

Occupational health and safety for teleworkers



Like workers in traditional settings, teleworkers are at risk from occupational health and safety (OH&S) hazards, with a potentially significant affect on their life and work.

Creating and maintaining a safe and productive work environment is important, wherever work is done. It improves productivity, staff happiness and well being—and could save both employers and employees money in the long term. However, setting up safe, comfortable and productive work arrangements in the home can sometimes be a challenge.

The employer is legally obliged to take “all practicable steps” to ensure a safe and healthy workplace but employers aren’t always aware of the risks that teleworkers are facing. Employees also have a responsibility to do what they

can to improve the safety and comfort of their home office: health and safety is a shared responsibility.

It is therefore important that employers discuss OH&S issues with their workers, and that they work together to identify and manage health and safety risks.

This document presents some general background information on OH&S before providing a check list that teleworkers and their supervisors should consider before telework starts.

Every attempt has been made to be accurate and thorough but not all risks and hazards can be identified in advance: users of this document will need to fully assess the risks that exist in their environments.

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Types of OH&S risks

Occupational health and safety (OH&S) risks arise from a range of contributory factors. Some risks can also arise from the combination of several factors.

The following groups of factors need to be considered to avoid the risks associated with OH&S.

- **Individual factors:** things a person can change (e.g. amount of sleep, fitness, or smoking) and things a person can't change (e.g. age, gender or genetic make-up);
- **Psychosocial factors:** the way a person reacts to the issues and stressors within their lives—both those within the work place and those outside of work. Such reactions can lead them to feel 'tense' or 'stressed';
- **Work organisation:** how work is arranged, delegated and carried out;
- **Workplace layout and awkward positions:** the way the workplace is set up and the working positions that a worker adopts;
- **Task variability:** how much a task does or does not change over time;
- **Load and forceful movements:** what objects a person handles and the force that is necessary to move them; and
- **Environmental issues:** where the work takes place and the conditions a person works in.

These groups of contributory factors will influence each other in undetermined ways: it is the combination of factors present (and their severity) that is important.

A holistic approach to managing OH&S is important because it can reduce the overall impact of specific risks as well as the risks that are involved once factors are combined. Furthermore, some sets of issues (boredom with repetitive tasks, for example) can be solved by action in another area (work organisation).

It is hard for employers to prevent discomfort, pain or injury for employees working off-site: there can be contributory factors present that do not exist in the traditional office. As a result, employees in the home office must take a higher level of responsibility for their own health and safety.

The seven groups of risk factors exist in both our private lives and our work lives. Although we might try to keep the two parts of our lives apart, it is rarely possible, wherever we work. And when the work environment is the home, it can be more difficult to separate work and private lives.

As a result, taking holistic action across all the groups of factors listed above is even more important. (An introduction to risk management is provided on page 9.)

Individual factors

Individual factors are things a person can and can't change about the way they are. Individuals might not be able to change their age, gender or genetic make-up but they can change many other things (albeit not always quickly or easily).

- Without fresh air and exercise, people start to feel tired much sooner and their health could suffer in the long run. Either way, productivity will drop. It is important to maintain a level of basic fitness.
- Maintaining regular, nutritious eating patterns is important—some teleworkers have put on weight because they snack on unhealthy foods.
- Intake of water should also be watched. Keeping fluid levels up avoids toxic build-ups.
- Fatigue can be a major issue. It can be easy to work too late at night when working at home. It is important to maintain sufficient, regular sleeping hours.
- Alcohol and other drugs or medication can impair an individual's ability to sleep, think clearly and work effectively.
- Smoking is not only a major health risk but it also creates an unhealthy atmosphere in the home office and will limit the capacity for useful exercise.
- It is possible to get so involved in work that rest breaks are skipped. These should be scheduled. To minimise the chance of RSI (repetitive strain injury) or OOS (occupational overuse syndrome) and minimise discomfort, this schedule should be supplemented by frequent micro-breaks: stretching, walking around the office, leaning back in the chair—anything to relax the body.
- In addition to specific problems, there could be personality aspects that will pose risks. How goals are set, decisions made and emotions handled is relevant. How a person copes with change and the attitudes and beliefs that they have can also create challenges.

Psychosocial factors

Psychosocial factors relate to how individuals interact with their work and non-work environments and the things that influence their behaviour, i.e. the stressors that they are faced with.

Stress is an increasing problem in the modern world. Unless we can decrease the amount of stress and the number of stressors in an individual's environment, happiness and wellbeing is likely to be affected and he or she is more likely to suffer from discomfort, pain or injury: productivity will drop.

Every individual has different capacities for 'coping' with specific issues at different times of their lives. Personality, culture, upbringing, way of thinking, life stage or maturity and physical health all affect this capacity.

Given that the 'non-work' environment is also a 'work' environment (for teleworkers) different potential stressors could become apparent.

Possible non-work factors:

- Relationships with partners and other family members will change when working in the home environment. Home-based workers are likely to see much more of the family and this can pose challenges.
- Emotional issues such as family bereavements or other personal relationships can be a major concern in the home office where traditional office distractions and rhythms are not present.
- Financial concerns could also appear to be more important when working from home.

- Should the employee, or those close to him or her, suffer from ill-health, this can also increase stress levels.
- Although too much social interaction (during work hours) can be a problem, not enough can also be an issue. A good social life can be a good antidote for work-related stress.

Possible work factors:

- Unreasonable workloads, deadlines and expectations can have a major impact on teleworkers. Without clear agreements with managers, including job briefings and information on how work will be measured, it is easy for teleworkers to become worried about their work, whether they are doing it well enough, and whether promotion prospects are being damaged;
- Inadequate time management skills can also lead to an increase in stress levels. The prospect of not meeting deadlines can become a major issue, as can having to work long, different or unsociable hours;
- Many teleworkers feel that they no longer have management support once they are away from the traditional office. Relationships with other colleagues can become problematic. Both of these factors can increase stress, particularly if telework is not effectively supported by the organisation's culture; and
- A lack of job satisfaction can be both a cause and result of stress. It can be easy to lose the belief that the job is worthwhile.

Work organisation

Work organisation covers the way that work is structured, managed and processed. This includes many issues that a person might react to and which could trigger psychosocial issues. Such issues can include:

- Hours of work—including issues related to shift work, overtime, unsociable hours, being on-call, etc;
- Chains of command—who has power and/or authority, how many 'levels' of hierarchy exist in the organisation;
- How work 'flow' is planned and managed and whether there are definite peaks and troughs in work demand;
- How the work is organised and whether there are appropriate breaks to manage fatigue and allow rest and recovery;
- Whether there is sufficient variation in the tasks to be performed to change the demands on body and mind throughout the day;
- How the workplace is laid out and whether printers or other equipment are easy to access;

- The overall workload—can hours of work, amount of work or the tasks themselves be changed?;
- Whether adequate training has been provided; and
- How files and equipment are managed: it is important to have the required resources and equipment where and when they are needed.

Organising work properly is a way of making telework easier. When workers are away from the subliminal cues of the traditional office, it is harder to concentrate and easier to lose sight of the objectives.

It is advisable to plan the workload across a week or longer time scale. It is also important that there is a clear understanding with managers and colleagues about what is to be done and the deadlines that apply.

If other people are present in the house during work hours, possible distractions should be minimised so that work organisation, quality of work and productivity are not affected.

Work place and awkward postures

When people think about OH&S, they often focus on the physical elements of the work place—the way the workplace is laid out and set up and the working positions that are adopted. Although these factors are important, they will not be the only things that need to be thought about.

The way the office is organised can pose a number of possible challenges. Inadequate space can lead to stacks of papers and/or dangerous stacks of storage boxes. Untidy or cramped offices can lead to lost productivity and stress. Leaving work lying around the house will make it hard to relax, increase stress and could damage productivity when important files or papers are mislaid.

The design and layout of a workplace directly affects the positions workers adopt. The workplace should be designed to suit the worker and the task(s) to be performed. This may mean building in a certain amount of adjustment and flexibility. However, even with adjustable workplace layouts, it is important that teleworkers know how to use equipment and why it is important to adjust it to their needs.

Chair and work surface heights should be set up properly, the monitor should be set at an appropriate level, and the keyboard should fall naturally under the hands. A footrest should be considered to improve desk comfort. Flexibility will be important, but the workplace should be based on a comfortable, safe position.

(More information is available at <http://www.comcare.gov.au/>.)

Comfortable (and productive) home office spaces will help teleworkers feel good about working but the office should also demonstrate a 'professional' approach to work.

Don't be misled by the myth of the 'perfect working position'. The human body needs to change and move around. Holding one position (even a very good one), or working in one particular way for a long time, can still lead to problems. It is often said, 'the best position to be in is the next one!'

Our joints and muscles generally work best around the mid-position of the joint or range. That is, not fully stretched and not fully bent, e.g. the wrist should naturally sit around the middle of its range of movement, not all the way back, forward or to either side. From there, regular changes from that mid-position are required. To maintain joint flexibility and muscle length (the conditions under which the body functions best), joints and muscles should be moved regularly and be stretched occasionally through their full range of movement.

Having to apply force when in an awkward posture magnifies the risks, as does the length of time spent at the work station.

Task variability

Task variability relates to the need to avoid repetition and its effects, as well as the effects of not moving at all. It also includes the impact of a lack of variety on the cognitive (mental/concentration) load of a person: both too little and too much can have negative effects on workers.

Task variability factors overlap considerably with work organisation: good time and work management can address many aspects of task invariability. Task variability issues include:

- Too much repetition of movement—this can lead to the body being unable to keep up with demands for nutrients and waste removal.
- No movement (i.e. static holding)—the muscle may not be able to pump nutrients and oxygen or perform the waste removal functions required.

- Too much cognitive demand—the worker may feel unable to ‘keep up’.
- Too little cognitive demand—the worker may get bored and not be bothered with work.
- The duration of a task plays a large factor in whether task invariability becomes an issue or not.

Organising and planning work ensures that there is variety in the working day and scheduled rest breaks. This helps workers stay interested and productive and helps to avoid gradual process injuries and physical discomfort.

Loads and movements

What objects a person handles and the forces they have to apply to move or use them can be harmful. Very few teleworkers will need to move large, bulky or heavy objects often but when this is necessary it could still cause discomfort, pain or injury, particularly as there is often a lack of assistance in the home.

Carrying documents, books and equipment between home and the workplace can cause problems for some teleworkers. The loads involved and the frequency that they are handled will need to be considered.

Issues that will need to be thought about include the weight of the object, how angular, bulky or unwieldy it is, and how easy it is to grip. Some objects could have an unpredictable or uneven weight and others could block the vision (leading to falls).

(Note that holding a limb or part of the body in a specific position for any length of time is equivalent to placing a load on the muscles involved.)

Environmental issues

Environmental issues come from where the work takes place and the conditions a person works in. A wide variety of issues could be involved in the home office.

- It is important to maintain a comfortable temperature—particularly as computer equipment can generate heat.
- Fresh air and adequate ventilation are important, particularly in warmer temperatures.
- High humidity is tiring (and can damage computer equipment).
- Inadequate lighting can damage eyesight, create headaches, distract, contribute to stress levels, and reduce productivity.
- Ambient noise can also lead to headaches, stress, and lower productivity. Occasional louder noises can be very distracting.
- Excessive vibration can be a problem in some home offices: large machinery working nearby, large household appliances, or passing traffic can all create low level vibration in the office. Over time this can become stressful and irritating.
- The desk can cause stress if it's difficult to find things on it, if there isn't enough space to spread papers out, or if other things on the desk become distracting.
- Home offices have a high power requirement, meaning that plugs and fuses can become overloaded creating power cuts and fire risks. Extension leads and multi-way power boards on the floor can be a hazard and it's possible to accidentally kick the computer's power plug out.

Security

Working at home or alone can pose personal security risks. Home-based workers should feel safe in their homes without feeling like a prisoner.

Emergencies and other disruptions

A number of external events could threaten your home and office. They range from fires, storms and floods and other natural disasters. Having an appropriate emergency plan will reduce the likelihood of discomfort, pain or injury as a result of these events.

Events of this sort can also damage computers and the data they store—data backups are always essential.

(Not every emergency will be major or life threatening. Power cuts can happen at any time, and telephone lines, water pipes or the gas supply could be cut. All of these things can be very inconvenient and disruptive and contingency plans should be prepared.)

Safety around the home

Accidents around the home are a common occurrence. Risks include slippery stairs and floors, floor coverings that can trip people, staircases without handrails, protruding corners and sharp edges, and kitchen hazards. External wood and concrete surfaces can also be a hazard when wet. Although none of these are essentially 'office' risks, they all pose risks to the safety and health of people who are working at home.

Identifying home risks

Managing risks in and around the home office requires that potential problems are understood and identified and that appropriate preventive actions are taken.

In the following checklist some possible issues within each group of contributory factors are listed. Since there is a shared responsibility for ensuring a safe working environment, both employers and employees are encouraged to use this resource so that they can decide together on appropriate actions to be taken.

Using the checklist

The checklist is effectively a 'hazard register' for the home and home office. The following four questions will help evaluate each possible risk:

1. Is this likely to be an issue?

Score:

- 5 if it's very likely,
- 4 if it's probable,
- 3 if it's possible,
- 2 if it's unlikely,
- 1 if it's extremely unlikely

2. Will it always be an issue?

Score:

- 5 if it's a continual problem,
- 4 if it's a daily problem,
- 3 if it's a weekly problem,
- 2 if it's a monthly problem,
- 1 if it's a rare problem.

3. Will it have consequences for work performance? Score:

- 5 if it destroys work files,
- 4 if it stops work proceeding,
- 3 if it's a major distraction,
- 2 if it's an irritation,
- 1 if it has no effect.

4. Will it have consequences for personal wellbeing? Score:

- 5 if it is life-threatening,
- 4 if it constitutes a serious health or injury risk,
- 3 if it could seriously disrupt home life,
- 2 if it will be an irritation,
- 1 if it'll have no effect.

The **significance** of the issue is the

total of the four answers. If something is very likely to happen often and will cause major disruption to both work and personal life, the significance will be $5 + 5 + 5 + 5 = 20$. Similarly, a possible problem that could distract and irritate once a month will have a significance of $3 + 2 + 3 + 2 = 10$.

As the home office and the way it is used will change over time, it is advisable to go through the checklist every six months or so.

Taking action

Once the checklist has been completed, it becomes the basis for an action plan. Developing this action plan should be a collaborative exercise involving individual teleworkers, their managers and other colleagues.

Within each group of factors, consider the issue with the highest significance and ask:

- What actions can be taken to reduce the likelihood that this will cause a problem? (How can the risk be eliminated or isolated?)
- What actions could reduce the frequency of the problem? (How can the risk be minimised?)
- What actions could reduce the impact of the problem? (How can the risk be managed?)

Write the answers to these questions on a separate piece of paper. (If no actions can be identified, the issue should be discussed with managers or with other teleworkers. They might have some suggestions.)

Once the list of actions has been prepared, it is important that action is taken. For advice on appropriate preventive actions, refer to the appropriate State or Territory authority. (Refer to the links provided at www.teleworkaustralia.net.au.)

A checklist of possible risks and hazards

Answer the following questions against each of the factors listed below to identify where remedial action might be needed.

1. Is this likely to be an issue?

Score:

- 5 if it's very likely,
- 4 if it's probable,
- 3 if it's possible,
- 2 if it's unlikely,
- 1 if it's extremely unlikely

2. Will it always be an issue?

Score:

- 5 if it's a continual problem,
- 4 if it's a daily problem,
- 3 if it's a weekly problem,
- 2 if it's a monthly problem,
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4. Will it have consequences for personal wellbeing? Score:

- 5 if it is life-threatening,
- 4 if it constitutes a serious health or injury risk,
- 3 if it could seriously disrupt home life,
- 2 if it will be an irritation,
- 1 if it'll have no effect.

	Q.1	Q.2	Q.3	Q.4	Total
Individual factors					
Scheduled regular exercise					
Overeating or inadequate nutrition					
Drinking enough fluid during the day					
Irregular or insufficient sleep					
Alcohol consumption					
Smoking					
Taking frequent short breaks					
Stretching routines to relax at the desk					
Psychosocial factors					
Other household members would rather you weren't home					
Interruptions from dependants and friends					
Emotional problems and bereavements					
Financial concerns					
Ill-health in the household					
Inadequate social life					
Appropriate telework agreement in place					
Knowledge of the task and how it will be measured					
Poor time-management skills					
Effective management support					
Relationships with colleagues					
Job satisfaction					

Work Organisation

Long or unsociable work hours					
Unclear chain of command					
Clear work plan in place					
Time-management system in place					
Trying to do too much					
Tasks are frequently needed immediately					
Lack of task variety					
Work load is excessive					
Inadequate skills or experience to do your off-site tasks					
Insufficient stationery or other resources or equipment					

Workplace layout

Filing and storage space available					
Furniture is comfortable and safe					
Adjustable desk and work surfaces					
Adjustable chair					
Adjustable keyboard					
Monitor height adjustable					
Footrest available					
Inefficient workplace layout					

Task variability

Work involves repetitive tasks or keystrokes					
Work has insufficient variety					
Workload not balanced between types of tasks					
Work position doesn't change					
Excessive time spent at the computer					
No regular rest periods at or away from your desk					
Cognitive demands too high					
Cognitive demands too low					
Tasks have a long duration					

Loads and movements

Carrying too much between home and office					
Heavy or bulky objects need to be moved					
Work involves holding limbs in static positions					
Large or heavy objects must be moved frequently					

Environmental issues

Office is too hot or cold					
Inadequate ventilation					
High levels of humidity or condensation					
Lighting too bright or too dim					
Inadequate noise insulation					
Vibration sources in and around the home					
Inadequate power fuses					
Excessive use of multi-way power boards					
Dangerous power cables (e.g. accessible to young children)					

Emergencies and fires

Civil emergencies					
Basic emergency plan and procedures unknown					
Fire alarm and extinguisher present					
Back up procedures for data and files in place					
List of important telephone numbers available					
Contingency plan for utility failures (power, water, etc.)					

Safety around the home

Slippery external surfaces, steps, and decks					
Slippery internal floors (bathroom, kitchen, hallways)					
Floor coverings you can trip on					
No handrails on staircases					
Blocked corridors and doorways					
Protruding or sharp corners and edges on furniture or walls					

Does your home office have any special features to be considered?

More information

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