

Providing Eye Care Information to Resolve Problems Caused by Excessive Screen Time

June, 12, 2020, Osaka, Japan - With novel coronavirus infections spreading around the world, we are working across our global operations to prevent and control infection while maintaining our business operations and a stable product supply. As a basic rule of our company, employees have been working from home since February 25 in Japan, and since early March in other locations around the world including US and Europe. While many nations are now working to reduce restrictions on leaving home and sequentially restart economic activity, we are required to adopt to the new lifestyles and ways of working, as we learn to live “with COVID-19” and eventually move in to the “post COVID-19”.

In Japan, since the announcement of a state of emergency on April 7, many companies, including Santen, rapidly moved to require their employees to work from home. A recent survey shows that the percentage of workers working from home had approximately doubled from 13.2% as of the end of March to 27.9% now¹. People are spending an increasing amount of time in front of LCD monitors to conduct not only daily meetings and tasks that were previously carried out face-to-face but also to participate in online drinking and study classes. This trend is occurring not only in Japan, but also across the world. Globally, as of April 3, more than 90% of school children have been affected by these changes, and in some regions the proportion of schoolchildren learning online now exceeds 50%². This increased screen time can result in eye-related symptoms including fatigue and dryness. There are concerns that people of all ages, from children to adults, are suffering these difficulties.

As we develop new lifestyles as a result of living “with COVID-19”, “post COVID-19”, Santen is, as a specialized company dedicated to ophthalmology, working in collaboration with the Japan Ophthalmologists Association to provide more comprehensive information on the resolution of various eye-related symptoms. We will be providing this information via channels including our company website and official LINE account. By supporting better ophthalmological health, our goal is to contribute to improved patient quality of life (QOL).

^{*1} Data from the "snapshot study of the impact of working from home due to novel coronavirus countermeasures", Persol Research and Consulting Co., Ltd.

^{*2} UNICEF and other (Child Safety Online. Global challenges and strategies)

■ VTD Syndrome

https://www.santen.co.jp/ja/healthcare/eye/library/vdt_syndrome/index.jsp (※Japanese Only)

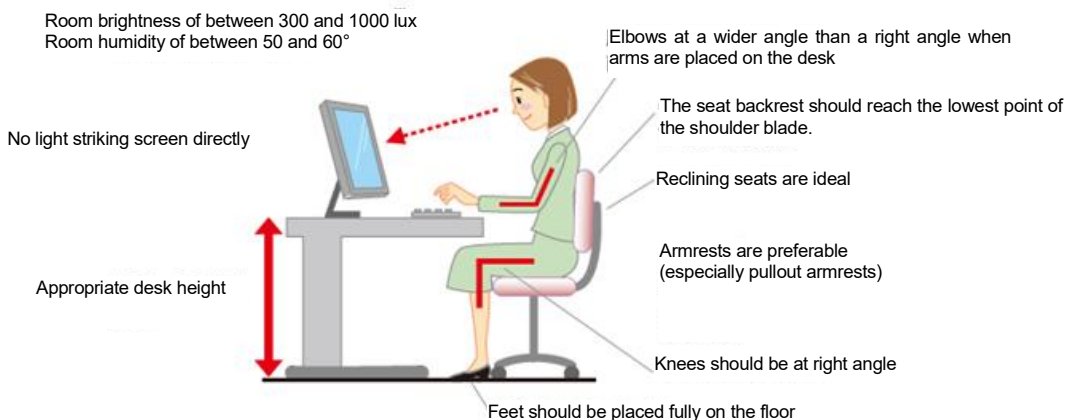
VTD (Visual Display Terminal) Syndrome (also known in Japan as IT-related disease) is a condition in which extended use of computer displays, monitors and other visual display terminals leads to physical symptoms, including eye problems, as well as psychological symptoms. Initial eye symptoms may progress into problems with stiff shoulders, pain from the neck through to the shoulders and arms, and feelings of listlessness. If the condition becomes chronic, those affected may also develop back pain, tingling hands and other symptoms.

Psychological symptoms include irritation and anxiety as well as depression.

Suggested measures:

- Take appropriate breaks of 10 to 15 minutes every hour
- Take appropriate exercise, stopping work to move around and release tension
- Ensure prescriptions for spectacles and contact lenses are appropriate
- Immediately seek medical assistance if symptoms occur

Environments that prevent eye fatigue



■ VDT Syndrome in Children

The eyes of adults and children are completely different. The size and shape of the eyeballs, as well as visual acuity and the capacity to move the eyes, continue to develop until the age of at least around 15. Therefore, the visual environment can have a major effect on development. Development of the eyes is particularly noticeable to the age of three.

In the same way as intellectual and physical development, eye development during this time is rapid. Particular attention should be given to the issues that can result if, during this period, children do not get enough exercise and instead spend a large amount of time playing video games, which require strenuous eye movements and present unusual visual environments.

Source: Japan Ophthalmologists Association IT-related eye disease in children, ophthalmologic health information (in Japanese) <https://www.gankaikai.or.jp/health/36/> (※Japanese Only)

■ How to use digital devices

With school closures, many students are studying at home, increasingly using PCs or tablets to study materials or take classes. These changes have worsened the environmental stress on children's eyes. To protect children's future eyesight, even greater care needs to be taken than normal.

Suggested measures:

- Smartphones and tablets should be held at least 25 cm away from the face
- It is important to rest the eye by looking at something other than a screen at least once every 30 minutes
- An ophthalmologist should be consulted when symptoms such as double vision occur

Source: Japan Ophthalmologists Association Message for children and their families during the state of emergency

https://www.gankaikai.or.jp/info_covid/coronavirus.pdf

■ Eye fatigue

<https://www.santen.co.jp/ja/healthcare/eye/selfcheck/eyestrain/> (※Japanese Only)

Suggested measures:

- Eat regularly and ensure good nutrition
- Rest the eyes through breaks of approximately 10 minutes every hour when working for extended periods
- When the eyes are fatigued, a warm towel can be pressed to the eyelids to relax
- When using spectacles or contact lenses, the prescription should be checked regularly
- People age 40 or over should see whether or not they are suffering from presbyopia (inability to focus on close objects), and if so to what degree. If necessary, use reading glasses.

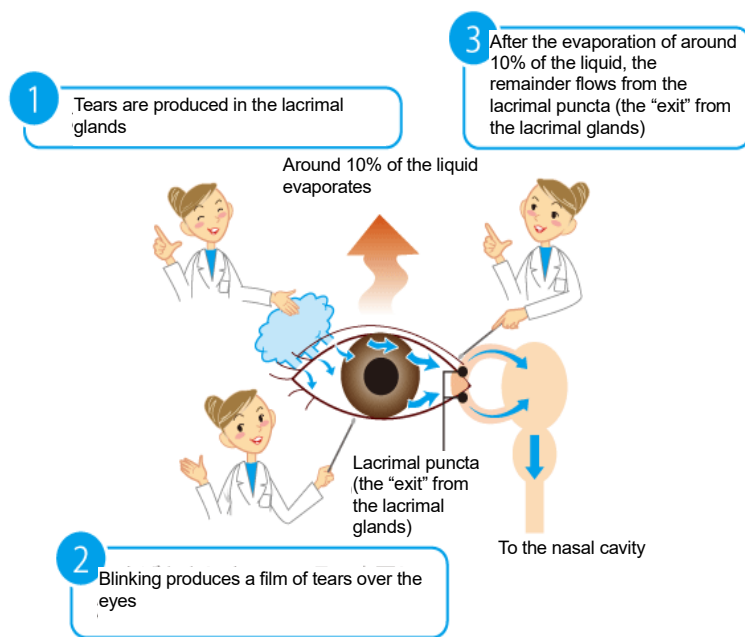
■ Dry eyes

<https://www.santen.co.jp/ja/healthcare/eye/selfcheck/dryeye/> (※Japanese Only)

Suggested measures:

- When looking for an extended period at a computer display or other screen in a dry room, remember to blink regularly to prevent your eyes from drying out
- If you continue to suffer from dry eyes, be sure to visit your ophthalmologist

Why Eyes Dry Out



■ Eye stretches

<https://www.santen.co.jp/ja/healthcare/eye/eyecare/stretch/> (※Japanese Only)

When using a PC for a long time, we naturally blink less, which leads the eyes to dry out and the interior of the eyes to feel heavier. This eye fatigue may eventually evolve into stiff shoulders as well as neck, shoulder and arm pain. When using a computer, take a 10 to 15-minute break every hour to give your eyes a rest. Stretching the muscles around your eyes is an effective way to reduce eye fatigue and relax.

■ How to use eye drops properly

<https://www.santen.co.jp/ja/healthcare/eye/eyecare/eyelotion/> (※Japanese Only)



- *1 Gently pull your lower eyelid to ensure the eyedrop fully enters the eye (follow any specific instructions from your physician or pharmacist). Make sure the end of the dropper does not touch your eyelids, eyelashes or eyeball.
- *2 Immediately after application do not blink, but rather close your eyes and softly wipe away any liquid runoff with a clean gauze or tissue.
- *3 Then, either wait for between one and five minutes with your eyes closed and use your fingertip to press lightly on the lachrymal sac (the area where the eye meets the nose).

It is thought that novel coronavirus infections can be passed through the conjunctiva, the eye's membrane. To prevent infection, ensure you take the following steps when using eyedrops.

- Wash your hands or disinfect your hands with alcohol before and after using eyedrops
- Do not share your eye drops with other people

Information links (Japanese only)

- Santen Pharmaceutical website: Eye Information Portal) <https://www.santen.co.jp/ja/healthcare/eye/>
- Santen Pharmaceutical LINE account <https://lin.ee/BVOTOYe>



- Santen Pharmaceutical Facebook account <https://www.facebook.com/SantenOfficial/>
- Japan Ophthalmologists Association website <https://www.gankaikai.or.jp/>

About Santen

As a specialized company dedicated to ophthalmology, Santen carries out research, development, marketing, and sales of pharmaceuticals, over-the-counter products, and medical devices. Santen is the market leader for prescription ophthalmic pharmaceuticals in Japan and its products now reach patients in over 60 countries. With scientific knowledge and organizational capabilities nurtured over a nearly 130-year history, Santen provides products and services to contribute to the well-being of patients, their loved ones and consequently to society. For more information, please visit Santen's website (www.santen.com).

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