

whiplash injury **Recovery** a self help guide



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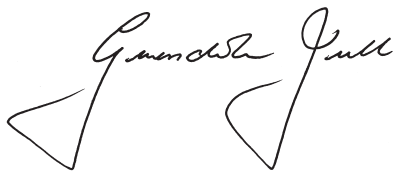
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The exercise program and self-management advice presented in this booklet are based on the results of clinical trials, research into neck disorders and the authors' extensive clinical experience in the area of whiplash-associated disorders and other neck pain syndromes.

A message from the authors

This booklet aims to help people who have a whiplash injury on the road to recovery. It provides information about whiplash associated disorders, an explanation of whiplash, an exercise program which has been proven to assist in reducing neck pain and advice on how to manage your neck to prevent unnecessary strain and to aid recovery.

The booklet is a self-help resource to aid recovery and to supplement any care being provided by a health care practitioner.



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Disclaimer

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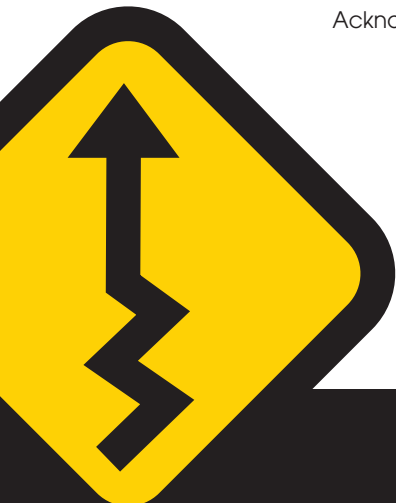
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What is whiplash?

Whiplash is the term used to describe the acceleration-deceleration forces on the neck which may occur in rear-end or side impact motor vehicle collisions.

These forces may result in painful injuries to the muscles, ligaments and joints of the neck and other spinal areas. However, sometimes they result in no injury or pain at all.

The joints and ligaments of the neck are covered by muscles. So the injury cannot be seen from the surface. This can be frustrating when your neck is painful.

Imagine a sprained ankle. Immediately following a sprain, the ankle becomes bruised, swollen and painful to move.

A similar reaction can be expected from an injury to the small joints of the neck, it is just that you cannot see it.

Whiplash is an injury from which most individuals recover well.

Whiplash associated disorders

Whiplash is an injury from which most individuals recover well. Studies have shown that people who are positive about recovery and resume their normal daily activities as tolerated may recover faster than those who markedly alter or markedly reduce their activity level for a period.

The main symptoms of a whiplash associated disorder are neck pain and stiffness. Other symptoms such as headaches, aching in the arms or feelings of being lightheaded are not uncommon.

It is also understandable that some people may feel distressed after the motor vehicle collision and these feelings usually settle with time and recovery.

Symptoms may appear immediately after the incident or have a delayed onset of a few hours or days. The nature of injury and the number and severity of symptoms vary between different people.

Remember the sprained ankle. Some people can resume walking immediately after going over on their ankle; others cannot put the full weight on their foot for many days.

Neck x-rays may be taken to rule out injuries such as bone fractures or dislocations. X-ray reports often state that no abnormality has been found. However, x-rays do not reveal injuries to the soft tissues of the neck (non bony parts of joints, ligaments, muscles) and x-rays do not provide information about pain levels. Normal x-rays only provide assurance that there are no major bone injuries.



Most people recover from a whiplash injury although at different rates. No injury is the same as another.

Recovery

Following a whiplash injury, you may have a few questions.

Will I make a full recovery?

- ♦ Most people recover from a whiplash injury although at different rates. No injury is the same as another.
- ♦ A small percentage of people who have a whiplash injury may develop long-term neck pain. Research is being conducted worldwide to understand why there are different recovery rates between different people. Some reasons have been identified such as age and initial severity of the pain or injury. However there is still more to be learnt.

How long will it take to get better?

- ♦ Many people recover within a few days or weeks. For others it may take several months to experience substantial improvement in symptoms. Ongoing symptoms may vary in their intensity during the recovery period. This is normal.

What can I do to help my recovery?

- ♦ Research has shown that it is better to try to keep doing normal daily activities as much as possible to aid recovery.
- ♦ You need to take care of your neck and not expose it to unnecessary strain during the healing phase. It's also important to regularly exercise your neck muscles. This booklet offers advice on how to care for your neck and suggests some specific exercises for your neck to help recovery.

Can I do the same activities as before? Are there any limitations?

- ♦ In the early stages of recovery, you may need to adapt some activities to care for your neck. However you should gradually resume normal activity as your neck improves (work, recreation and social).
- ♦ It may be necessary to limit some of your usual work and recreational activities in the early to mid-stage of recovery. Be adaptable - find new ways to do tasks to avoid unnecessary strain on your neck.

Those who continue to work, even in a reduced capacity at first, have been shown to have a better recovery than people who take a long time off work.

- ♦ An injury will cause pain. However the pain that occurs in the recovery period does not automatically mean that there is further injury. It is best to stay active and gently exercise to recover.

This guide provides information about neck care and exercises to assist you in your recovery. **You should be in control of the situation.**

Helping yourself

You are your own best resource in the recovery process.

Managing yourself is a key part to stopping the discomfort that you are experiencing.

Staying active is important

Do as many of your normal activities as possible. Some more vigorous activities that place undue stresses on your neck may need to be avoided in the early stages of recovery.

However, better recovery has been found in individuals who continue a healthy active routine after a whiplash injury. This goes for your general health as well as that of your neck.

Plan gradual increases in activity and exercise levels so that you can successfully return to full participation in your regular activities, hobbies or sports.

Continue or resume working

Those who continue to work, even in a reduced capacity at first, have been shown to have a better recovery than people who take a long time off work. It may be necessary to change some work routines for a while. This guide will suggest ways to do this.

You may wish to talk to your employer or health care practitioner regarding ways to modify your particular work tasks and environment if difficulties continue.

Keeping a good relationship with your employer and co-workers is helpful in the recovery process. Talk to your employer openly and frequently.

During times of high work load or busy periods, it is important to let colleagues and supervisors know that you may need extra time or help to meet deadlines. Don't be afraid to ask for help. You may be in a position to return the favour at some time.

Care for your neck

Set achievable goals

Set progressive goals to achieve during the recovery process.

Visualise again a sprained ankle – you play tennis and your goal is to get back to playing. You can achieve this with progressive activity goals.

For example:

Goal 1: To restore normal movement of your ankle

Goal 2: To walk without a limp

Goal 3: To jog, progressively increasing distances

Goal 4: To run, progressively increasing distances

Goal 5: To run with quick changes in direction and return to tennis.

Use a similar process to set progressive goals to return to usual activities following a whiplash injury.

Reward yourself as you achieve a goal. Realise that each achievement is moving you closer to your usual lifestyle.

Don't skip the simple pleasures - enjoy time with your family and friends, take part in social activities, begin a new hobby or rediscover an old one.

Maintain the flexibility and muscle support of your neck

An exercise program that is specific to the neck and upper back will greatly benefit your recovery. The exercise program in this booklet will help you regain normal neck movement and function.

The exercises are also designed to ensure that your neck receives proper support from the muscles. The set of exercises in this guide is designed specifically for people recovering from whiplash.

Perform daily activities in a strain-free way

Thinking about how you do your work and recreational activities can avoid unnecessary strain on your neck, reduce pain and positively assist recovery.

Be aware of neck positions and postures at work and home

The positions in which you work and relax each day have a great impact on the health of your spine. It is easy to compensate and allow yourself to develop poor postural habits. You will need to be consciously aware of postures and positions when you are performing tasks at home and work.

Keeping your spine in a good position is important in everyday activities as well as during the exercises.

How do I correct my posture?

Keeping your spine in a good position is important in everyday activities as well as during the exercises.

Postural correction exercise

Correct your posture by gently growing tall from the lower back and pelvic region.

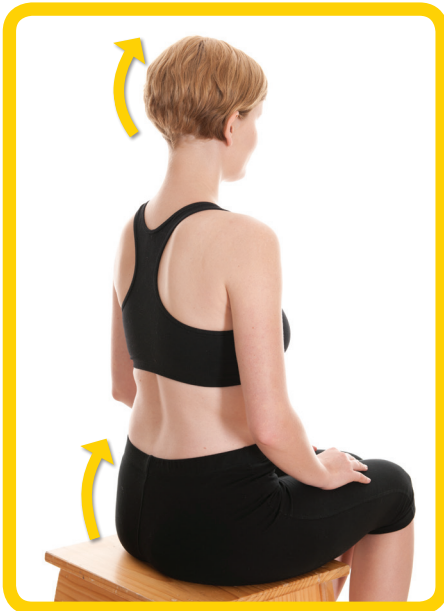
Gently raise your pelvis up out of a slumped position.

Next, reposition your shoulder blades so they draw back and across your rib cage (towards the centre of your spine). This needs only minimal effort.

Gently lift the base of your skull off the top of your neck. This takes the weight of your head off your neck and stimulates the muscles to work.

Hold the position for at least 10 seconds. Repeat frequently during the day (e.g. three or four times an hour).

Perform this exercise when sitting, standing or while walking, at work and at home.



Sitting in one position for prolonged periods is not good for anyone, certainly not someone with neck pain.

Sitting

Change your position

Sitting in one position for prolonged periods is not good for anyone, certainly not someone with neck pain. Keep your neck healthy and move often.

It is essential that you change your position before your neck becomes stiff or sore. Perform the postural correction exercise regularly. Stand up and move regularly, at least every hour.

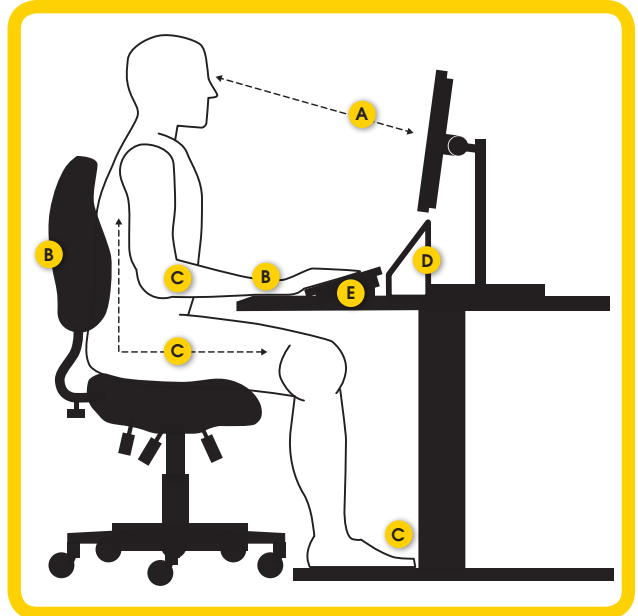
Assess how you spend your day at work

Whether sitting in a motor vehicle, at a desk or computer terminal, you need to give your body a regular change of position throughout the day. Take a 'neck break', it can be as simple as standing up for a few moments to straighten your spine. Stand and stretch backwards gently to reverse the flexed sitting posture. A complete change of position every hour is advisable.

Working at a computer

Arrange your desk, chair and computer to avoid strain on your neck. Have work materials close to you and in easy reach.

- A. Position the top of your screen slightly below eye level and directly in front of you (50-70cm or arm's length away). There is no single monitor height suitable for everyone. Position the screen to have a comfortable viewing angle to the middle of the screen. Avoid extremes of head and neck bending (upwards or downwards).



- B. Have an adjustable chair so that you can change the height and angle of the back support. Have the chair close to the desk so you do not have to reach for the keyboard or mouse. If possible, rest your forearms on the desktop to 'unload' the shoulders.
- C. Desk height should allow sitting with shoulders and arms relaxed with elbows at a 90 degree angle and wrists in a neutral position. Sit with hips and knees at close to 90 degree angles. Feet should be flat on the floor or use a foot stool to achieve a comfortable position.
- D. If working from documents for prolonged periods, these should be placed on a document holder either positioned between the keyboard and monitor or at the same eye level as the screen and close to the monitor. Reading from items placed flat on the desktop may increase the strain on your neck and should be avoided. Books and documents should be elevated onto a sloped surface (e.g. an empty 2-ring folder).
- E. When using the computer mouse, keep the mouse close to the keyboard, use keyboard shortcuts instead of the mouse and alternate which hand uses the mouse.

Working with laptops

Laptops often induce awkward work postures especially for the neck, with the confined and fixed relationship between screen, keyboard and mouse. Use an external keyboard and mouse to relax the neck and arms while working. Raise and tilt the laptop on a stand (or books) to have a suitable screen height.



Dare to be different

Current research suggests that spending time standing at work (high set work station) has benefits not only for the neck and back, but also for general health (e.g. by increasing daily activity levels to help maintain healthy body weight). At home and work, try to spend time working in a standing position.

Telephones

Use a headset if your job entails extensive use of a telephone. When using a telephone avoid holding or cradling the handset between your head and shoulder.

Think about how you are sitting in all situations

- ♦ **Driving the car:** Bring the seat forward so when your foot is on the accelerator, your knee is bent to about 30 degrees. Ensure the back of the seat is upright with the lower back supported. Your arms should be relaxed, with bent elbows, as your hands gently grasp the steering wheel. Check the position of the rear-view and side mirrors in your car. Using mirrors effectively can help when changing lanes. When reversing, sit slightly forward and turn your trunk and shoulders first and then your head to see behind you.
- ♦ **Going to the movies:** Don't avoid going to the movies because it bothers your neck. Where or how are you sitting? Go early so you can get a seat in the centre of the theatre. By being straight on, you can reduce neck strain and enjoy the movie.
- ♦ **Tablets and Texting:** Limit your use with your head bent forward. Raise to a comfortable height.
- ♦ **Attending a dinner party or work meeting:** Sit where you can view people straight on. Sitting with your head turned to talk for prolonged periods can make your neck stiff.
- ♦ **Reading:** Rest the book up on a stand so that you do not have to hold your neck bent for long periods of time.
- ♦ **Going to the hairdresser:** Stand and face the basin if you know that your neck hurts to put your head back.
- ♦ **Going to the dentist:** Take a rolled towel or small pillow to the dentist to support your neck.
- ♦ **Travelling on long trips (e.g. in a plane or car):** Take a neck support pillow with you if you intend to sleep.
- ♦ **Watching television:** Practise the postural exercise during advertisements or stand up. If lying down, lie on your side and support your neck with a pillow. Don't lie on your back with your neck bent up on a pillow.

Prevent strain, prevent pain.

Be creative. Adapting how you do things will lessen the strain on your neck and take yourself closer to the lifestyle that you want to resume.

**Don't forget to correct your posture
for 10 seconds every 15 minutes.**

Educate Others

In today's society, we are all sitting more, whether it is in front of computers at work or at home, or in front of the television. It is important for everyone, young or old, to move regularly to maintain the health of their neck and back.

The exercises and advice in this booklet will help prevent neck pain and strain in all people.

While you practise ways to ensure you regain good health of your neck, do a favour for your family and friends. Help them develop good habits to prevent neck pain and strain as well by following the advice in this booklet.

Be adaptable

If the way you are performing a task aggravates your symptoms, find another way that does not strain or make your neck painful. Don't hesitate to change positions and tasks that place excess stress on your neck. There is no substitution for common sense.

Some examples are over the following pages.

Working at benches

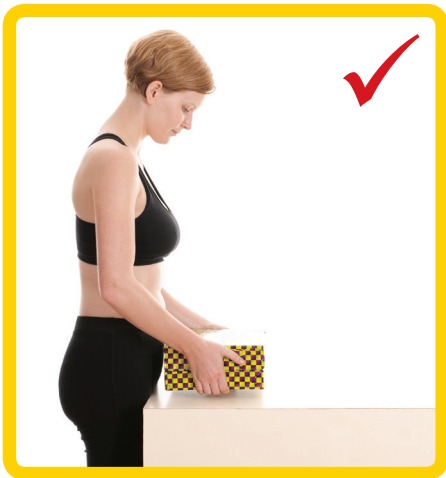
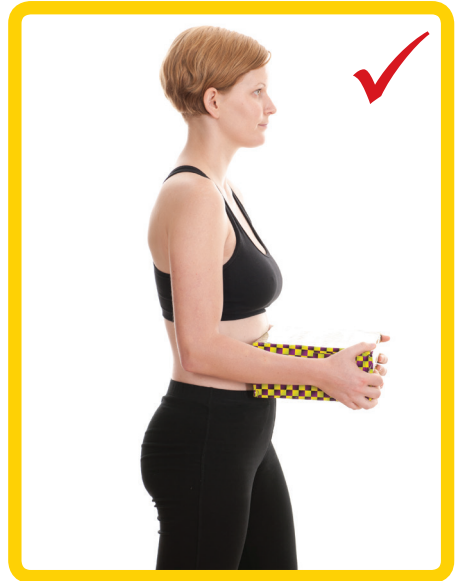
Whether working at benches in your job or for household activities, be aware of your posture, particularly of your shoulders and arms.

- ◆ Ensure the bench height allows you to work with shoulders and arms relaxed. Benches that are too high can result in raised shoulders, which places unnecessary strain on the neck.
- ◆ Have objects close to you to avoid unnecessary reaching.
- ◆ As much as sitting in one position is not good, prolonged standing can be fatiguing. Try to do some of your work while sitting, alternate your work or household tasks to vary your position.
- ◆ Don't forget to correct your posture every 15 minutes. Stand tall, gently draw your shoulder blades back and lift the base of your skull from the top of your neck. Hold for 10 seconds. Feel your neck and shoulder region relax with this manoeuvre.

Lifting and carrying



- ♦ Think before you lift. Test the weight. Avoid reaching to lift objects or lifting awkwardly. Carry the object close to your body.



- ♦ When lifting from ground level, stand close to the object with feet apart, bend using your knees and your back (about 50:50). Keep your chin in during the lift.
- ♦ Carry fewer bags of groceries from the car at a time. There will be more trips but less strain on your neck.
- ♦ Check the contents of your bags (e.g. handbag, gym bag, school bag). Lighten the load. You can prevent neck strain.

You do not have to do everything at once – be adaptable.

- ◆ When travelling, always use a suitcase with wheels, including hand luggage. Consider whether you need all those items that you have packed, especially footwear, which is heavy. Lessen the load.
- ◆ When going to and from work, alternate the side you carry your briefcase or laptop. If you need to carry extra paperwork, consider transporting it separately. Do not overload one side. Specially designed laptop backpacks are a more comfortable way of carrying computers.
- ◆ Use a cart or trolley to carry oversized or multiple items. At the supermarket, choose a trolley that steers easily when you push it.
- ◆ When carrying children, regularly change sides. Use slings if comfortable, backpacks or strollers.
- ◆ When nursing or breastfeeding a baby, place the baby on a pillow on your lap to save having to hold the weight of the baby for prolonged periods.
- ◆ Encourage children to climb onto your lap or into the car as soon as they are able. Position their car seat to limit the amount of reaching you have to do to secure the child in the seat.

Household activities

- ◆ Spread out house cleaning over a few days. You don't have to do all the household tasks at once. Change your routine and reduce the chance of neck strain.
- ◆ Rotate the cleaning tasks and don't do the same task all at once. Alternate lighter tasks with heavier tasks. For example, do some dusting, vacuum one room, do the washing up, and vacuum another room. You do not have to do everything at once – be adaptable.
- ◆ Adjust the height of your vacuum cleaner so you do not have to bend as far. Try to keep your posture as upright as possible when using brooms or mops. Clean small areas at a time.
- ◆ In the laundry, lift fewer clothes from the washing machine at once.
- ◆ Lower the clothesline and place the basket up on a trolley to reduce the strain on your neck and shoulders while hanging out the clothes.
- ◆ Dry heavy items on a clothes rack if necessary.

Lessen the strain

**Remember pillows are personal items.
If your pillow is comfortable, it is right for you.**

- ◆ When preparing food, be mindful that your shoulders are not creeping upwards. While peeling or chopping vegetables, regularly draw your shoulder blades gently back towards your spine. This keeps your neck relaxed. Lift the base of your skull off the top of your neck to take the load from your neck.
- ◆ Using sharp knives reduces the force required to chop hard vegetables.
- ◆ In the kitchen, place items that you use regularly at bench height so that you don't have to do unnecessary bending or reaching.
- ◆ If using heavy saucepans or pans, draw them close to you first and lift with two hands. To lessen the weight, let them rest on the sink as you drain the contents.
- ◆ In the garden, vary your activities and positions. Do some weeding then some raking, then some trimming. Rotate your activities.
- ◆ Weed the garden kneeling on your hands and knees or in a half kneeling position with one knee bent up.
- ◆ Use a wheelbarrow to take weeds to the compost bin.
- ◆ When trimming high hedges, don't stretch up too high. Use a step ladder to improve your position. Make sure it is positioned safely.

- ◆ Don't start new projects such as painting a ceiling or projects involving heavy lifting until your neck has recovered. Get help to carry heavy loads or to do heavy tasks.

Sleeping postures

The best sleeping posture is lying either on your side or on your back. Avoid sleeping on your stomach as you must fully turn your neck all night to breathe.

A question frequently asked is what is the best pillow to use? There is no simple answer. No research points to one type of pillow being the best. Pillows are a personal item. What suits one person is not necessarily comfortable for another. You do not necessarily need to change your pillow because you have had a whiplash injury.

The principle is that your neck should be supported in a neutral position while you sleep. For example, if you sleep on your side, look in a mirror and check the distance between your ear and the tip of your shoulder. Your pillow height should match this distance.

Some individuals like one firm pillow of suitable height. Others prefer two pillows of lesser thickness, with the top pillow being softer and able to be moulded into the neck for comfort and support.

Remember pillows are personal items. If your pillow is comfortable, it is right for you.

Recommendations for self-help

Act as usual: It is normal to experience some discomfort during recovery but don't stress your neck to a painful level. Try to participate in most of your normal activities. If your normal activities or sports place high strains on your neck, adapt them or build up to them gradually as your neck recovers. Remember to have progressive goals.

Be active: Perform general exercise and activity to maintain your wellbeing and health. Undertake a specific exercise regime to improve your movement and flexibility and restore muscle control and support to your neck.

Be adaptable: It is good for you to undertake your normal physical exercise, but you may have to change how you exercise in the recovery phase.

Examples:

- ♦ **Swimming:** swim with a snorkel and goggles if turning your head to breathe is difficult.
- ♦ **Riding a bike:** lift up the handlebars so you can ride with a better posture for your neck.

♦ **Running:** run on grass at a park rather than on the hard surface of the road.

♦ **At the gym:** seek advice from your health professional or trainer on how to change your program to prevent strain on your neck.

Be aware: Make a conscious effort to maintain good posture during your daily activities. Practise postural correction and control when sitting. Maintain good posture when standing and walking.

Undertake the neck rehabilitation exercises. Research has shown that the exercises in this booklet are helpful in the recovery of your neck injury.

These exercises were chosen specifically to assist you to regain your normal neck movement and flexibility. The exercises will also help restore the muscle control necessary to support your neck during normal activities.

Muscle control means pain control. Exercise to reduce your pain.

**Muscle control means pain control.
Exercise to reduce your pain.**

Exercises

Instructions for exercises

Do not hesitate to contact your health professional if you have any difficulties or concerns with the exercises or advice in this booklet.

- ♦ For exercises performed while seated or standing, ensure you start with a good posture (see page 11).
- ♦ Perform all exercises in a slow and controlled manner. Do each exercise as precisely as you can. With each repetition, make sure the movements are smooth and slow, not quick or jerky.
- ♦ Keep relaxed. Place your lips together, teeth apart and your tongue on the roof of your mouth. This will help you to stay relaxed.
- ♦ Reduce tension in your neck. Gently draw your shoulders back and across your rib cage (e.g. towards the centre of your spine) before you begin any of the exercises.
- ♦ During the movement exercises, try to achieve the same distance to each side. Notice if one side is stiffer and try to gently work into the stiffness to regain your normal movement.
- ♦ Try to complete the repetitions for each exercise as they are prescribed.

- ♦ During the exercises you may experience some discomfort. This is quite normal, though pain is not. Go to the point where pain is just felt and then return to the starting position.

Exercises should not increase your pain or any other symptoms.

Perform the exercises in the positions suggested. Always place yourself in the relaxed neck and shoulder position to start the exercise.

How often should I exercise?

Perform exercises at least twice a day. Include exercise in your daily routines. You can exercise while you work.

The exercise program will take no longer than 10 minutes to perform. Perform once in the morning before you start your daily routine. Perform once at night before retiring to sleep.

If you want to do the exercises more often, one or two additional sessions a day would be helpful.

Correct posture takes load off your neck and stimulates the muscles to work. It reduces the tension or stress in the neck and shoulder muscles.

Perform the postural correction exercise while sitting or standing

Keeping a good position of your spine in everyday activities will help relieve your pain.

It is not possible to sit in a perfect posture all day as it becomes tiring. Instead, make sure that your chair and working area help you to keep a good supported posture.

At regular times during the day, assume the 'ideal posture' described on page 11. Straighten your spine out of any slumped position, gently bring your shoulder blades back and across towards the centre of your spine and gently lift the base of your skull off the top of your neck. Hold the position for 10 seconds. Repeating this postural correction throughout the day is essential.

Correct posture takes load off your neck and stimulates the muscles to work. It reduces the tension or stress in the neck and shoulder muscles. Regularly correct your posture throughout the day (e.g. every 15 minutes). It takes only a few seconds to do.

Once you have mastered the exercise, try continuing your work while you hold your shoulders in the correct position; it eases the strain on the top of your shoulders.

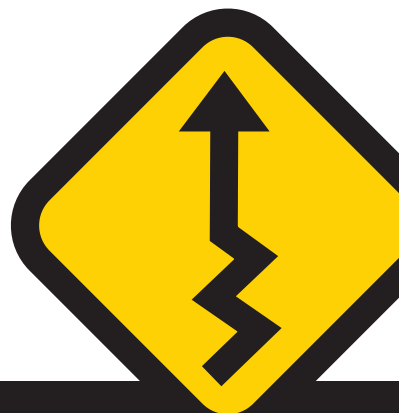
Everyone should do this posture exercise to maintain the health of their neck.

Find cues to remind you to perform postural correction repetitively throughout the day.

For example, think 'correct my posture':

- ♦ before you answer the phone
- ♦ before you answer each new email
- ♦ each time you send a text
- ♦ at every red traffic light
- ♦ during every ad on television
- ♦ for each new customer you see in a shop
- ♦ anytime you drink or eat.

Choose events that happen regularly throughout the day. Use these as your cues to remind you to perform postural correction.



Range of motion exercises

For each of the following exercises, complete 5-10 repetitions in each direction.

Rotation

Assume the correct postural position. Gently turn your head to the left, looking where you are going to see over your shoulder as much as possible.

You may find it easier to have a target on the wall to focus on.

With each repetition, try to go a little further in that direction. Perform the same exercise to the right side.



Alternate position for the rotation exercise

Sometimes it is easier to perform this exercise while kneeling on your hands and knees, especially in the early days after injury. Push through your hands so your back is not slumped. Practise turning your head and looking to each side.



Side bending

Assume the correct postural position. Start with your head centred and gently bring your right ear down towards your right shoulder. You may feel a normal stretch of the muscles on the side of your neck. The exercise should be pain-free. Perform this exercise on the left side.



Forward and backward bending

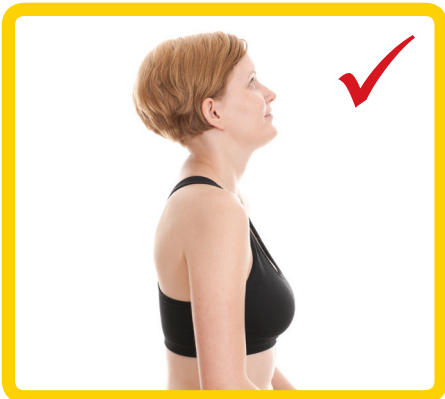
Assume the correct postural position.



- A. Look down and gently bring your chin down towards your chest. Lift your chin up and return to the starting position.



- B. Slowly roll your head and neck backwards to look up at the ceiling as far as is comfortable.



- C. Come back up by tucking your chin down and bringing your head back to the upright position. Avoid letting your chin poke out.



Each movement should be done slowly and purposefully taking about 2-4 seconds to perform. Repeat each exercise 5-10 times.

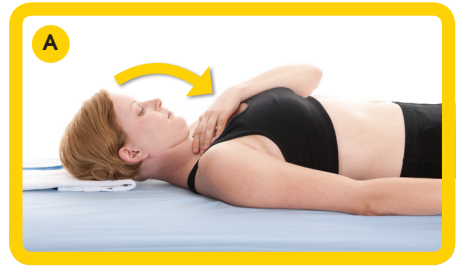
Exercises to retrain muscle control

Head nod and holding exercise

This is an important exercise to retrain the deep neck muscles of the front of your neck for pain relief and muscle control.

Lie on your back with knees bent without a pillow under your head and neck.

- A. If this is not comfortable, place a small, folded towel under your head for support.
- B. Start by looking up at a point on the ceiling. Then with your eyes, look at a spot on the wall just above your knees. Feel the back of your head slide up the bed as you perform a slow and gentle nod as if you were indicating 'yes'.



While doing the exercise, place your hand gently on the front of the neck to feel the superficial muscles. Make sure they stay soft and relaxed when doing the head nod movement. Stop at the point you sense the muscles are beginning to harden, but keep looking down with your eyes.

Hold the position for 10 seconds and then relax. Look up to a point on the ceiling to resume the starting position. Repeat the exercise 10 times.



Head and neck exercises

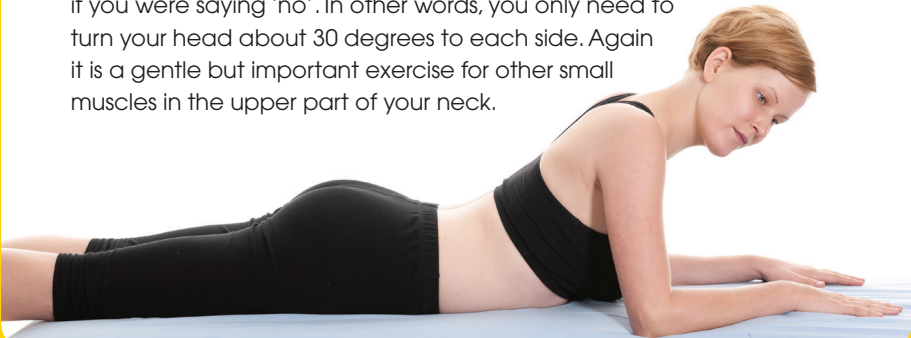
These are important exercises to retrain the muscles at the back of your neck for pain relief and muscle control. There are three exercises to perform, which ensures you exercise the upper and lower regions of your neck.

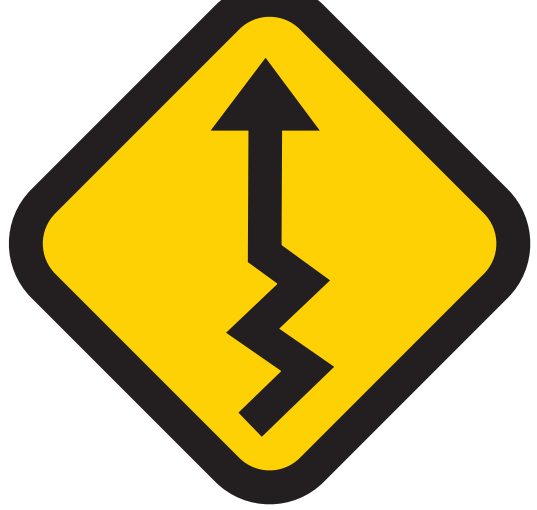
Lie on your stomach, propped up on your elbows. Push through your elbows to prevent your chest from sagging between your shoulder blades.

- A** Just concentrate on your chin. Tip it up and down as if saying 'yes'. It is a gentle but important exercise for the small muscles in the upper part of your neck.



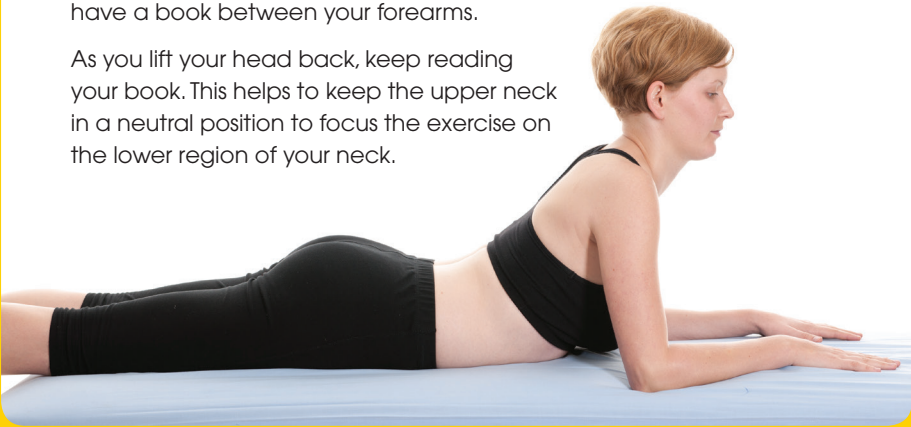
- B** This time, gently turn your head from side to side as if you were saying 'no'. In other words, you only need to turn your head about 30 degrees to each side. Again it is a gentle but important exercise for other small muscles in the upper part of your neck.





- C** For the third exercise, first lower your head and neck to look at your chest. Then raise and curl your neck back up. Pretend you have a book between your forearms.

As you lift your head back, keep reading your book. This helps to keep the upper neck in a neutral position to focus the exercise on the lower region of your neck.



To begin, perform each exercise five times as one set. Try to build up to three sets (and eventually three sets of 10 repetitions each). Remember to keep pushing through your elbows to keep your chest raised for the whole set. Have a rest between sets.

Shoulder blade exercises

Poor muscle control around the shoulder blades can increase pain and strain on the neck. There are three exercises that you can do for your shoulder blades and arms.

This first exercise will relax and ease any tension in the muscles on top of your shoulders. It can give you pain relief.

- A** Lie on your left side with your arm resting on two pillows.



- B** Roll your right shoulder blade back and across your ribs towards the centre of your back. Hold the position for 10 seconds. Repeat five times. Repeat lying on the right side for the left shoulder blade.



The second exercise helps you to improve the control of your shoulder blades while mimicking work you may do with your arms. It trains you to ease any tension in the muscles on top of your shoulders while you are using your arms.

Sit and correct your posture and draw your shoulder blades back and across your rib cage as you have already practised.

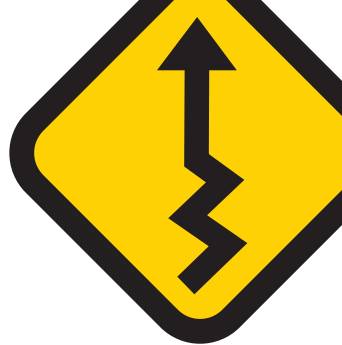
Concentrate on holding your shoulder blade position. Then move your arms (A) forwards and backwards; (B) out to the side; and (C) turn your forearms outwards. Do not lift your arms more than 30 degrees in exercises A and B (that is, about a quarter of the way up). Perform each exercise (A,B and C) five times and repeat this set three times.

When you feel confident that you can do the exercise keeping your shoulder blades gently back, hold a 250 gram can in each hand as a small weight.



Shoulder blade exercises continued...

The third exercise is simply raising alternate arms forward as far up as you can go. Make sure that you maintain a good posture, especially concentrating on lifting the base of your skull off the top of your neck and then as you raise your arm, keep your thumb facing upwards. Perform three sets of five left and right arm raises.



Neck isometric exercise (no movement)

Assume the correct postural position and gently raise the back of your head.

Place your right hand on the right cheek. Without moving your head, turn your eyes to the right and gently push your head into your hand as if to look over your shoulder.

While performing this exercise no movement occurs. Hold the muscle contraction for five seconds.

Do the exercise smoothly and gently, use only 10% effort.

Change hand position and perform the same exercise to the left side. Do five repetitions on each side.



Coordination and balance exercises

Some people feel a little light-headed, dizzy or unsteady in association with their neck pain. These symptoms can be helped by exercises which involve co-ordinating eye and head movement and by practising balance. If you have these symptoms, try the next three exercises.

Eyes still, move head

Hold a pen at a comfortable distance in front of your eyes or focus on a spot on the wall.

Keep your gaze fixed on the pen and turn your head gently from side to side. Turn 10 times to each side. Cease if you feel a little dizzy, but try to do one more turn the next time you practise.



Head still, eyes move

Keep your head still and move the pencil about 20-25cm from the midline one side to the other, that is, within your field of vision. Follow the pen with your eyes, but this time keep your head still. Move the pen 10 times to each side. Cease if you feel a little dizzy, but try to move the pen one more time the next time you practise.



Balance exercises

Test your balance in the three positions listed below. The aim is to keep a steady balance in each position for 30 seconds. If all positions are easy, your balance is good.

A



If you were unsteady in a position, practise in that position until you can stay there steadily for 30 seconds. Then progress to the next position on the list.

B



As a safety measure, stand by a wall or table when doing balance exercises but only touch it if necessary.

(i) Stand tall with feet close together, looking straight ahead – eyes open.

(ii) Stand tall with feet close together, looking straight ahead – eyes closed. (A).

(iii) Stand with one foot in front of another, heel touching toes – eyes open (B).

Use both the right and left foot as the front foot; one combination will be easier than the other.

When should I do more difficult exercises?

Once your neck pain has settled, the exercises can be progressed to include strengthening exercises.

These exercises should not cause pain.
Progress slowly.

Head lift exercise

The weight of your head is enough weight to lift. Start by sitting on a chair close to a wall. Rest your head back on the wall.

Slide the back of your head up the wall to nod your chin and hold it in this position.

Then just take the weight of your head off the wall (your hair still touches the wall).

Hold for five seconds and relax. Start by doing three sets of two to three repetitions and gradually build up to three sets of five repetitions.

Shifting the chair a little further from the wall makes the exercise more difficult.

You can progress the exercise by moving the chair away from the wall in five centimetre stages.



Progression: Lie resting your head on two pillows. Slide the back of your head up the pillow to nod your chin and hold it in this position.

Then try to just lift the weight of your head until it just clears the pillow.

Hold for five seconds and relax. Start by doing three sets of two to three repetitions and gradually build up to three sets of five repetitions.

The exercise can be progressed by removing one pillow and performing the exercise in the same way.

Note in all variations of the exercise: holding the chin nod position (that is keeping a double chin) is a very important aspect of the exercise.



Summary points

How tasks are performed each day can have an impact on your recovery. Don't place unnecessary stress on the muscles and joints of your neck. You can actively help to control your pain.

- ♦ Change your posture frequently throughout the day.
- ♦ Assume the upright stress-free posture for short periods regularly throughout the day.
- ♦ Carry lighter weights - bags, briefcases, shopping bags. Prevent the strain of unnecessary weight.
- ♦ Rotate work, household and garden chores. Joints and muscles like activity but not to excess.
- ♦ Change from one task to another if you notice that your discomfort is increasing with a particular task.
- ♦ Simple tasks can sometimes be the most challenging. The changes that can be the most useful are often the simple common sense ones.
- ♦ Change the way you do things to lessen strain and pain. Preventing strain is a way to recovery.
- ♦ Be adaptable.
- ♦ Gradually increase your activity levels and increase tolerance.
- ♦ Be in control of your situation.



More information

This booklet is designed to supplement care provided by your health care practitioner. Please speak to your health care practitioner if you have any concerns about the advice contained in this booklet or you require further assistance.

Further information about treatments for whiplash and the research evidence to support their use may be obtained by visiting the website of Centre of National Research on Disability and Rehabilitation Medicine (CONROD) at **www.conrod.org.au/cms/resources-and-tools/whiplash-evidence-based-resource**

To download more copies of this publication and view any updates, visit the Motor Accident Insurance Commission (MAIC) website at **www.maic.qld.gov.au**

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