



Occupational Health Management for Computer and Digital Device Work

The “Guidelines for Occupational Health Management for Computer and Digital Device Work” were established in 2019 to protect the health of workers who use computers and other digital devices.

‘Computer and digital device work’ refers to tasks performed using computers, tablets, and similar devices, including data entry, search, and verification; the creation, editing, and revision of text and images; programming; and monitoring work.

This type of work was previously called “VDT work” (short for Visual Display Terminals).

Overview of Changes to Work Categories

Framework of the Guidelines

- **Work Environment Management**
Explains how to improve the work environment.
(Examples: display brightness, choosing devices, desks, and chairs)
- **Work Management**
Explains methods for managing the work itself.
(Examples: working hours, how to take breaks, and desirable posture)
- **Health Management**
Explains measures to protect the health of workers engaged in computer and digital device work.
(Examples: health examinations and workplace exercises)
- **Occupational Health Education**
Explains the education needed so workers and managers understand the purpose and methods of the above measures.



New

	Definition of Work Categories	Work Environment Management	Work Management	Adjust equipment and posture	Health Management
Constrained work (Note 1)	Workers who perform computer and digital device work for 4 or more hours per day and whose work involves continuous display viewing or input-device operation, or otherwise imposes substantial constraints on posture or the pace of work.	Lighting and glare; selection of information devices; inspection and cleaning	If daily working hours are excessively long, reduce the workload. Each continuous work period should not exceed 1 hour. Insert one or two short breaks, and within continuous work, include 1–2 brief mini-breaks. For “constrained work,” special consideration should also be given to total continuous work time per day.		• Health examinations • Work history • Past medical history • Presence of subjective symptoms • Ophthalmologic tests • Musculoskeletal tests
Other than the above (Note 2)	Work other than the above				Conduct the above examinations only for workers with subjective symptoms.

Note 1: Work considered to involve a considerable degree of constraint in working time or work content (all workers are subject to health examinations).

Note 2: Work other than the above (only workers with subjective symptoms are subject to health examinations).

○ About the Category Change

The three “work categories” specified in the former VDT guidelines were changed in the new guidelines to two categories based on whether the work is constrained. For “constrained work,” in addition to focused responses from the perspective of work management, the implementation of health examinations for computer and digital device work is stipulated as an obligation to make efforts.

○ Health Problems Caused by Computer and Digital Device Work



Category	Main Symptoms	Self-Check for Employees (Signs to Notice)
1. Eye Symptoms (Ophthalmic disorders)	• Dry eye (eye dryness) • Eye strain (fatigue that does not go away even after rest) • Reduced vision, blurred vision, redness • Sensitivity to light	• By evening, text on the screen looks blurry • Your eyes feel gritty and you blink more often • Your eyes feel drier than before and you cannot do without eye drops
2. Body Symptoms (Musculoskeletal disorders)	• Severe stiffness or pain in the neck, shoulders, upper back, or lower back • Pain in the wrists or fingers, tenosynovitis • Numbness in the arms or hands • Swelling or heaviness in the feet and legs	• While working, you unconsciously rotate your neck or shoulders • You feel discomfort in your wrists or fingers when typing • By evening, your shoes feel tight (swollen feet)
3. Mental Symptoms (Neuropsychological disorders)	• Chronic fatigue, headache, dizziness • Irritability, anxiety • Sleep problems (difficulty falling asleep, waking during the night) • Decreased motivation	• From the moment you wake up, your body already feels tired and heavy • When you sit in front of the computer, you become irritated for no clear reason • Even after getting into bed at night, work stays on your mind and you cannot sleep

If You Feel Unwell

● Thorough Self-Care (Readjust Your Environment)

First, readjust your office or home environment, such as desk and chair height and screen brightness.

● Consult an Appropriate Medical Provider (Specialist)

Do not endure the symptoms. We recommend consulting a specialist according to your symptoms.

- Eye symptoms: Ophthalmology (treatment for dry eye or eye strain, and adjustment of eyeglass prescriptions)
- Body symptoms: Orthopedics or Rehabilitation Medicine (for diagnosis of lower back pain and neck-shoulder-arm disorders)
- Mental symptoms: Psychosomatic Medicine, Psychiatry, or your primary care physician

● Contact Internal Consultation Services

If “changing the environment does not help” or “the workload is too high to take breaks,” do not keep it to yourself. Consult the in-house occupational health nurse, HR, or your supervisor.

Sources: Ministry of Health, Labour and Welfare, *Guidelines for Occupational Health Management for Computer and Digital Device Work*; Tokyo Labour Bureau, *Occupational Health Management for Computer and Digital Device Work*; Tokyo Medical Association, *Guide for Occupational Physicians*.

Environmental Standards Suitable for Computer and Digital Device Work (VDT)

Item	Guideline Standards (Numerical Values)	Specific Measures and Tips to Tell Employees
Screen Brightness (Display)	No significant difference from the surrounding brightness (luminance balance)	- Lower the screen brightness so it blends with the room lighting. - Adjust it so text on a white background does not feel glaring.
Room Brightness (Lighting)	- When viewing the display: 300 lux or more - When viewing documents or the keyboard: 300 lux or more	- Make the room as a whole sufficiently bright. - Maintain a level of brightness that does not tire the eyes whether looking at the screen or at papers on the desk.
Glare Prevention (Anti-Glare)	No sunlight or lighting should be reflected on the screen	- Use curtains or blinds on windows. - Adjust the direction and tilt of the display. - Apply an anti-glare protective film.
Ventilation and Air Environment	- Room temperature: 17°C to 28°C - Relative humidity: 40% to 70%	- Adjust the air conditioner airflow so that it does not hit the body directly. - During the dry winter season (when the eyes tend to dry out), also use a humidifier.
Noise Control	Noise generated by equipment should not be unpleasant	If the PC or surrounding equipment is noisy, change the placement or inspect the equipment.

Environmental Standards Suitable for Chairs and Desks

Item	Guideline Standards	Specific Measures and Tips to Tell Employees
Chair Height	- The entire sole of the foot should rest on the floor - The back of the thighs should not be compressed	- If the chair is too high and the feet are floating, use a footrest. - If the chair has no adjustment function, use a cushion or similar item to adjust the height.
Chair Backrest / Seat	- The backrest should firmly support the back - The seat depth should be appropriate	- Sit deeply with the pelvis upright and rest your back against the backrest. - If the backrest is too far away, place a cushion behind the lower back.
Desk Height / Width	- When typing, the elbow angle should be 90 degrees or more (a right angle or slightly wider). - The shoulders should not rise, and the arms should be able to hang naturally.	- If the desk is too high, raise the chair and place a footrest under the feet; if it is too low, adjust it with risers. - Ensure enough space to place documents, the keyboard, and the mouse comfortably.
Equipment Placement	- The top edge of the screen should be at eye level or slightly lower - Keep the screen at least 40 cm away from the eyes	Because laptops tend to lower the line of sight and cause a hunched posture, it is ideal to raise the screen with a stand and use an external keyboard.

Work Management (Standards for Working Hours and Breaks)

Item	Guideline Standards	Specific Measures and Tips to Tell Employees
Continuous Work Time	One continuous work session should not exceed 1 hour	Use a timer or similar tool and break the work once 1 hour has passed.
Break Time (Short Breaks)	Take a 10–15 minute break between continuous work sessions	- Take your eyes completely off the screen. - Stand up, look into the distance, do light stretching, and drink water.
Mini-Breaks During Continuous Work	Even during a continuous work session, take a 1–2 minute brief pause	Between tasks, take your hands off the keyboard for a few seconds to about 1 minute and let them relax, or close your eyes and rest them.
Work Rotation	Combine other tasks (such as organizing documents or moving around) so computer and digital device work does not continue uninterrupted	Add variety to the work content, such as: "PC work in the morning, then one hour in the afternoon for tidying up or checking outgoing mail."

How Bright Is "300 Lux or More"?

Office Guideline:

A typical office workspace (with fluorescent lights or LEDs fully on) is approximately 300–700 lux.

At Home:

Brightness suitable for serious reading or studying at a desk (with a desk light on) is approximately 500–1,000 lux.

Work Environment for Telework

- Employers should strive to protect workers' health by following the guidelines.
- Workers should also refer to the guidelines and strive to create an appropriate work environment.



[Eye Symptoms]

- Dry eye
- Eye strain
- Redness
- Reduced vision



[Physical Symptoms]

- Shoulder stiffness
- Neck, back, and lower back pain
- Headache

Using digital devices for long hours can lead to...

[Mental Symptoms]

- Irritability
- Anxiety
- Fatigue
- Feeling heavy



Sources: Ministry of Health, Labour and Welfare, Guidelines for Occupational Health Management for Computer and Digital Device Work; Tokyo Labour Bureau, Occupational Health Management for Computer and Digital Device Work; Tokyo Medical Association, Guide for Occupational Physicians.