



Is Your Vision Roadworthy Eyesight Campaign: Great Britain

February/March 2023

Analysis of Police Returns carried out by

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The Is Your Vision Roadworthy police campaign ran from Monday 27th February to Sunday 12th March 2023. Police forces in England, Scotland and Wales were invited to participate. The deadline for submitting completed returns was 15th March, but this was initially extended until 25th March with reminders sent to police forces. This was further extended until 5th April with further reminders to forces to ensure that as many outstanding returns as possible could be included.

Instructions provided to police forces were as follows:

“Between Monday 27th February and Sunday 12th March 2023 we ask all Police Forces to take part in this campaign by undertaking a roadside 20m number plate test at every opportunity, this might be:

- 1) When you suspect a driver may have defective vision, suspicion may arise following: - Road Traffic Collision - Moving traffic offence - Careless or Dangerous Driving allegation or offence - Allegation about the persons driving from a third part - Driver fails to stop or delayed in stopping when requested - Failure to see or abide by a road traffic sign.
- 2) Voluntary roadside eyesight testing operation”

Methods and Analysis

A spreadsheet was provided to all police forces to complete. To minimise the burden on officers, there were only 15 fields to complete and drop-down boxes to select from.

Each participating police force returned completed spreadsheets to a central person who passed these to Rob Heard who in turn passed these to Dr Hawley. Dr Hawley cleaned the data and merged all returns into a master spreadsheet for analysis.

Several police forces provided their data by the 15th March deadline but those who did not were contacted by Rob Heard to ask if they had collected any data. A further reminder was sent to non-responders in mid March which resulted in more forces submitting returns. In late March a further reminder was sent to non-responders which resulted in a further three police forces submitting returns. This resulted in a total of 23 police forces submitting data out of the 44 forces invited to participate. Two other forces replied, one had no returns to submit and the other had decided not to participate in the campaign.

The data were collated and imported into a statistical package for analysis (SPSS Version 27).

There were missing data for several fields: driver age; driver gender; type of vehicle; whether the driver had a prescription for corrective lenses; whether the driver was wearing their prescription when they were stopped by police; and if the driver had an eyesight test within 2 years.

A total of 898 drivers were included in the analysis. Although the dates of the campaign were 27th February to 12th March, returns were received which included data collected between 22nd February and 15th March. These data were included in the analysis so as to include as many police forces as possible in the study.

The data did not permit any complex statistical analysis so the results presented below are descriptive showing frequencies and cross-tabulations.

Results

Country Participation

The three nations, England, Scotland and Wales took part in the campaign. English police forces contributed 717 returns (80% of the total), Scotland 109 returns (12% of the total) and Wales 72 returns (8% of the total).

Police Force Participation

Participation from different police forces was patchy, with some forces carrying out eyesight checks with large numbers of drivers and others checking fewer than 10 drivers. Table 1 shows the number of drivers checked per police force.

Table 1 Participating Police Forces

Police Force	Frequency	Percent
Cheshire	45	5.0
Cumbria	6	.7
Dyfed-Powys	2	.2
Essex	25	2.8
Gwent	61	6.8
Hampshire	1	.1
Humberside	46	5.1
Kent	7	.8
Lancashire	39	4.3
Lincolnshire	13	1.4
Merseyside	331	36.9
North Wales	9	1.0
Northamptonshire	15	1.7
Northumbria	7	.8
Scotland	109	12.1
South Yorkshire	18	2.0
Staffordshire	1	.1
Surrey	60	6.7
Sussex	22	2.4
Warwickshire	2	.2
West Mercia	16	1.8
West Midlands	55	6.1
West Yorkshire	8	.9
Total	898	100.0

Reason for conducting eyesight test

Police were asked to indicate the reason for stopping the driver and conducting an eyesight test. They were asked to choose one of six reasons as shown in table 2 below. A reason was given for 888 of the drivers stopped. For these 888 drivers the most common reasons were because a traffic offence had been committed (56.9% of drivers); following a road traffic collision (16.8%); and conducting a voluntary roadside test (14.7%). Sixty-two drivers (7%) were stopped specifically as part of the Is Your Vision Roadworthy Police Campaign (IYVRPC).

Table 2 Reason for conducting eyesight test

	Frequency	Percent
No reason given	10	1.1
IYVRPC campaign	62	6.9
Other reason not listed	10	1.1
Road Traffic Collision	149	16.6
Suspicion of defective eyesight	31	3.5
Traffic offence committed	505	56.2
Voluntary roadside test	131	14.6
Total	898	100.0

Vehicle Type

Vehicle type was available for 818 drivers and not recorded for 80 drivers. The most frequently stopped vehicles were a car (627 drivers, 76.6%), or a van (129 drivers, 15.8%). Table 3 shows the vehicles involved.

Table 3 Vehicle type

	Frequency	Overall Percent
Missing Data	80	8.9
Car	627	69.8
Large Goods Vehicle	38	4.2
Minibus	1	.1
Motorcycle	8	.9
Other	15	1.7
Van	129	14.4
Total	898	100.0

Driver Characteristics

Actual age was available for 776 drivers (87.4% of the sample). The youngest driver was aged 17 and the oldest aged 90, the mean age was 47.7 years. One police force only stated if the driver was aged 'under 25 years' or '25 and over'. This dichotomous measure could be applied to 822 drivers, 762 of these (92.7%) were aged 25 or over. Combining these data enabled categorisation of drivers into those aged 70 or over (92 drivers) and those aged under 70 (691 drivers).

Information on gender was available for 856 drivers (95% of the total), of these most were male (682, 79.7%) and 174 (20.3%) were female.

Eyesight

Of the 898 drivers, 277 said they had been prescribed corrective lenses for driving, 551 had not, and data were missing for 70. Of the 277 prescribed corrective lenses, 270 (97.5%) were wearing these when stopped by police. Drivers aged 70 or over were significantly more likely to have been prescribed corrective lenses (69.6%) than drivers aged under 70 (27.1%).

Of the 747 drivers asked, just over half (389, 52%) said they had had an eyesight test with an optometrist in the past two years, 317 (42%) had not, and this information was unknown for 41 (5%). Drivers aged 70 and over were significantly more likely to have had an eyesight test within the past two years (67% of drivers aged 70 and over compared to 45% of drivers aged under 70).

Police Eyesight Test

A 20 metre eyesight test was carried out at the roadside with 898 drivers. Of these, 864 (96.2%) passed; 20 (2.2%) failed; one person declined to do the test; and for 13 drivers the result was not recorded but it is assumed that they passed as no action was taken. Of the 20 drivers who failed the test, the youngest was aged 30 and the eldest aged 90 with an average age of 69.3 years, age was not recorded for 3 of these drivers. Three-quarters were male (15, 75%).

For the 20 drivers who failed the eyesight test seven (35%) were tested following a road traffic collision; six (30%) were tested following a traffic offence; four (20%) were tested because the police officer suspected they had defective eyesight; two (10%) were tested as part of a voluntary roadside check; one (5%) was tested after being stopped for speeding; one (5%) was tested after a driving complaint. None were tested specifically as part of the IYVRP campaign.

Eight of the 20 drivers who failed the police eyesight test had had an eyesight test with an optometrist in the past two years, eight had not, and no information was provided for four

drivers. Twelve of the failed drivers had been prescribed corrective lenses for driving, but only eight of them were wearing these corrective lenses when they were stopped by police. Therefore, a third of those who failed the test and were prescribed corrective lenses were not wearing them for driving at the time they were stopped.

Action Taken by Police and Licence Revocations

Police officers were asked to state if they had taken any action after the eyesight test. No action was taken for 746 drivers (83.1%), some action was taken for 111 drivers (12.4%) and for 41 drivers no action was recorded (4.6%).

Of the action taken, this was eyesight related for 23 drivers (20.7% of 111). The other actions were mostly related to the traffic offence they had been stopped for.

Licence revocations were applied to 17 drivers after failing the eyesight test (1.9% of the 898 tested). Three-quarters of these drivers were male (13, 76%). The age range was 30 to 90 and average age was 70.6 years. Sixteen drivers had their driving licence revoked immediately (D751E), one driver had a pending revocation as it was a weekend and DVLA were not available.

Three drivers failed the eyesight test but did not have their licence revoked. Reasons for this were: one driver took the eyesight test at night and failed, but the officer wrote that the driver was given a warning; the second driver reported he had been issued with a new eyesight prescription that day but was not wearing his new glasses; the third driver had her glasses in the vehicle but was not wearing them to drive, she was given words of advice to wear her glasses when driving.

Eyesight related action was taken for two drivers who passed the eyesight test: one made an error (one letter incorrect) and the other had been stopped on suspicion of defective eyesight. Both drivers received words of advice from the attending police officer.

Study Limitations

This study has several limitations. Firstly, not all police forces took part in the campaign, so it is not possible to extrapolate data across the whole of Great Britain. Secondly, some police forces did not submit data for all drivers stopped, with two forces submitting data only for drivers who failed the eyesight test. This means that the incidence of failed eyesight tests appears artificially high as not all drivers who passed were recorded. Thirdly, there were several instances of missing data, in particular age and gender of drivers, also information on eyesight prescription was often missing. Fourthly, few police eyesight tests were carried out randomly for the IYVRP campaign, with most tests taking place after road collisions or traffic offences. This introduces bias into the data, as most of the drivers tested had been brought to the attention of the police through either involvement in a collision or committing an offence. For a more accurate picture of the incidence of visual impairment among drivers, random sight tests are needed.

Conclusions

This eyesight campaign has enabled the collection of data on 898 drivers in Great Britain who were given an eyesight test at the roadside. Twenty-three police forces submitted data for analysis. Of the drivers tested, 864 (96%) passed, one person declined to do the test; and for 13 drivers the result was not recorded. The youngest driver was aged 17 and the oldest aged 90, the mean age was 47.7 years, 80% of drivers were male. Over half the drivers taking the police eyesight test had been stopped because of a traffic offence.

Of the 20 drivers who failed the test, three-quarters were male. The youngest driver was aged 30 and the eldest aged 90 with an average age of 69.3 years. Seventeen of the drivers who failed the eyesight test had their licence revoked, three had mitigating circumstances and were either given a warning or advice. Licence revocations due to failed eyesight were applied to 1.9% of the 898 drivers tested, but this figure should be interpreted with caution as not all drivers who passed the test were included in police returns and the actual percentage of drivers with failed eyesight is likely to be lower.

An important outcome of the campaign is that over a two-week period twenty drivers were found to have been driving with eyesight which did not meet current standards, and seventeen of them had their driving licences revoked to ensure that they did not continue to pose a risk to other road users. In order to identify the true extent of the problem of driving with inadequate eyesight it is recommended that an eyesight campaign is carried out which stops drivers randomly rather than testing opportunistically (after an offence or collision). However, the pressures and constraints on traffic police may make this difficult to do.

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