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## A 2018 update on computer glasses for use at work in Norway

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### Introduction

On a more or less biannual basis, for thirteen years, The Norwegian Association of Optometry has performed consumer surveys in Norway. Typically, approximately 1300 randomly selected Norwegians, at the age of 15 years and above, have constituted the study participants. Professional telephone interviewers contacted them all. Among the questions addressed were also the questions listed below:

- *Do you have special prescribed computer glasses for use at work, fully or partly paid by the employer?*
- *Do you feel a need of a pair of glasses for use at the computer (computer glasses)?*
- *Have there been measurements at your work place for your special work glasses? (In particular, we have measurements of visual work distances, lighting and reflexes in mind.)*
- *Are the costs of an eye examination partly or fully covered by your employer?*

### Purpose

The main purpose of this survey was to give an up to date number of the percentage of the Norwegian working population who use “special computer glasses for use at work” according to the Norwegian implementations [1, 2, 3] of the The European Directive on computer work (EU 90/270/EEC) [4]. An alternative term for “computer glasses” is glasses for use at Visual Display Units (VDU).

### Methods

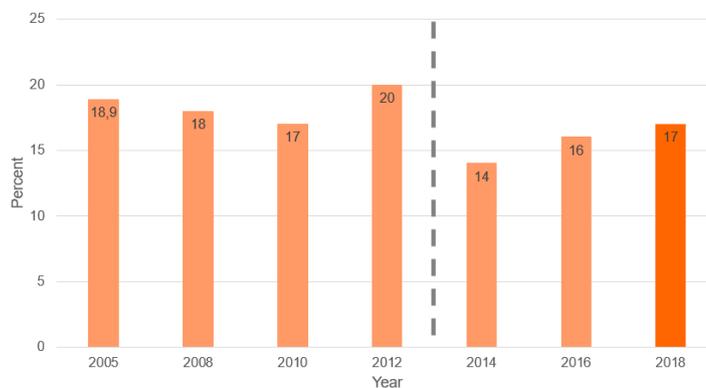
In the first half of January 2018 Kantar TNS AS interviewed over 1300 persons by Computer Aided Telephone Interviewing (CATI). All participants were randomly selected, 15 years of age and above, and selected in such a way that they should represent the Norwegian population by their family’s total income, geographically location and level of education. The person asked for by the interviewer was the person in the household who last had her/his birthday.

### Results

For the 2018 survey a total of 1311 persons constituted the survey population. The percentages for those included in the questions related to computer glasses were based upon all participants who gave a positive answer on wearing spectacles, or spectacles in combinations with contact lenses (n=958).

- *Do you have special prescribed computer glasses for use at work, fully or partly paid by the employer?* **Yes 17%**
- *Do you feel a need of a pair of glasses for use at the computer (computer glasses)?* **Yes 18%**
- *Have there been measurements at your work place for your special work glasses? (In particular, we have measurements of visual work distances, lighting and reflexes in mind.)* **Yes 34%**
- *Are the costs of an eye examination partly or fully covered by your employer?* **Yes 73% (fully 49%, partly 24%)**

In **figure 1** the results for the question on whether people use “special” glasses at work or not, are presented for the seven surveys performed since 2005. For the surveys for 2014 and onwards the wording was altered to more precisely ask for special glasses prescribed for VDU work.



**Figure 1.** Percent of people using glasses, or glasses in combination with contact lenses, having “special VDU-glasses for use at work, partly or fully paid by the employer”. For 2005, 2008, 2010 and 2012 the numbers are higher and represent the percentage of people using optical corrections who also have “special glasses for use at work”, which might also include special glasses for other work purposes than VDU work.

## Discussion

In Europe work at VDUs has long been recognised as possible visually demanding. The European Directive on computer work (EU 90/270/EEC) was introduced in 1990 [4]. A few years later the Norwegian provision of the EU directive was established [1], and a separate set of guidelines developed by The Norwegian Labour Inspection Authority [2, 3]. Even though the Norwegian provision regulation has been altered since it was first introduced, the importance of optimized visual conditions at VDU work is still included at a part of the present regulation.

EU90/270/EEC [4] include recommendations for eye examinations of workers. If the results of such an examination show that it is necessary, and if normal corrective appliances cannot be used, workers must be provided with special corrective appliances appropriate for the work concerned.

## Conclusion

According to the survey in 2018 approx. 17% of people using glasses, or glasses in combination with contact lenses, seems to use computer glasses after the regulations in the EU directive for computer work and the acting national provision.

## References

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