

High Risk Offenders' reconviction patterns

Prepared for Road Safety Division, Department for Transport, Local Government and the Regions

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In 1999, TRL completed an investigation into the working of the High Risk Offender (HRO) Scheme for the Department for Transport, Local Government and the Regions (DTLR, formerly Department of the Environment, Transport and the Regions). This included analyses of driving licence information from the Driver and Vehicle Licensing Agency (DVLA). DTLR subsequently commissioned TRL to explore certain issues in greater detail, and this report presents the results of these new analyses.

Since June 1990, there have been three criteria under which a driver who is disqualified for a drink/driving offence may be classified as a High Risk Offender. Two of these involve the driver's Blood Alcohol Concentration (BAC):

- provision of an evidential sample with an alcohol level exceeding 2½ times the legal limit (equivalent to 200mg/100ml BAC);
- 2 provision of an evidential sample with an alcohol level between 1 and 2½ times the legal limit (equivalent to 81-200mg/100ml BAC), having been disqualified for a drink/driving offence in the previous ten years; or
- 3 refusal to supply an evidential sample.

The practical consequence of becoming an HRO is that the driver's licence is not reissued automatically once the period of disqualification has ended, as currently occurs for most other groups of offender. Instead, the HRO must apply for a new licence, and one is only issued after a satisfactory medical assessment by the Drivers Medical Group at DVLA. The treatment of an HRO does not depend upon the particular criteria under which they became an HRO, but research has found that the three types of HRO defined by these criteria have distinctive characteristics.

The earlier investigation of HROs found that those who had committed previous drink/drive offences were more likely than others to re-offend, more likely even those who had been driving with high alcohol levels. This brought into question the widely held view that high alcohol levels pose particularly high risks, rather than re-offending behaviour. To study this, the first and third HRO categories were subdivided according to whether or not offenders had committed previous drink/drive offences.

First, the most appropriate period to examine for any previous drink/drive offence had to be selected. It was found that as the period was shortened so the proportion of HROs who subsequently reoffended grew. The period of 36 months was chosen to achieve good discrimination between 'reoffenders' and other HROs whilst providing sufficient numbers of offenders for reliable analysis. Thus, HRO types 1 and 3 were subdivided into those who had committed an offence up to three years before they became an HRO - the 'reoffenders' - and those who had not.

The subsequent convictions of those who became HROs in 1995 were studied in detail. It was found that the proportion of HROs who were convicted subsequently was higher for reoffenders than other HROs. For example, the proportion of men who were reconvicted during the first two years after becoming an HRO was as follows (most HROs were disqualified from driving for at least two years after becoming an HRO):

	Had they committed an offence up to three years before becoming an HRO.		
	Yes	No	
HRO1	10.3%	4.0%	
HRO2	10.6%	6.8%	
HRO3	12.8%	6.9%	

The same pattern was also found when longer periods after becoming an HRO were studied: those who had committed a previous offence were more likely to be reconvicted than those who had not.

Thus, reoffenders form a particularly high risk subset of the High Risk Offenders. Nevertheless, they form only a small minority: of those who became HROs between 1995-2000, only 2.5 per cent of HRO1s and 5.4 per cent of HRO3s were reoffenders. Reoffenders tended to be younger than other HROs; their mean age was at least 3 years less than the mean age of those with no previous offences. They are mainly men: the proportion of women among reoffending HROs was even lower than the proportion among HROs generally.

Reoffenders tend to be disqualified from driving for longer periods than other HROs, by 9 months on average, although they are often fined less than other HROs. It has been surprising to find that mean fines and disqualification periods for most types of HRO fell between 1995 and 2000. The mean length of disqualification was 28.7 months in 1995 and 27.1 months in 2000, and among the HROs who were fined, the mean fine fell from £358 in 1995 to £305 in 2000. The mean fine was greatest for HRO1s, e.g. £376 in 2000, while it was £266 for HRO2s and £241 for HRO3s in that year. The mean disqualification period was longest for HRO2s, e.g. 34.5 months in 2000, while it was 26.6 months for HRO1s and 19.8 months for HRO3s.

The DVLA data include details of the other types of driving offence committed by HROs. The commonest types were Insurance and Licensing offences, many of which were committed *before* the drivers became HROs. Thus, many HROs were already driving illegally before becoming HROs. Of the five HRO types, HRO3 reoffenders had the highest rates of non-drink/drive offences, in particular 'Driving while disqualified'. Among the less common types of offence, they had relatively high rates of 'Aggravated taking of a vehicle' and 'Reckless/ Dangerous Driving' offences.

The DVLA file includes codes that record sentences in addition to fines and disqualifications. 33 per cent of new HROs received an additional sentence - mostly Probation (14 per cent of HROs), Community service order (11 per cent) and Imprisonment (5.8 per cent). Reoffenders were more likely than other offenders to receive an additional sentence, and about one fifth were imprisoned. Over one third of HROs who were convicted of another drink/drive offence after becoming an HRO were then imprisoned.

The report provides a broader context for these analyses of offences and offenders with various analyses of accident data from 1995-99, in particular relating to the role of women. The breath test results recorded in the STATS19 accident database reproduce certain features of the offence data, such as the increase over recent years of the proportion of drink/drivers who are women. On the other hand, this proportion was higher than the proportion of HROs who are woman. Women drivers involved in accidents were less likely than men to be drink/drivers, as was confirmed by the alcohol levels of dead drivers supplied by Coroners in England and Wales and Procurators Fiscal in Scotland. One interesting feature of these alcohol levels is that, of the drivers who had illegal alcohol levels, 50 per cent of women had more than 21/2 times the legal limit compared with 40 per cent of men.

Evidence from recent surveys of the consumption of alcohol in the general population is reviewed briefly. The proportion of women whose alcohol consumption exceeded 14 units per week rose from 10 to 15 per cent between 1988-98, while the proportion of men whose consumption exceeded 21 units per week stayed constant at 27 per cent. Among the young (12-21 years old), there is now little difference between males and females in their consumption of alcohol. This suggests that the existing gap between the level of drink/driving among men and women may gradually close in future, causing the proportion of HROs who are women to rise.

1 Introduction

In 1999, TRL completed an investigation into the working of the High Risk Offender (HRO) Scheme for the Department for Transport, Local Government and the Regions (DTLR, formerly Department of the Environment, Transport and the Regions) (Davies *et al.*, 1999a). One part of that research consisted of analysing information from the driving licence records of High Risk Offenders held by the Driver and Vehicle Licensing Agency (DVLA) at Swansea. DTLR subsequently commissioned TRL to explore in greater detail certain issues that had arisen during these earlier analyses, and this report presents the results of these new analyses. In addition, TRL has arranged to be supplied with extra details from the licence records, and analyses of this additional information are also presented.

Since June 1990, there have been three criteria under which a driver who is disqualified for a drink/driving offence may be classified as a High Risk Offender. Two of these involve the driver's Blood Alcohol Concentration (BAC):

- provision of an evidential sample with an alcohol level exceeding 2½ times the legal limit (equivalent to 200mg/100ml BAC);
- 2 provision of an evidential sample with an alcohol level between 1 and 2¹/₂ times the legal limit (equivalent to 81-200mg/100ml BAC), having been disqualified for a drink/driving offence in the previous ten years; or
- 3 refusal to supply an evidential sample.

The practical consequence of becoming an HRO is that the driver's licence is not reissued automatically once the period of disqualification has ended, as currently occurs for most other groups of offender. Instead, the HRO must apply for a new licence, and one is only issued after a satisfactory medical assessment by the Drivers Medical Group at DVLA.

The treatment of an HRO does not depend upon the particular criteria under which they became an HRO, but research summarised by Maycock (1997) has found that the three types of HRO defined by these criteria have distinctive characteristics. This earlier research has contributed to the widely-held view that driving with an alcohol level of at least 21/2 times the legal limit poses particularly high risks, and consequently the analyses reported by Davies et al. (1999a) compared the characteristics of these three types of HRO. The results showed that HROs of the second type (i.e. with a previous offence) were more likely to reoffend than the other types, and this emphasised the significance of reoffending rather than high alcohol levels. Consequently, two of the HRO types have been subdivided for the analyses presented in this report, and the following types will be compared:

- 1A an offence with BAC > 200mg/100ml and no previous drink/drive offence;
- 1B an offence with BAC > 200mg/100ml plus a previous drink/drive offence;
- 2 an offence with BAC between 81 and 200mg/100ml BAC, having been disqualified for a drink/driving offence in the previous ten years;

- 3A a refusal to supply an evidential sample and no previous drink/drive offence;
- 3B a refusal to supply an evidential sample and a previous drink/drive offence.

Section 2 presents various comparisons of these five types. The period prior to becoming an HRO that is to be examined when checking for any 'previous drink/drive offence' needs to be selected. The factors that might influence the selection are discussed, and the consequences of alternative choices examined.

Davies *et al.* (1999a) described the system for supplying the driving licence details of HROs to TRL every six months, to support its programme of research into drink/ driving that is carried out for the DTLR. The supply of information has continued since then, and the results presented below come from analyses of the file of data that was supplied in November 2000. The file contains information about offenders who were convicted up to October 2000, although the data are only assumed to be complete up to the end of June 2000 because of possible delays between conviction and the entry of information supplied by Courts onto the DVLA database.

The file sent to TRL contains selected details from every licence record with an 'HRO Indicator'. This indicator is set for any driver who became an HRO since the new HRO scheme began in June 1990. It is also set for any driver who, while not currently an HRO, has been convicted of a drink/driving offence and could become an HRO (under the second criterion) if they were convicted of another offence. The great majority of 'ordinary' (i.e. non-HRO) drink/drive offenders fall into this category and are included automatically when the file is prepared.

Davies *et al.* (1999a) described the licensing data that were supplied at the time of the earlier analyses. Subsequently, TRL arranged for the following additional information to be supplied:

- any fine imposed for the drink/driving offence;
- any additional sentence, such as imprisonment.

Further details are provided in Section 3, together with various analyses of the extra information. Section 3 also examines the other types of driving offence for which HROs had been convicted, and the sentences imposed. To set these analyses of drink/drive offences in context, Section 4 examines recent trends in drink/drive accidents. Finally, Section 5 brings together the principal conclusions that can be drawn from these analyses.

2 Repeat offenders

As explained in the Introduction, one reason for extending the previous research was the concern that the use of only three HRO types did not place sufficient weight on the possibility that HRO types 1 and 3 may have committed previous drink/drive offences. Davies *et al.* (1999a) found that '23 per cent of those becoming an HRO because of an offence with BAC > 200 have been convicted in the previous 10 years with BAC between 81 and 200; 33 per cent of those becoming an HRO because of refusing to supply a specimen have been convicted of a drink/drive offence in the previous 10 years'.

Accordingly, HRO types 1 and 3 have been sub-divided into type A with *no* previous drink/ drive conviction and type B with one or more previous convictions. The period to be examined for a previous conviction needs to be selected, and the natural choice is probably ten years – largely because of the second criterion for becoming an HRO. There are two main reasons, however, for considering a shorter period. The first is that this would focus on those whose recent behaviour indicates a continuing problem of drink/driving, whereas someone who reoffends after 9½ years may pose fewer risks.

The second main reason is that the longer the period, the greater the restriction imposed by the removal of details of drink/drive convictions from licensing records. Details of a drink/drive conviction can be removed from DVLA records 11 years after conviction (the period is much shorter for other offences, as discussed in Section 3.3). Hence, the file of DVLA data should have complete details of these convictions from late 1989: details from any earlier period are likely to be incomplete.

The practical consequences of the removal of drink/ drive convictions from the DVLA file are demonstrated by calculations of the number of HROs per year. When estimates for 1995 and 1996 derived from the latest dataset were compared with estimates presented by Davies *et al.* (1999a) derived from the dataset that was prepared in April 1998 (i.e. 2¹/₂ years earlier), it was found that:

- the number of HROs of type 1 and 3 matched very closely; but
- the number of HROs of type 2 was 7 per cent less in 1995 and 5½ per cent less in 1996

Thus, a significant number of records of convictions from the late 1980s have been removed from the DVLA file since April 1998, which means that a proportion of HROs of type 2 cannot be identified with the current data. The HRO Indicator has been set for these records, so it is known that they are HROs, but the available offence details do not show why.

This loss of information must be taken into account when designing analyses. If the previous ten years are examined for a previous conviction, it would be impossible to determine with certainty whether or not someone who became an HRO before 1999 had a previous conviction: the details of an actual conviction could quite legitimately have been removed. Consequently, to avoid any risk of misclassification, only the records of those who became HROs from early 1999 onwards should be analysed. If, on the other hand, a shorter period were to be examined, this date would move back – providing more records for analysis and hence results that are more robust statistically.

As the 'previous period' to be searched for a previous conviction is reduced, some drivers will cease to be classified as repeat offenders and will transfer from HRO types 1B and 3B to types 1A and 3A. The classification of HRO2s is based on the legal criterion of re-offending within 10 years, so conviction rates for HRO2s are unchanged as the length of the previous period is varied. This previous period could, in principle, be used to classify HRO2s as well as other types of HRO, but some would cease to be HROs with periods of less than 120 months (10 years) and it would be confusing to have this additional degree of freedom. Nevertheless, in certain cases results will be presented for those who became HROs because of a second conviction within a period of *less than* 10 years, as well as for HRO2s in general.

Section 2.1 compares reconviction rates calculated with alternative periods and selects the most appropriate value which is used in all subsequent analyses. Section 2.2 presents various analyses of the incidence of the five HRO types.

2.1 Alternative previous periods

The main point of sub-dividing HRO types 1 and 3 is to identify the sub-groups at higher risk of re-offending. Two indices will be used to examine this risk: the mean number of convictions per driver per year *whilst disqualified* for drink/driving and for driving while disqualified. To minimise the risk of misclassification, the analysis is confined to those who became HROs in 1999-2000 and the offences they committed subsequently. Even those HROs who were disqualified at the beginning of the period, in January 1999, had at most 21 months in which to reoffend, so only male rates will be examined because they are considerably higher than female rates.

Table 1 analyses the offences committed after becoming an HRO, examining 4 alternative 'previous periods' for drink/drive offences. The table includes the numbers of offences as well as the rates. It can be seen how, as the 'previous period' extends, drivers are progressively reclassified as repeat offenders and transfer from HRO types 1A and 3A (no offence during previous period) to types 1B and 3B (at least one offence).

The B rates are higher than the corresponding A rates in all cases, and the difference grows as the previous period falls from 120 months to 36. This trend continues for three of the four comparisons as it falls from 36 to 24 months, but the numbers of offences and offenders are rather small when the previous period is only 24 months so chance will have more effect on the results.

Thus, the period of 36 months discriminates successfully between 'reoffenders' and other HROs whilst providing sufficient numbers of offenders for reliable analysis. Consequently, for the remainder of this work, HRO types 1B and 3B will be defined as those who had committed a drink/drive offence up to 36 months before the date when they became an HRO.

Table 1 compared reconviction rates for drivers who became HROs in 1999-2000. The next Section investigates the drivers who became HROs in 1995-2000, so Table 2 presents reconviction rates for this set of HROs and the 'standard' previous period of 36 months. Drink/drive convictions are divided between offences committed whilst disqualified and those committed after a new driving licence had been issued.

It was suggested above, as the first main reason for looking for previous offences over a period of less than 10 years, that those who reoffend over shorter periods tend to pose the greater risks. If this were true then it would be unfair to

Table 1 Reconviction rates for alternative previous periods

Offence										
Previous period (months) ¹	1A		1B		2	2		<i>3A</i>		3
Drink/driving										
24	0.017	315	0.049	11			0.032	236	0.060	16
36	0.018	306	0.043	20			0.031	223	0.061	29
72	0.017	273	0.037	53			0.030	202	0.049	50
120	0.016	248	0.031	78	0.035	398	0.029	181	0.045	71
Driving while disqualified										
24	0.038	658	0.130	29			0.088	655	0.142	38
36	0.037	635	0.112	52			0.087	628	0.137	65
72	0.035	570	0.082	117			0.088	585	0.107	108
120	0.035	525	0.065	162	0.103	1178	0.088	536	0.101	157

The table shows the reconviction rate (mean number of convictions per driver per year) and the number of convictions

¹ Period examined for a previous conviction for drink/driving

Table 2 Reconviction rates for five types of HRO,1995-2000

Offence	Offence										
Sex	HRO1A	HRO1B	HRO2	HRO3A	HRO3B	HRO2 ³					
Drink/dri	ving (whilst	disqualifie	d)								
Male	0.020	0.053	0.034	0.031	0.053	0.051					
Female	0.008	0.026	0.018	0.015	0.016	0.024					
Drink/dri	ving (after e	nd of disqu	ıalificatio	n)							
Male	0.025	0.048	0.036	0.035	0.050	0.053					
Female	0.014	0.010	0.023	0.020	0.022	0.044					
Driving w	hile disqua	lified									
Male	0.042	0.109	0.101	0.100	0.147	0.156					
Female	0.018	0.060	0.062	0.041	0.041	0.087					

Rates in 'italics' have 95% confidence intervals of ±0.010 or greater

compare the reconviction rates of HRO2s, who became HROs because of a second conviction within 10 years, with HRO1Bs and HRO3Bs who were reconvicted within 3 years. To provide a fairer comparison, a subset of HRO2s will be defined: let an HRO2³ be a driver who became an HRO2 because of a second conviction within 3 years – rather than 10. Thus, the definition of HRO2 is unchanged but a specific subset of offenders who may pose higher risks will be examined in parallel with the full set of HRO2s.

The main male rates in Table 2 are based on large numbers of offences, so their 95% confidence intervals are

Table 3 The incidence of HROs, 1995-2000

 ± 0.002 or less. The female rates are based on far fewer offences and hence are more likely to be affected by chance; rates with 95% confidence intervals of ± 0.010 or greater are shown in italics.

Reconviction rates are much higher for type B HROs than for type A in all cases where they are relatively precise, indeed they are also higher than for HRO2s; however, they are broadly similar to the rates for HRO2³s. The refinement of the classification of HROs that is being tested has proved capable of identifying groups of HROs who are particularly likely to re-offend. It is depressing to note that the ending of their period of disqualification appears to have virtually no effect on the willingness of HROs of all types to drink and drive.

2.2 The incidence of HRO types

Table 3 shows the number of new HROs per year since 1995, together with various details of the distribution of HROs; data for HRO2s from 1995 and 1996 have been adjusted to allow for the loss of information discussed above. While the annual total has fallen since 1997, the proportion of females has risen steadily. Female HROs are less likely than males to be repeat HROs, but this proportion has also risen. The proportion of HROs with BAC > 200 (type 1) peaked in 1998, whilst the proportion of refusers (type 3) has risen sharply since 1998.

For more detailed analysis by age, Table 4 now brings together HROs from the six years 1995-2000. The proportion

	Number of	Proportion	Proportion of repeat	Distri	bution of HROs (%	%)
	new HROs (thousand)	of HROs who are women	HROs who are women	Type 1	Type 2	Type 3
1995	33.2	8.4%	3.7%	47%	32%	21%
1996	33.3	8.8%	3.5%	49%	32%	19%
1997	33.9	9.4%	3.9%	50%	31%	19%
1998	30.4	10.5%	4.2%	52%	30%	18%
1999	27.9	11.0%	4.6%	49%	29%	22%
2000	*	11.6%	5.0%	48%	28%	25%

Data for 2000 are incomplete Repeat HROs are of types 1B, 2 or 3B of HROs who are women rises with age until about 50, as does the proportion of repeat HROs; however, a woman is less than half as likely as a man to be a repeat HRO. It is interesting that the proportions of HROs of types 1 and 3 who have previous convictions (i.e. are of types 1B or 3B) fall with age. This may appear surprising since younger drivers have had less time than older drivers to commit a previous offence, but the restriction of the previous period to 3 years diminishes this effect. Thus, young HROs are more likely than their older counterparts to be repeat HROs and so present greater risks. Section 3.1 will examine the question of age and reoffending with an alternative technique.

Table 4 Incidence of HROs by age, 1995-2000

	17-24	25-29	30-39	40-49	50-	All
Proportion of HROs who are women	6.4%	7.9%	10.8%	12.6%	10.1%	9.8%
Proportion of repeat HROs who are women	2.8%	3.5%	4.8%	5.2%	4.3%	4.2%
Proportion of HRO1s who are type 1B	4.2%	2.8%	2.1%	2.0%	1.8%	2.5%
Proportion of HRO3s who are type 3B	8.8%	6.2%	4.7%	3.3%	3.9%	5.4%

Repeat HROs are of types 1B, 2 or 3B

Table 3 showed that the proportion of HROs who had refused to supply a specimen, i.e. of types 3A and 3B, rose at the end of the 1990s. Table 5 shows that, over the period 1995-2000, female HROs were more likely than males to be refusers. The proportion rises with age among women, but there is very little variation among men.

Table 5 Proportion of HROs of type 3, 1995-2000

	17-24	25-29	30-39	40-49	50-	All
Men	22%	20%	20%	19%	20%	20%
Women	24%	23%	23%	26%	28%	24%

Figures 1a and 1b compare the age distributions for HROs in more detail. The figures include 'Ordinary Offenders' to provide a yardstick: these are defined as drivers who were convicted of their first drink/drive offence in 1995 but the offence was not sufficiently serious for them to become an HRO. Figure 1a presents the age distributions for male offenders; those for HRO1Bs and HRO3Bs are relatively erratic because of the small numbers per year of age, but the general trends are clear. Distributions for female offenders are presented in Figure 1b; because of the relatively small number of female HROs, the five HRO types are combined together. Table 6 summarises the various age distributions, although these simple indices tend to conceal the extent of the differences between the distributions.

Figure 1a confirms the finding of Table 4 that HROs of type B tend to be younger than HROs of type A. Its most striking feature, however, is that HRO1Bs and HRO3Bs (i.e. the 'worst' offenders) are similar in age to the Ordinary Offenders (i.e. the 'least-worst' offenders). They

Table 6 Mean and peak ages for various groups of
drink/drive offenders, 1995-2000

	HRO1A	HRO1B	HRO2	HRO3A	HRO3B	HRO2 ³	Ordinary Offender
Men							
Mean age	36.5	33.4	34.7	35.3	31.7	30.0	33.6
Peak age	31	23	27	31	20	20	23
Women							
Mean age		37.7	36.3		38.3	33.1	33.5
Peak age		35	34		33	29	25

There are few female HROs of type B, so they are combined with type As

tend to be several years younger than HRO2s, the main type of repeat HRO, although the table shows that HRO2³s are also rather younger than HRO2s in general. Comparison of Figures 1a and 1b shows that female HROs tend to be older than males, although the age distributions of male and female Ordinary Offenders are similar.

Table 7 now examines regional variations during this period. The proportion of HROs of types 1 and 3 with previous convictions varies widely, as does the proportion of repeat HROs. There is little correlation between the first three proportions, so no clear pattern of repeat offending emerges; for example Scotland has low proportions for type 1 yet the highest proportions for type 3, the proportion of repeat HROs is low among men but average for women. The proportion of HROs who are women also varies widely, from 8.1 per cent in the West Midlands to 11.0 per cent in Wales and North West England.

Table 7 Regional variations, 1995-2000

	Propor -tion i		Propor -tion ii		Propor -tion iii		Propor -tion iv	
	Male	Fe -male	Male	Fe -male	Male	Fe -male		
Scotland	2.2%	0.7%	8.0%	6.2%	26%	12%	10.2%	
North West England	2.6%	1.8%	4.8%	2.3%	33%	12%	11.0%	
North England	3.0%	1.7%	5.4%	3.0%	33%	11%	9.8%	
Yorkshire & Humberside	2.3%	1.0%	4.5%	2.5%	33%	12%	9.1%	
East Midlands	2.5%	1.5%	5.5%	3.7%	34%	11%	8.8%	
West Midlands	2.7%	2.2%	5.2%	4.2%	36%	14%	8.1%	
Wales	3.1%	2.1%	4.3%	4.1%	36%	14%	11.0%	
South West England	2.0%	0.9%	4.6%	2.8%	34%	13%	10.4%	
South East England	2.7%	1.4%	4.5%	2.0%	36%	14%	10.8%	
Eastern England	2.8%	1.4%	5.9%	1.8%	37%	13%	10.3%	
London	3.0%	1.1%	7.0%	4.6%	37%	17%	9.5%	
Great Britain	2.6%	1.4%	5.7%	3.4%	34%	13%	9.8%	

Proportion i = proportion of HRO1s who are 1Bs

Proportion ii = proportion of HRO3s who are 3Bs

Proportion iii = proportion of HROs who are repeat HROs

Proportion iv = proportion of HROs who are women

2.2.1 Disqualification periods

All HROs are disqualified from driving upon conviction, and Figure 2 presents the mean disqualification periods between 1995 and 2000. HROs with previous convictions clearly receive longer disqualifications than those without; HRO1Bs were disqualified on average for 9 months longer



Figure 1a Age distribution of male HROs and Ordinary Offenders



Figure 1b Age distribution of *female* HROs and Ordinary Offenders



Figure 2 Mean period of disqualification

than HRO1As, and the difference is similar for HRO3Bs and HRO3As. The reduction in several of the mean disqualification periods, including that for all HROs, may be surprising in view of the national emphasis throughout this period on the need to reduce drink/driving.

The other types of sentence imposed upon HROs, such as fines and imprisonment, are examined in Section 3.3.

3 Further analyses

Section 2 applied methods that have been used in previous research to analyse the licensing data, subdividing the original range of HRO types. This Section describes several new types of analysis. Section 3.1 applies a new method for examining the propensity of HROs to re-offend that offers significant advantages over the technique used previously. Section 3.2 considers the types of non-drink/drive offence committed by HROs. Section 3.3 then examines new data about the sentences received by HROs such as fines, imprisonment and lesser types of punishment.

3.1 Survival analyses

A key question about drink/drivers is the extent to which they re-offend. The earlier report examined this by calculating the average number of convictions committed per year by convicted offenders after their *original* conviction, but this approach suffers from certain drawbacks. This Section introduces a new method for examining the propensity of drink/ drivers to re-offend that derives from the statistical technique of 'survival analysis'.

The variable that will be examined is:

P(N) = proportion of offenders who committed another drink/drive offence within N months of being convicted of the original offence,

where N is allowed to vary over a suitable range. Note that an individual offender can 'contribute' at most once to this analysis, since only the first subsequent offence is counted. For HROs, the 'original' conviction is the one that caused them to become an HRO. The analysis can be restricted to specific groups of offender, for example by age or HRO type.

To bring out the reason for using the term 'survival analysis', the converse of P(N) can be expressed as 'the proportion of offenders who *survived* for N months without reconviction'. The technique was developed by medical statisticians to evaluate trials of medical treatments where, depending upon the type of trial, the meaning of survival can range from absence of symptoms to literal survival. Davies *et al.* (1999b) used the technique to examine the reconviction rates of drink/drivers who had attended rehabilitation courses. In that application, the treatment was to attend a rehabilitation course and survival had the meaning given above.

Survival analysis is normally applied to relatively small samples, where it is important to estimate the likelihood that an apparent difference actually arose by chance -i.e. to establish the statistical significance of the results. In the

present case, however, the data contain the *full population* of recent drink/drive offenders, so such questions do not arise. Only the philosophy of the technique is needed, not the statistical details.

The results presented in this Section compare the subsequent drink/drive convictions of two groups of driver who were convicted of drink/drive offences in 1995:

- those who became HROs during 1995;
- those whose first conviction occurred during 1995, but who had not become an HRO by the end of 1999.

The latter will be referred to as 'Ordinary Offenders', and they provide a control for the subsequent behaviour of the HROs.

The DVLA file should contain details of all drink/drive convictions of HROs and Ordinary Offenders from 1995 until at least the end of 1999, so P can be calculated reliably for N \leq 48 months. Figure 3 shows the proportion of drivers who re-offended up to 4 years after the original conviction, taking N=3 months, 6 months etc. The underlying numbers of offenders are:

	HRO1A	HRO1B	HRO2	HRO3A	HRO3B	All o HROs (Ordinary Offenders
Men	13537	339	9566	5919	312	29673	43903
Women	1721	23	347	640	23	2754	4906

Various interesting points emerge from the figure. The graphs for the larger groups are effectively linear, which suggests that many convicted drink/drivers continue to re-offend irrespective of the disqualification that followed their conviction in 1995. The proportion of re-offending drivers is higher among men than among women, and higher among HROs with previous convictions (types 1B, 2 and 3B) than those without (types 1A and 3A). The proportion is much higher among HROs than Ordinary Offenders.

The graphs are summarised in Table 8. The table also includes results for HRO2³s, and shows once again that they are more likely to reoffend than HRO2s in general; indeed, the proportion of HRO2³s who re-offend is comparable to the proportion of HRO1Bs and HRO3Bs.

Table 8 Proportion of offenders who re-offended within2 and 4 years

Type of drink/	Men w	vithin:	Women within:		
Type of drink/ drive offender	2 years	4 years	2 years	4 years	
HRO1A	4.0%	8.9%	2.2%	4.9%	
HRO1B	10.3%	19.5%	4.3%	13.0%	
HRO2	7.6%	13.2%	4.0%	8.6%	
HRO3A	6.9%	13.6%	3.6%	7.5%	
HRO3B	12.8%	19.2%	4.3%	8.7%	
All HROs	5.9%	11.5%	2.8%	6.1%	
HRO2 ³	10.6%	18.4%	5.8%	15.4%	
Ordinary offenders	0.5%	1.0%	0.1%	0.3%	

Results in 'italics' have 95% confidence intervals of $\pm 2.0\%$ or greater



Figure 3 Survival analysis for HROs and Ordinary Offenders convicted in 1995

The analysis has been repeated by age of driver at the time of conviction in 1995, grouping all types of HRO together to retain reasonably large numbers. Most graphs are again effectively linear, but the degree of overlap makes it difficult to examine differences. Instead, Figure 4 presents the re-offending rates within 2 and 4 years, by age and sex. The reoffending rate falls markedly with age among HROs and male Ordinary Offenders. The pattern is less clear for female Ordinary Offenders, perhaps because of the relatively low rates and numbers of drivers - the underlying numbers are:

	17-19	20-24	25-29	30-34	35-39	40-44	45-49	50-59	60-
HROs									
Men	897	4051	5554	5488	4258	3351	2693	2631	750
Women	45	261	405	511	488	395	349	244	56
Ordina	ry Offer	iders							
Men	3421	9387	7734	6074	4853	3795	3381	3765	1493
Women	289	891	966	814	657	515	402	290	82

3.2 Other driving offences

In addition to drink/driving offences, the DVLA data contain details of all driving offences that have been endorsed upon the offenders' licences. Section 2 mentioned that details of a drink/ driving offence may be removed from the DVLA file eleven years after conviction, but the minimum period is only four years for most types of driving offence. Thus, while the 'other' offences committed by drink/drivers are of interest, the range of analyses is restricted by the potential incompleteness of the data caused by the rules under which DVLA operates.

A four-character code is used to record the type of offence. The general type is specified by two letters: for example, AC denotes 'Accident offences'. The two remaining characters are more specific: for example, AC10 denotes 'Failing to stop after an accident'. DR denotes Drink or Drugs while BA denotes Driving while Disqualified; these types of offence have already been analysed and are excluded from this section. The following offence types will be considered:

Speeding offences (coded SP).

Careless driving offences (coded CD).

Insurance offences (coded IN).

Licensing offences (coded LC or PL).

Other offences.

The last is a heterogeneous group. The most common type is TT (disqualification under the totting up procedure), followed by CU (Construction and Use) and AC (Accident offences). These offences occur less frequently than those listed, so are examined in less detail in Section 3.2.1.

Two complementary sets of analyses have been made which should provide reliable results, given the minimum period for which offence details should be retained at DVLA:

a for drivers who became HROs in 1996 and Ordinary Offenders in 1996, offences committed up to three years *after* their drink/driving conviction are analysed; b for drivers who became HROs in 1999 and Ordinary Offenders in 1999, offences committed up to three years *before* their drink/driving conviction are analysed.

Any offences committed at the same time as the drink/ driving conviction are excluded from the analyses, in order to isolate them from the events surrounding the specific conviction. Comparison of the results from the *after* period with the results from the *before* period will show the effect that the drink/driving conviction had on the offenders' behaviour, under the plausible assumption that the sets of offenders in 1996 and 1999 are broadly similar. Figure 5 shows the rate of driving offences *per three years per driver*, by the driver's age at the time of the drink/driving conviction. Offence rates are shown by age and sex because they tend to fall with age in the general population of drivers, and to be lower for women than for men.

Offenders will be on average three years older in the after period than in the before period, so the rates would be expected to be slightly lower during the after period even if increased age were the only change between the two periods. On the other hand, all offenders will have been disqualified from driving for most if not all of the after period, so rates should in principal be much lower during the after period. The fact that in most cases the SP and CD rates fall by no more than a half in the after period suggests once again that significant numbers of offenders continue to drive while disqualified.

The rate of insurance (IN) offences is relatively high in many cases. Where this occurs in the after period, it is probably linked to driving while disqualified, but it also occurs in the before period for most groups of HRO and some groups of Ordinary Offender. Broughton (1999) showed that IN offences are far less common than SP offences in the general population of drivers, so these high rates indicate that these offenders have often been driving without proper insurance before their drink/drive conviction.

Figure 6 develops Figure 5, examining the five HRO types separately (only three types for women); it is not possible to disaggregate by age because of the relatively small numbers. Clear differences are visible, and HROs with previous drink/drive convictions tend to have the highest rates. Data for Insurance and Licence offences in the before period once more confirm that HROs of type B do pose greater risks than those of type A, although it is interesting to note that the differences are less in the after period. A possible explanation for the relatively low rate of licensing offences in the after period may be that they have been largely replaced by convictions for driving while disqualified.

3.2.1 Remaining offence types

This Section compares the less frequent offence types that were grouped together as 'other offences' in the previous Section. Table 9 compares the rate of driving offences *per three years per driver* during the before and after periods. Only the more frequent types are included: those with a rate of at least 0.01 among HROs, together with DD (Dangerous Driving) because of its particular importance.



Figure 4 Re-offending rates from survival analysis for those convicted in 1995

35-39

40-44

45-49

50-59

Men reoffending within 4 years

Women reoffending within 4 years

60-

0.0%

17-19

20-24

25-29

Men reoffending within 2 years

Women reoffending within 2 years

30-34











(a) - offences committed in 3 years after conviction





Figure 6 Driving offences committed over three years by HROs (all ages)

Table 9 Rate of the more frequent types of driving offence per three years per driver

		High Risk Offenders					
(Ordinary Offenders	All types	1A	18	2	3A	3B
Before per	iod						
TT	0.025	0.045	0.016	0.079	0.073	0.063	0.142
CU	0.022	0.027	0.014	0.047	0.043	0.030	0.102
AC	0.009	0.019	0.013	0.054	0.030	0.015	0.026
UT	0.006	0.015	0.003	0.047	0.026	0.022	0.122
DD	0.002	0.006	0.002	0.006	0.013	0.007	0.031
All offence	s 0.077	0.131	0.057	0.253	0.213	0.161	0.480
After perio	d						
TT	0.015	0.032	0.015	0.030	0.048	0.049	0.059
CU	0.008	0.011	0.005	0.007	0.016	0.020	0.031
AC	0.006	0.014	0.011	0.032	0.015	0.016	0.028
UT	0.004	0.011	0.004	0.035	0.015	0.019	0.028
DD	0.003	0.009	0.004	0.017	0.011	0.015	0.047
All offence	s 0.043	0.088	0.044	0.137	0.118	0.140	0.226

TT Disqualification under 'totting up' procedure

CU Construction&Use Offences

AC Accident Offences

UT Theft or Unauthorised Taking

DD Reckless/Dangerous Driving

Throughout the period analysed, the only endorsable type of UT offence has been UT50 'Aggravated taking of a vehicle', so the high rate among HROs (especially types 1B and 3B) is noteworthy. Although the overall rate of Dangerous Driving offences is relatively low, it is markedly higher among HRO3Bs – and in most cases it is higher during the after period, i.e. after the offenders have been disqualified from driving.

3.3 Other sentences

When drivers have been convicted of drink/driving offences in recent years, they have invariably been sentenced to disqualification from driving, but many have also been fined or received an additional sentence such as imprisonment. This section presents analyses of these sentences, as recorded in the DVLA data.

The DVLA data include many types of additional sentence, ranging from Imprisonment to Absolute Discharge. Probation or Community Service can be either primary (i.e. no other additional sentence) or secondary (i.e. in combination with another sentence). When a sentence includes a period, the duration is included together with the unit used (ranging from hours to years). All of this information is compressed into a fourcharacter code using a complex series of rules. Examples of these codes are A18M to denote 18 months imprisonment and #100 to denote a combination community service order of 100 hours.

These codes are prepared by the sentencing Courts and transmitted to DVLA. The complexity of the coding system makes it difficult to check the validity of the codes, and in practice there is substantial miscoding, such as A03H which indicates 3 hours of imprisonment whereas a larger unit was presumably intended. An attempt has been made to correct such errors, although corrections are sometimes subjective and occasionally impossible.

It is likely that any previous offence is taken into account when an additional sentence is imposed, so the analyses will distinguish between:

sentences received when first becoming an HRO;
sentences received when already an HRO;
sentences received by drivers who are not HROs.

Table 10 begins by showing the distribution of the additional sentences imposed in 1997-99 on those who were becoming HROs. The less frequent types such as 'Bound Over' are grouped together as 'other type'. The final row shows the percentage of offenders who received a probation order in combination with another sentence. Cases with coding errors that could not be corrected with reasonable confidence are excluded from the analysis.

Table 10 The additional sentences imposed in 1997-99 on new HROs

	HRO type					
Type of additional sentence	1A	1B	2	3A	3B	All
Imprisonment	5.0%	21.6%	7.0%	4.3%	19.6%	5.8%
Suspended prison sentence	0.3%	0.9%	0.2%	0.1%	0.3%	0.2%
Conditional discharge	0.4%	0.2%	0.4%	1.2%	0.7%	0.6%
Probation	16.9%	31.4%	12.3%	6.7%	20.6%	13.9%
Absolute discharge	0.1%	0.4%	0.2%	0.4%	0.4%	0.2%
Community service order	15.8%	12.9%	6.4%	4.7%	9.3%	10.8%
Young Offenders Institution	0.2%	2.1%	0.9%	0.7%	1.6%	0.5%
Admonition (Scotland only)	0.6%	0.4%	0.4%	0.8%	2.4%	0.6%
Other type	0.1%	0.7%	0.3%	0.4%	0.8%	0.3%
% who had NO additional	60.6%	29.5%	71.9%	80.6%	44.3%	67.2%
sentence						
% of HROs who also received	0.2%	1.6%	0.6%	0.4%	0.6%	0.4%
Combination Order - Probatio	n					

It is strange to see that, while a previous offence increases the likelihood of an additional sentence for HRO 1s and HRO 3s, especially imprisonment, HRO 2s receive fewer additional sentences than HRO 1s in spite of their previous offences. Once again, it appears that the treatment of drink/ drive offenders tends to reflect the view that high alcohol levels pose greater risks than repeat offending, while refusal to supply a specimen poses relatively little risk.

There are minor variations among the lengths of the sentences, but these are difficult to interpret. Among HROs who are sentenced to imprisonment, the mean period is 2.7 months for HRO1As and 3.1 months for HRO1Bs, which could suggest more severe sentences for repeat offenders. However, the mean period for HRO3As is 3.4 months but only 3.2 months for HRO3Bs; the mean period for HRO2s is 3.5 months.

Table 11 now compares the additional sentences imposed on those who did not become HROs as a result of this offence, those who did become HROs and those who were already HROs. It can be seen that the likelihood of an additional sentence rises from one group to the next, while the sentences imposed become progressively more severe. Over one third of HROs were imprisoned following conviction for a subsequent drink/drive offence.

Table 11 The additional sentenc	es imposed in 1997-99
on HROs and non-HR	Os

Type of additional sentence	Non- HROs	New HROs	Existing HROs
Imprisonment	1.5%	5.8%	35.3%
Suspended prison sentence	0.0%	0.2%	0.9%
Conditional discharge	0.6%	0.6%	1.3%
Probation	2.6%	13.9%	26.6%
Absolute discharge	0.2%	0.2%	0.7%
Community service order	2.2%	10.8%	10.5%
Young Offenders Institution	0.4%	0.5%	2.9%
Admonition (Scotland only)	0.5%	0.6%	0.7%
Other type	0.3%	0.3%	1.2%
% who had NO further sentence	91.8%	67.2%	20.0%
Combination Order - Probation (% of sentences)	0.0%	0.4%	1.7%

3.3.1 Fines

In addition to the sentences examined above, offenders are also liable to be fined. The two types of punishment tend to be alternatives, since Table 12 shows that in 1997-99 very few new HROs received both an additional sentence *and* a fine. Only 1 in 20 escaped without either a fine or an additional sentence.

Table 12 Fines and additional sentences received by new HROs in 1997-99

		HRO type					
	1A	1B	2	ЗА	3B	All	
An additional sentence and a fine	1%	2%	1%	1%	3%	1%	
An additional sentence but no fine	38%	69%	27%	19%	53%	32%	
A fine but no additional sentence	56%	20%	66%	77%	36%	62%	
No fine and no additional sentence	4%	9%	5%	4%	8%	5%	

Figure 7 examines the fines imposed on new HROs between 1995 and 2000: naturally, the data for 2000 are incomplete. Mean values are calculated for those who were fined, so they are unaffected by the proportion of HROs who, for whatever reason, are not fined. As with the additional sentences, HRO1s tend to be fined most while HRO3s tend to be fined least. It might be expected that HROs who have previous offences would on average be fined more than those who do not, but the figure shows that in fact the reverse tends to apply. The average fine was less for HRO3Bs than for HRO3As in each of the six years, and it was less for HRO1Bs than HRO1As in three of the years.

The mean fines imposed on new HROs fell steadily after 1996, by 4.3 per cent per year on average. The data have not been adjusted for inflation, so the fall was even faster in real terms.

4 Drink/drive accidents

In order to put some of the earlier results in a broader context, trends in drink/drive accidents will now be examined. Official figures are published annually, for example DTLR (2000), and these provide much useful information. They provide very little detail on the issue of how drink/drive trends for men and women compare, however, and Section 2.2 showed that the proportion of HROs who are women has increased in recent years.

This issue will be examined using two types of data. Section 4.1 examines the results of breath tests following accidents from the national accident reporting system, while Section 4.2 examines BAC levels in dead drivers. In both data sources, most women appear as car drivers while many men appear as drivers of other types of vehicles or as motorcycle riders. Consequently, data in both Sections are restricted to car drivers in order to obtain a fair comparison of men and women.

Finally, Section 4.3 summarises recent evidence from surveys of the consumption of alcohol in the general population.

4.1 Breath tests following accidents

For each driver involved in an injury accident, the STATS19 national accident reporting system records whether there was a breath test, and if so the result. The police are entitled to test any accident-involved driver, and the proportion actually tested rose during the 1990s until more than half of these drivers were tested. With this level of testing, the STATS19 data should represent reliably the incidence of illegal alcohol levels in injury accidents over recent years.

The average number of accident-involved car drivers who failed a breath test per year between 1995 and 1999 was 6.8 thousand, while Table 3 showed that the average number of new HROs approached 32 thousand. Even when allowance is made for the relatively small number of drivers and riders of other types of vehicle who became HROs, it is clear that the great majority of drink/drive offences - including those that lead to HRO status – do not arise from injury accidents but from damage-only accidents and routine breath testing. Consequently, trends in the STATS19 data may differ from trends in the offence data.

Table 3 presented the proportion of women among HROs. Table 13 compares these data with the proportion of drink/drivers involved in serious and slight accidents who are women (fatal accidents are excluded because many of the drivers involved cannot be tested). It shows that women form a higher proportion of drink/drivers in accidents than of HROs. The proportions have tended to rise, although less fast than the proportion of HROs. The table suggests that the increasing proportion of drink/ drivers in accidents who are women is partly a consequence of the increasing involvement of women drivers in accidents generally.

Table 13 Proportion of accident-involved drivers who are women

1995	1996	1997	1998	1999
8.4%	8.8%	9.4%	10.5%	11.0%
12.4%	11.8%	12.8%	15.6%	12.8%
13.5%	13.2%	14.4%	15.2%	15.5%
29.9%	30.0%	30.4%	31.2%	31.1%
33.9%	34.5%	35.1%	35.6%	35.8%
	1995 8.4% 12.4% 13.5% 29.9% 33.9%	1995 1996 8.4% 8.8% 12.4% 11.8% 13.5% 13.2% 29.9% 30.0% 33.9% 34.5%	1995199619978.4%8.8%9.4%12.4%11.8%12.8%13.5%13.2%14.4%29.9%30.0%30.4%33.9%34.5%35.1%	1995 1996 1997 1998 8.4% 8.8% 9.4% 10.5% 12.4% 11.8% 12.8% 15.6% 13.5% 13.2% 14.4% 15.2% 29.9% 30.0% 30.4% 31.2% 33.9% 34.5% 35.1% 35.6%



Figure 7 Fines imposed on new HROs

Figure 8 presents the proportion of drivers involved in accidents who had been drinking. It is much lower for women than for men, although the proportion for women has tended to rise slightly while the proportion for men has tended to fall.



Figure 8 Proportion of accident-involved drivers who failed a breath test

Table 14 now compares the proportion of women among HROs by age from Table 4 with the proportions of women among drink/drivers involved in accidents. All three rise to a peak in the 40-49 age group, then fall among older drivers.

Table 14 Proportion of women among drink/drivers, 1995-99

Proportion of women among:	17-24	25-29	30-39	40-49	50-	All
HROs (from Table 4)	6.4%	7.9%	10.8%	12.6%	10.1%	9.8%
Drink/drivers in serious accidents	9.1%	11.1%	16.2%	19.4%	16.5%	13.0%
Drink/drivers in slight accidents	10.3%	13.5%	16.5%	20.2%	15.6%	14.4%

Table 5 showed that proportionately more women HROs than men were of type 3, i.e. had refused to supply a specimen. The STATS19 variable records whether a driver had supplied a specimen, so the proportion of test failures caused by a refusal to supply a specimen can be calculated. Table 15 presents the results. This confirms that women are more likely than men to refuse, and that both are more likely to refuse in serious accidents than in slight. The increase of the proportion of refusals with age is more marked in the accident data than in the offence data.

To summarise, the proportion of women among drink/ drivers in accidents is higher than the proportion among HROs. The patterns in the two sets of data are otherwise broadly similar, except that the proportion of refusals to supply a specimen rises more rapidly with age among drink/drivers involved in accidents than among HROs.

Table 15 Proportion of drink/drivers who refused to supply a specimen, 1995-99

	16-24	25-29	30-39	40-49	50-	All
Men in serious accidents	11%	16%	16%	16%	22%	15%
Women in serious accidents	16%	17%	19%	24%	41%	21%
Men in slight accidents	7%	10%	12%	11%	13%	10%
Women in slight accidents	10%	12%	14%	15%	22%	14%

4.2 BAC levels

The STATS19 data do not provide drivers' alcohol levels. In order to collect this information, TRL requests Coroners in England and Wales and Procurators Fiscal in Scotland to supply the BAC level for any adult who dies within 12 hours of an accident within their jurisdiction. This is then linked in the TRL STATS19 database to the record for that person, to provide details such as age and sex.

Table 16 shows the distribution of these levels in car drivers who died between 1995 and 1999 (recall that the legal limit is 80 mg/100 ml BAC). It shows that proportion of drivers with illegal alcohol levels was lower for women than for men, but it is interesting to see that the proportion exceeding $2\frac{1}{2}$ times the legal limit rose with age among women but not among men. Of the drivers who had illegal alcohol levels, 50 per cent of women had more than $2\frac{1}{2}$ times the legal limit compared with 40 per cent of men.

Table 16 BAC levels in dead car drivers, 1995-99, by age and sex

	Women	aged:	Men aged:		
BAC (mg/100ml)	16-30	31-99	16-30	31-99	
0-9	80.8%	82.6%	54.1%	68.6%	
10-50	7.7%	9.8%	10.8%	10.0%	
51-80	3.1%	0.4%	4.9%	1.4%	
81-200	6.2%	2.5%	20.2%	10.0%	
201-	2.3%	4.7%	10.1%	10.0%	
Above limit	8.5%	7.1%	30.3%	20.0%	
Number of drivers	260	448	1208	1266	

There are indications that the trends for men and women differed between 1995 and 1999, although the relatively small annual numbers mean that these differences are not statistically significant. Grouping together drivers of all ages, the percentage of women with BAC>80 mg/100ml rose on average by 0.4 per year while the percentage of men fell by 1.6. The percentage of women with BAC>200 also rose on average by 0.4 per year while the percentage of men fell by 0.2.

4.3 Survey evidence

Survey evidence of alcohol consumption in the general population shows that women's consumption has risen in recent years. The proportion of women found to be drinking more than 14 units per week increased from 10 per cent in 1988 to 15 per cent in 1998, while the proportion of men exceeding 21 units per week has remained constant at about 27 per cent (Alcohol Concern, 2000). This report also comments on specific groups of women whose drinking pattern places them at risk:

Socio-economic group. Women from professional households are more likely to drink regularly than women from unskilled manual households, with 72 per cent of women from professional households compared to 40 per cent having drunk alcohol in the previous week. In addition 33 per cent of fulltime working women drink 3 or more units at least once a week compared to 17 per cent of women who are economically inactive.

Age. The mean weekly consumption of women aged 16 to 24 years is 10.6 units compared to 3.3 units for women over 65 years. Young women (16-24) tend to cram their drinking into heavy drinking sessions with 48 per cent consuming their alcohol over one to three days. They are also more likely to exceed the daily benchmark with 23 per cent drinking over 6 units at least one day a week. While most interest focuses on young women's drinking patterns, problem drinking is clearly not restricted to this group as older women tend to drink more regularly with 11 per cent of 25-44 year olds and 16 per cent of 45-64 year olds regularly drinking 5 or more days per week.

A study of underage drinking (Home Office, 2000) found a significant level of alcohol consumption by young people that could provide advance warning of an increasing problem of drink/driving over the next few years when many of them start to drive regularly. The report found very similar drinking patterns among boys and girls aged 12-15. For 16-17 year olds, slightly fewer women than men reported drinking (54 per cent of men drank at least once a week compared with 48 per cent of women). There was little difference between young men and women in the proportion who reported feeling very drunk at some point during the previous year, as shown by Table 17.

This convergence of the drinking behaviour of young men and women must raise concern that in future the existing gap between the level of drink/driving among men and women, as shown by the various indices studied in this report, will gradually close.

Table 17 Proportion of young people who reportedfeeling very drunk during last year

Age	12-13	14-15	16-17	18-21
Males	8%	38%	68%	80%
Females	7%	35%	57%	75%

5 Conclusions

This report has presented various results relating to issues that arose towards the end of an earlier investigation into the working of the High Risk Offender (HRO) Scheme that TRL had carried out for DTLR. In particular, it emerged that HROs who had committed previous drink/drive offences were more likely than other HROs to re-offend, even those who had been driving with high alcohol levels. This brought into question a view that had been widely held, namely that high alcohol levels pose particularly high risks, rather than re-offending behaviour. To study this, the HRO categories were subdivided according to whether or not there had been a previous drink/drive offence.

As with the earlier investigation, the principal source of the data analysed in this report has been an extract from the DVLA file of driver licence details. This extract was prepared for TRL in November 2000, so it has been possible to update various earlier analyses. TRL has arranged for extra items of data to be supplied, so that additional issues have also been studied.

The first question to be investigated was the length of the period to examine for any previous drink/drive offence. It was found that as the period was shortened so the proportion of drivers who reoffended after becoming HROs grew. The period of 36 months was chosen to achieve good discrimination between 'reoffenders' and others whilst providing sufficient numbers of offenders for reliable analysis.

The subsequent convictions of those who became HROs in 1995 were studied in detail, and it was found that the proportion of HROs who were convicted subsequently was higher for reoffenders than other HROs. For example, the proportion of men who were reconvicted during the first two years after becoming an HRO was as follows (most HROs were disqualified from driving for at least two years after becoming an HRO):

	Had they commi three years before	tted an offence up to becoming an HRO?
	Yes	No
HRO1	10.3%	4.0%
HRO2	10.6%	6.8%
HRO3	12.8%	6.9%

The same pattern was also found when longer periods after becoming an HRO were studied: those who had committed a previous offence were more likely to be reconvicted than those who had not.

Only a small minority of those who became HROs between 1995-2000 were reoffenders: 2.5 per cent of HRO1s and 5.4 per cent of HRO3s. Reoffenders tended to be younger than other HROs; their mean age was at least 3 years less than the mean age of those with no previous offences. Similarly, the proportion of HROs who were reconvicted within two years of becoming an HRO fell steadily with age. Reoffenders were mainly men: the proportion of women among reoffending HROs is even lower than the proportion among HROs generally.

Reoffenders tend to be disqualified from driving for longer periods than other HROs, by 9 months on average, although they are often fined less than other HROs. It has been surprising to find that mean fines and disqualification periods for most types of HRO fell between 1995 and 2000. The mean length of disqualification was 28.7 months in 1995 and 27.1 months in 2000, and among the HROs who were fined, the mean fine fell from £358 in 1995 to £305 in 2000. HRO1s (alcohol level at least 21/2 times the legal limit) were fined most, e.g. £376 in 2000. The mean period was 26.6 months for HRO1s and 19.8 months for HRO3s in that year. The mean fine was greatest for HRO1s, e.g. £376 in 2000, while it was £266 for HRO2s and £241 for HRO3s. The mean disqualification period was longest for HRO2s, e.g. 34.5 months in 2000, while it was 26.6 months for HRO1s and 19.8 months for HRO3s.

The DVLA data also record details of the other types of driving offence committed by HROs. The commonest types were Insurance and Licensing offences, and many of these were committed *before* becoming an HRO. Thus, many HROs were already driving illegally before becoming an HRO. Of the five HRO types, HRO3 reoffenders had the highest rates of non-drink/drive offences in particular 'Driving while disqualified'. Among the less common types of offence, they had relatively high rates of 'Aggravated taking of a vehicle' and 'Reckless/ Dangerous Driving' offences.

One of the extra items of data that has been supplied from the DVLA file is a code that shows any sentence imposed on an offender in addition to a fine or disqualification. 33 per cent of new HROs received an additional sentence mostly Probation (14 per cent of HROs), Community service order (11 per cent) and Imprisonment (5.8 per cent). Reoffenders were more likely than those with no previous offence to receive an additional sentence, and about one fifth were imprisoned. Over one third of HROs who were convicted of another drink/ drive offence after becoming an HRO were then imprisoned.

A broader context for these analyses of offences has been provided by some analyses of accident data. The breath test results recorded in the STATS19 accident database reproduced certain features of the offence data, such as the increase over recent years of the proportion of drink/drivers who are women. On the other hand, this proportion was higher than the proportion of HROs who are women. Women drivers involved in accidents were less likely than men to be drink/drivers, as was confirmed by the alcohol levels of dead drivers supplied by Coroners in England and Wales and Procurators Fiscal in Scotland. One interesting feature of these alcohol levels is that, of the drivers who had illegal alcohol levels, 50 per cent of women had more than 2½ times the legal limit compared with 40 per cent of men.

Evidence from recent surveys of the consumption of alcohol in the general population shows that the level of drinking among young women is rising to the level among young men. The proportion of women whose alcohol consumption exceeded 14 units per week rose from 10 to 15 per cent between 1988-98, while the proportion of men whose consumption exceeded 21 units per week stayed constant at 27 per cent. Among the young (12-21 years old), there is now little difference between males and females in their consumption of alcohol. This suggests that the existing gap between the levels of drink/driving among men and women may gradually close in future, causing the proportion of HROs who are women to rise.

6 Acknowledgements

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Abstract

The High Risk Offender (HRO) Scheme covers those drink/drive offenders whose offences suggest that they pose particular risks to other road users. The consequence of being an HRO is that the driving licence is not reissued automatically at the end of the disqualification period, as occurs with most other types of offender. Instead, an HRO must apply for a new licence, and one will only be issued following a positive medical assessment.

This report extends the analyses of data from the driver licence file of the Driving and Vehicle Licensing Agency (DVLA) that were made during a previous project. The earlier research classified HROs into three types, based on the nature of the offence committed. The classification is extended in the current project to take account of an HRO's previous history of drink/drive convictions. This extension of the classification proves capable of identifying a group of HROs with especially high risk of reoffending.

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