2002).</p> <p>Furthermore, perceived levels of alcohol-related crime among members of the public are increasing. For instance, 52% of people believe that alcohol-related violence in pubs and bars has risen in recent years, 61% believe this has increased on the streets, and 40% in the home (Strategy Unit, 2003).</p> <p>Feelings of safety are often associated with public perceptions of the criminal justice system, with those who believe the police to be controlling crime in the local area much more likely to report feeling safe than others (Johnson, 2005). This is important in the night-time economy, where the presence of police and other security services, and enforcement of penalties for alcohol-related disorder may increase feelings of safety and reduce fear of victimisation.</p>
<b>Crown Prosecution Service</b>	

<p><b>Crown Prosecution Service - Target 2:</b> Reassure the public, reducing the fear of crime and anti-social behaviour, and building confidence in the Criminal Justice System without compromising fairness - <i>target contributing to the Criminal Justice System PSA.</i></p>	<p>Alcohol consumption has been associated with many forms of crime (see PSA targets for <a href="#">road accidents</a> <i>Department of Transport</i> and <a href="#">fire-related deaths</a> <i>Office of the Deputy Prime Minister</i>), but heavy drinking is also related to anti-social behaviour, particularly in the night-time economy. For instance in a Local Authority survey of problems experienced with evening and night-time activities, urinating on the street was rated as being a severe problem by 30% of local authorities, along with: threatening or unsafe areas (29%), noise disturbing local residents (28%), rowdiness or fighting in the street (24%) and vandalism (16%) (The Civic Trust, 2004).</p> <p>Heavy drinking plays an important role in the public's fear of crime and anti-social behaviour. Public drunkenness and street drinking can create feelings of intimidation in the community and fear of becoming a victim of crime:</p> <p>In the 2004/05 British Crime Survey, 22% of respondents perceived people being drunk or rowdy in public places to be a significant problem in their local area (Nicholas et al, 2005).</p> <p>In a review of experiences and perceptions of security on public transport, the presence of rowdy people under the influence of alcohol caused anxieties for men and women alike, more commonly when travelling in the evening or at night. In particular, individuals felt threatened by the unpredictable behaviour of intoxicated individuals and the potential to become a victim of alcohol-related violence (Department for Transport, 2004; see also PSA target for <a href="#">public transport</a> <i>Department for Transport</i>).</p> <p>A survey of 10-15 year olds found that 35% of boys and 48% of girls were worried about crime. Forty percent reported being frightened of drunks (Crimestoppers, 2002).</p> <p>Furthermore, perceived levels of alcohol-related crime among members of the public are increasing. For instance, 52% of people believe that alcohol-related violence in pubs and bars has risen in recent years, 61% believe this has increased on the streets, and 40% in the home (Strategy Unit, 2003).</p> <p>Feelings of safety are often associated with public perceptions of the criminal justice system, with those who believe the police to be controlling crime in the local area much more likely to report feeling safe than others (Johnson, 2005). This is important in the night-time economy, where the presence of police and other security services, and enforcement of penalties for alcohol-related disorder may increase feelings of safety and reduce fear of victimisation.</p>
<p>Department of Trade and Industry</p>	

**Department of Trade and Industry - Target 1:**

Demonstrate further progress by 2008 on the Government's long-term objective of raising the rate of UK productivity growth over the economic cycle, improving competitiveness and narrowing the gap with our major industrial competitors - *joint with the HM Treasury.*

Heavy alcohol consumption can affect workplace productivity, increase the costs of running a business and impair a business' ability to compete effectively (Alcohol Concern, 2006). Total alcohol-related output lost to the economy as a result of alcohol is estimated to be £6.4bn per annum (see PSA target for [economic performance](#) *Office of the Deputy Prime Minister*), through:

**Increased sickness and absenteeism.** Although results are mixed, in general research reports either a linear or U-shape relationship between alcohol consumption and absenteeism, with heavy drinkers (and sometimes non-drinkers) having higher absence rates due to sickness (Gmel and Rehm, 2003). Between 6 and 15% of all workplace absences are related to alcohol, which is equivalent to 17 million days per year (Strategy Unit, 2003a). This causes an estimated £1.5bn loss to the UK economy each year (Strategy Unit, 2003b).

**Poor performance.** Several studies have reported a negative relationship between alcohol consumption and job performance. Workers with the heaviest drinking patterns are also more likely to get into work late, leave early and complete less work during the day (Mangione et al, 1999). Alcohol-related behaviours such as withdrawal, mood changes, uncharacteristic behaviour and alcohol on the breath may create problems for both customers and colleagues (SOLCO s.r.l. et al, 2003). Some authors have suggested heavy drinkers may avoid taking sick leave specifically to cover up a drinking problem, which could lead to longer breaks during the day or sleeping while at work (Gmel and Rehm, 2003).

**Workplace injuries.** Decreased co-ordination and cognitive skills or drowsiness caused by alcohol consumption during the working day can increase the risk of mistakes and the likelihood of workplace accidents. An estimated 20-25% of all workplace accidents are related to alcohol (Henderson et al, 1996) (see also PSA target for [workplace risks](#) *Department for Work and Pensions*).

**Unemployment or early retirement.** Evidence suggests that heavy alcohol use is associated with unemployment. For instance, 36% of those receiving help for alcohol problems are unemployed (Alcohol Concern, 1997), and problem drinking by men is thought to account for between a 7 and 31% drop in the probability of working (Strategy Unit, 2003a). An estimated £1.9bn is lost annually in the UK from a reduction in employment related to alcohol (Strategy Unit, 2003b) (see also PSA target for [unemployment](#) *Department for Work and Pensions*).

**Premature deaths.** Excessive drinking increases the risk of dying from a number of acute and chronic conditions (e.g. injuries, accidents, cardiovascular disease, cancer - see PSA target for [mortality](#) *Department of Health*), and between 15,000 and 22,000 deaths each year in the UK are thought to be attributable to alcohol (Strategy Unit, 2003a). While only a proportion of these individuals will be of working age, an estimated 58,000 potential years of working life are lost annually through premature alcohol-related death (Strategy Unit, 2003a), a loss to the economy of around £2.4bn each year (Strategy Unit, 2003b).

Problem drinking can impact on the ability to hold down a job,

	<p>increasing the costs of recruitment and training for employers. For instance, those with a history of alcohol misuse are more likely to change jobs more often or to have reduced weeks in employment (Booth and Feng, 2002). However, while the effects of alcohol use may adversely impact on workplace productivity, it is possible that work-related factors such as job stress, boredom and repetitive tasks are related to both heavy alcohol use (e.g. Ames and Janes, 1992) and poor job performance (e.g. Parker and Kulik, 1995).</p>
<p><b>Department for Work and Pensions</b></p> <p><b>Department for Work and Pensions - Target 4:</b></p> <p>As part of the wider objective of full employment in every region, over the three years to Spring 2008, and taking account of the economic cycle:</p> <ol style="list-style-type: none"> <li><b>Demonstrate progress on increasing the employment rate - joint with HM Treasury;</b></li> <li><b>Increase the employment rates of disadvantaged groups (lone parents, ethnic minorities, people aged 50 and over, those with the lowest qualifications and those living in the local authority wards with the poorest initial labour market position); and</b></li> <li><b>Significantly reduce the difference between the employment rates of the disadvantaged groups and the overall rate.</b></li> </ol>	<p>The costs of heavy and problematic drinking on workplace productivity have been well documented (see PSA targets for <a href="#">economic performance</a> <i>Office of the Deputy Prime Minister</i> and <i>Department of Trade and Industry</i> and <a href="#">workplace productivity</a> <i>Department for Work and Pensions</i>). Related to this, evidence suggests a link between heavy alcohol consumption and unemployment. The majority of research suggests that problem drinking negatively impacts on an individual's probability of employment. For instance a number of studies find that problem drinkers are less likely to be employed and more likely to be unemployed (Mullahy and Sindelar, 1996; Terza, 2002), with one study reporting that problem drinking leads to a reduction in the probability of working by between 7 and 31% (MacDonald and Shields, 2004). Heavy alcohol use is related to the risk of being fired or resigning from a job. Additionally, just over a third (36%) of those receiving help for alcohol problems are unemployed (Alcohol Concern, 1997).</p> <p>However, not all studies find evidence of an association. Some research suggests that being out of work lowers alcohol consumption and dependence symptoms significantly. Reductions in employment may discourage drinking through lowering the income available to purchase alcohol (Ettner, 1997).</p> <p>The reasons for a link between unemployment and heavy alcohol use are thought to be complex (Mullahy and Sindelar, 1996): The cognitive and physical effects of alcohol use can reduce job performance and productivity, increase sickness rates (see PSA target for <a href="#">workplace productivity</a> <i>Department of Trade and Industry</i>), and heighten the risk of injury (see PSA target for <a href="#">workplace risks</a> <i>Department for Work and Pensions</i>), all of which can impact on an employee's reliability and ability to hold down a job as well as hindering their chances of finding future employment.</p> <p>Conversely (or simultaneously), unemployment may be the cause of increased alcohol consumption. For instance drinking may be used as a way of coping with the emotional and financial stress of unemployment, while increased leisure time may provide greater opportunities to drink.</p> <p>Alternatively, heavy alcohol use and unemployment may co-occur through other risk factors that increase the propensity for both to occur, such as chronic physical and mental health problems, physical pain, injuries or social stresses.</p>

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## Appendix C - The four tiers of interventions

The following tables suggest what should be commissioned in local alcohol treatment systems from Models of Care for Alcohol Misuse

### **Tier 1 interventions: alcohol-related information and advice; screening; simple brief interventions; and referral**

**Definition** Tier 1 interventions include provision of: identification of hazardous, harmful and dependent drinkers; information on sensible drinking; simple brief interventions to reduce alcohol-related harm; and referral of those with alcohol dependence or harm for more intensive interventions.

**Interventions** Commissioners need to ensure that a range of generic services provide as a minimum the following Tier 1 alcohol interventions:

- alcohol advice and information
- targeted screening and assessment for those drinking in excess of DH guidelines on sensible drinking and for those who may need alcohol treatment
- provision of simple brief interventions for hazardous and harmful drinkers
- referral of those requiring more than simple brief interventions for specialised alcohol treatment
- partnership or 'shared care' with specialised alcohol treatment services, e.g. to provide specific alcohol treatment interventions within the context of their generic services.

**Settings** Tier 1 interventions can be delivered by a very wide range of agencies and in a range of settings, the main focus of which is not alcohol treatment. For example: primary healthcare services; acute hospitals, e.g. A&E departments;

psychiatric services; social services departments; homelessness services;

- antenatal clinics; general hospital wards; police settings, e.g. custody cells;
- probation services; the prison service; education and vocational services;
- and occupational health services.

Such interventions can also be provided in highly specialist non-alcohol-specific residential or inpatient services, which have service users with high levels of alcohol-related morbidity who may require care plans and support to facilitate their access to alcohol-specific provision. Examples include: specialist liver disease units, specialist psychiatric wards, forensic units, residential provision for the homeless, and domestic abuse services.

**Competency** This is provision that depends on at least minimal skills in alcohol misuse identification, assessment and interventions. Those delivering Tier 1 provision may require the following competences from the Drugs and Alcohol National Occupational Standards (DANOS):<sup>17</sup>

- AA1 Recognise indications of substance misuse and refer individuals to specialists
- AF1 Carry out screening and referral assessment
- AH10 Carry out brief interventions with alcohol users
- AB2 Support individuals who are substance misusers
- AB5 Assess and act upon immediate risk of danger to substance misusers.

### **Tier 2 interventions: open access, non-care-planned, alcohol-specific interventions**

**Definition** Tier 2 interventions include provision of open access facilities and outreach that provide: alcohol-specific advice, information and support; extended brief interventions to help alcohol misusers reduce alcohol-related harm; and assessment and referral of those with more serious alcohol-related problems for care-planned treatment.

**Interventions** Tier 2 interventions include open access facilities and outreach targeting alcohol misusers, which provide:

- alcohol-specific information, advice and support
- extended brief interventions and brief treatment to reduce alcohol-related harm
- alcohol-specific assessment and referral of those requiring more structured alcohol treatment
- partnership or 'shared care' with staff from Tier 3 and Tier 4 provision, or joint care of individuals attending other services providing Tier 1 interventions
- mutual aid groups, e.g. Alcoholics Anonymous
- triage assessment, which may be provided as part of locally agreed arrangements.

**Settings** Tier 2 provision may be delivered by the following agencies, if they have the necessary competence, and in the following settings: specialist alcohol services; primary healthcare services; acute hospitals, e.g. A&E and liver units; psychiatric services; social services; domestic abuse agencies; homelessness services; antenatal clinics; probation services; the prison service; and



occupational health services.

**Competency** Tier 2 interventions require competent alcohol workers who should have basic competences in line with DANOS,<sup>17</sup> including those required for Tier 1. Competency can also depend on what cluster of services is provided. Front-line staff would normally have competence in motivational approaches and brief interventions. Those providing interventions at Tier 2 may require the following competences from DANOS:<sup>17</sup>

- AB2 Support individuals who are substance users
- AB5 Assess and act upon immediate risk of danger to substance users
- AF2 Carry out assessment to identify and prioritise needs
- AG1 Plan and agree service responses which meet individuals' identified needs
- AH10 Carry out brief interventions with alcohol users.

### **Tier 3 interventions: community-based, structured, care-planned alcohol treatment**

**Definition** Tier 3 interventions include provision of community-based specialised alcohol misuse assessment, and alcohol treatment that is care co-ordinated and care-planned.

**Interventions** Tier 3 interventions include:

- comprehensive substance misuse assessment
- care planning and review for all those in structured treatment, often with regular keyworking sessions as standard practice
- community care assessment and case management of alcohol misusers
- a range of evidence-based prescribing interventions, in the context of a package of care, including community-based medically assisted alcohol withdrawal (detoxification) and prescribing interventions to reduce risk of relapse
- a range of structured evidence-based psychosocial therapies and support within a care plan to address alcohol misuse and to address co-existing conditions, such as depression and anxiety, when appropriate
- structured day programmes and care-planned day care (e.g. interventions targeting specific groups)
- liaison services, e.g. for acute medical and psychiatric health services (such as pregnancy, mental health or hepatitis services) and social care services (such as child care and housing services and other generic services as appropriate).

**Settings** Tier 3 interventions are normally delivered in specialised alcohol treatment services with their own premises in the community (or sometimes on hospital sites). Other delivery may be by outreach (peripatetic work in generic services or other agencies, or domiciliary or home visits). Tier 3 interventions may be delivered alongside Tier 2 interventions. Some of the Tier 3 work is based in primary care settings (shared care schemes and GP-led prescribing services), but alcohol specialist-led services are required within the local systems for the provision of care for severe or complex needs and to support primary care. The work in community settings can be delivered by statutory, voluntary or independent services providing care-planned, structured alcohol treatment.

**Competency** Tier 3 services require competent drug and alcohol specialised practitioners who should have competences in line with DANOS.<sup>17</sup> The range of competences required will depend on job specifications and remits. Those delivering Tier 3 interventions may require a wide range of competences from Key Area A in DANOS<sup>17</sup> and many of the competences from Area AH, depending on the type of alcohol treatment provided. Medical staff (usually addiction psychiatrists and GPs) will require different levels of competence, depending on their role in alcohol treatment systems and the needs of the service user, with each local system requiring a range of doctor competences (from specialist to generalist) in line with joint guidance from the Royal Colleges of General Practitioners and Psychiatrists, *Roles and responsibilities of doctors in the provision of treatment for drug and alcohol misusers*,<sup>18</sup> summarised in the National Treatment Agency for Substance Misuse briefing document *Roles and responsibilities of doctors in the provision of treatment for drug and alcohol misusers*.<sup>19</sup>

### **Tier 4 interventions: alcohol specialist inpatient treatment and residential rehabilitation**

**Definition** Tier 4 interventions include provision of residential, specialised alcohol treatments which are care-planned and co-ordinated to ensure continuity of care and aftercare.

**Interventions** Tier 4 interventions include:

- comprehensive substance misuse assessment, including complex cases when appropriate
- care planning and review for all inpatient and residential structured treatment
- a range of evidence-based prescribing interventions, in the context of a package of care, including medically assisted alcohol withdrawal (detoxification) in inpatient or residential care and prescribing interventions to reduce risk of relapse
- a range of structured evidence-based psychosocial therapies and support to address alcohol misuse
- provision of information, advice and training and 'shared care' to others delivering Tier 1 and Tier 2 and support for Tier 3 services as appropriate.

**Settings** Specialised statutory, independent or voluntary sector inpatient facilities for medically assisted alcohol withdrawal (detoxification), stabilisation and assessment of complex cases. Residential rehabilitation units for alcohol misuse. Dedicated specialised inpatient alcohol units are ideal for inpatient alcohol assessment, medically assisted alcohol withdrawal (detoxification) and stabilisation. Inpatient provision in the context of general psychiatric wards may only be ideal for some patients with co-morbid severe mental illness, but many such patients might benefit from a dedicated addiction specialist inpatient unit.

Those with complex alcohol and other needs requiring inpatient interventions may require hospitalisation for their other needs (e.g. pregnancy, liver problems) and this may be best provided for in the context of those hospital services (with specialised alcohol liaison support).

**Competency** Inpatient and residential interventions providing medically assisted alcohol withdrawal (detoxification) and specialist assessment and stabilisation would normally require medical staff with specialist competence in substance misuse (rather than generalist GPs). The level of specialised medical staff competence required will depend on the types of service provided and the severity of the service users' problems. Addiction specialist competences will be needed for inpatient units for severe and complex problems. Suitably competent GPs can provide support to some units for patients with less complex needs. Staff in residential rehabilitation units that are registered care homes will need to meet relevant social care national occupational standards. Hospital-based services will also be required to meet practitioner standards for independent or NHS hospitals.

Those delivering Tier 4 interventions may require a wide range of competences from Key Area A in DANOS,<sup>17</sup> and in particular many of the competences from Area AH 'Deliver healthcare services, depending on the alcohol treatment provided'. All staff working in all residential settings are advised to demonstrate competence against DANOS<sup>17</sup> at both manager and practitioner levels.