

## BLUE LIGHT PROTECTION IS RECOMMENDED FOR PEOPLE OF ANY AGE

Protection from artificial light emitted by modern LED light sources is recommended for people of any age – but children are especially at risk! This has been shown by a comprehensive study conducted by the French Office for Environmental Safety and Work Safety (ANSES). In their press release, they sum up the results as follows: “The high amount of blue in the emitted spectrum as well as the light intensity of LED lights are a serious risk factor for the eyes. In the retina, “toxic stress” is created, which can lead to retina damage within a short time. Children are especially susceptible, since their ocular lenses are still developing, and cannot filter the dangerous wavelengths efficiently.”

Scientists now assume that the total quantity of blue light reaching the retina over a lifetime influences the risk for the feared Age-Related Macular Degeneration (AMD), a disease of the eye, that cannot be cured, and probably only mitigated in the future.

Another risk originates from the fact that artificial light from LED lamps disrupts the circadian rhythms, and therefore strongly impairs the hormonal balance. And again, children are at a higher risk, because the harmonious interaction of the hormones is still forming in the juvenile organism.

Nevertheless, more and more kindergartens and schools are equipped with LED lamps in order to save energy. And in addition, a lot of kids don't only play computer games in their free time, but are also introduced (mandatorily!) to this technology at school. These are the reasons that even our youngest spend hours every day exposed to potentially damaging artificial LED light.

It is always reasonable to minimize existing risks. The most efficient countermeasure is to limit the amount of short wavelengths contained in artificial light which is shining into the eyes. The selective elimination of the aggressive short wavelengths content of visible light strikes the detrimental effect at the roots.

We take the concerns of leading scientist serious, and therefore adapted our innovative bluelightprotect glasses to the specific needs of children. Fashionable and robust frames in a fresh design hold the same high quality blue light protection filters that we use in our established products for adults.

-  The bluelightprotect glasses should be worn as often as possible, when children are looking into a screen or are surrounded by artificial light from LEDs.
-  The screen time and stay in artificially lit areas should be limited to reasonable time spans.
-  Accustom your child to take frequent breaks when working on the computer to give the eyes a rest. During this break, the blue light blocking glasses should not be worn.
-  When working on a screen, the eyes have to deliver maximum performance in the close field of vision. To keep the sensitive structures of the visual organs flexible, the breaks should be used to look into the far distance, ideally through an open window. While doing this, the blue light blocking glasses should not be worn.
-  Since working on a screen makes the view static and requires constant focusing, it is advisable to use the breaks for eye training, that gets the eyeballs moving and trains the eye muscles. For these exercises, the blue light blocking glasses should not be worn. Innovative Eyewear also offers pinhole glasses, which have been well-proven for eye training. These should then be used without a colored filter.
-  The eyeballs of children are still growing and adapt to the main visual task. If this is always in the near field of vision, the development of myopia can be promoted. To counteract this, it is important to follow the advices and eye training exercises described here!
-  Children should spend at least an hour outdoors every day. In this time, they shouldn't wear any protection glasses (neither sunglasses nor bluelightprotect glasses), since the blue light content of natural daylight can counteract the development of myopia, when not overdosed.
-  The most natural light environment for the human eye can be found in the presence of green plants and grass. If the daylight seems to be too strong, it is useful to wear a peaked cap.