

**THE OPHTHALMOLOGICAL EXAMINATION FOR
THE BUS DRIVER LICENCE IN ITALY:
A POTENTIAL RISK FOR SAFETY AT WORK AND
FOR THE GENERAL POPULATION**

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Introduction

- **The Italian law prescribes that ophthalmological examination for obtaining driving licence does not undergo the responsibility of occupational health doctors.**
- **This evaluation has to be carried out by other medical doctors from public health service, usually utilizing only few tests with a variable periodicity usually every five years.**

Methods

- **To evaluate the efficacy of this ophthalmological screening, we analyzed the ophthalmological status in 249 bus drivers working in 13 different companies.**
- **Every bus driver was visited by a specialized ophthalmologist who carried out a complete clinic evaluation of every worker.**

Methods

We particularly considered:

- **natural and best corrected visus at near / at far;**
- **actual visual correction at near and at far;**
- **ocular motility;**
- **stereopsy;**
- **possible presence of asthenopia related to work;**
- **ocular colour screening capability**

Results

Among the 249 workers examined:

- 48 workers (19.3%) had a not well corrected visus at far, (an error at least of ± 0.75 dioptries).

Results

Among the 127 drivers examined, aged more than 45:

- **52 workers (41.0%) had a not well corrected visus at near, (an error at least of +/- 0.50 dioptries).**

Results

Among the 249 workers examined:

- **35 (14.1%) drivers had an unbalanced ocular motility;**
- **in 17 cases this fact had not been previously detected.**

Results

Among the 249 workers examined:

- **21 (8,4%) drivers had relevant alterations in colour screening capability, (using Ishihara tests)**

Results

Among the 249 workers examined:

- **25 (10,0%) drivers had a relevant deficit in their stereopsys.**

Results

Among the 249 workers examined:

- **43 drivers referred a frequent occupational asthenopia (more than two symptoms more than twice a week)**

Results

Among the 249 workers examined:

- **63 (25,5%) drivers had at least one of the relevant ocular alterations listed above**

Results

Among the 127 drivers examined, aged more than 45:

- 51 workers (40.2%) had at least one of the relevant ocular alterations listed above**

Results

Among the 63 drivers who had at least one of the relevant ocular alteration 51 (81,0%) were aged more than 45.

Discussion

- The results obtained showed that a big part of the bus drivers examined, who had regularly obtained and confirmed their driving licence, had one or more relevant alterations of the ophthalmological parameters evaluated.
- This fact can worsen their correct driving capability and especially their reaction time.

Discussion

- **This fact is a risk for the drivers' safety and for the safety of the passengers and of the general population.**
- **Consequently we think that actual Italian procedure of ocular evaluation for the obtainment and maintenance of bus driving licence has to be improved.**

Conclusion

We think that:

- **more ophthalmological tests and a more complete evaluation should be carried out during clinical controls for bus drivers.**
- **stricter parameters should be used for the concession of the bus driving licence.**
- **more frequent clinical controls should be compulsory, especially for bus drivers aged more than 45 years old.**