



**SOUTH AUSTRALIAN WINE INDUSTRY
ASSOCIATION INCORPORATED**

Fit4Work
Musculoskeletal Health Program

Champions of Change Workshop
Supporting Resources

What is Fit4Work Musculoskeletal Health Program?

Fit4Work is a new initiative at the South Australian Wine Industry Association (SAWIA) supported by Wine Grape Council of SA, SA Health and Pinnacle Workplace Consultants, designed to provide the industry with task-specific musculoskeletal health and wellbeing related resources. Musculoskeletal injuries form the largest proportion of injuries to workers within the grape growing sector, hence there is a need across the industry to manage this risk.

Program contents

The program comprises of the following elements:

- Industry survey to seek members feedback on the tasks and health issues which would benefit from having online training resources developed;
- Development of 3 online training modules, 2 grape growing task specific modules along with one general wellbeing module. This has involved consultation with and visits to local vineyards to develop the content;
- Development of an induction package and associated resources to assist grape growers in implementing the training resources at their site;
- Delivery of 5 regional 'Champions of Change' workshops;
- Capture program outcome measures inclusive of industry feedback following the delivery of the program elements.

What the modules include

The two task-specific modules on 'Digging Holes' and 'Attaching Implements to Tractors' cover the following points:

- Risk factors of musculoskeletal strain and sprain relevant to the task
- Optimal Manual Handling technique
- Injury Prevention Stretches and exercises
- Other Risk Management Tips

The general well-being module called 'Mind Your Health' covers wellbeing tips on Heat stress, Fatigue Management and Fitness and Exercise. It includes information on:

- Associated risks and warning signs
- Management tips
- Advice on exercise and fitness

SAWIA plan to develop additional modules in the future to add to the breadth of the training resources.

Use of the modules

The modules have been developed to provide wine producers and wine grape growers with training resources which can be used during formal and informal site training, toolbox discussions and employee inductions. A framework for implementation is presented within this handout.

Access to the modules

The **Fit4Work** modules are available to members free of charge via the SAWIA's and Wine Grape Council of South Australia's (WGCSA) websites. In order to access the modules, members are invited to navigate to the SAWIA & WGCSA website (below).

<http://www.winesa.asn.au/members/advice-information/work-health-safety/fit4work/>

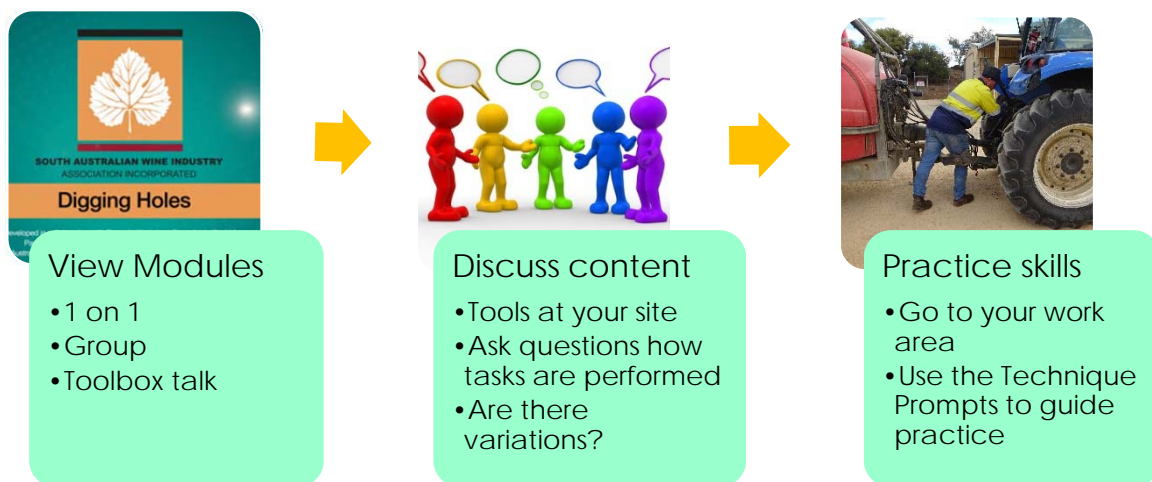
<https://www.wgcsa.com.au/fit4work.html>

Use of the Modules for Training

The most effective way to facilitate change in employee work practices and behaviours is to include practical discussion around the training content and hands on experience with the participants. Hence, it is recommended that the Fit4Work training modules are viewed by the employee(s) and then followed by discussion and practice (if relevant) with the tools or equipment which are used at your site.

The **Fit4Work** Modules can be utilised for employee training at an induction level, staff group training level or toolbox talk.

We recommend the following process is used to implement the training modules at your site:



Within this resource, we provide suggested prompts or questions which the facilitator can use to guide discussion at your site. This will enhance the learning experience of the participants and provide you with a better understanding of issues which they may be experiencing.

Have you:

- ✓ Prepared a training record for viewing the modules?
- ✓ Reviewed the equipment at your site?
- ✓ Reviewed the relevant policies at your site?
- ✓ Practiced elements contained in the modules?

It should also be acknowledged that there is no one perfect way to perform a task. It will depend on the abilities of your employees and particular characteristics of the equipment which you have. The advice provided is given as a guide and as such, if you have any unique issues / hazards identified at your site we recommend that you consult a relevant expert such as a WHS professional, Ergonomist, or suitably experienced Occupational Therapist or Physiotherapist.

*The **Fit4Work** training resources have been developed for the members of the SAWIA and WGCSA. They are not to be used outside of Australia. Please refer to the terms and conditions stated within each module for the full details pertaining to their use.*

What are Musculoskeletal Injuries?



Musculoskeletal injuries are those which can occur to the muscles, joints, bones, ligaments, nerves, discs and tendons of the body.

Symptoms associated with these injuries can include soreness, stiffness and pain, but can also include pins and needles, numbness and muscle weakness.



Musculoskeletal injuries can occur as a result of a one-off incident or more commonly, as part of a gradual wear and tear process developed over a period of time, or what we call 'cumulative microtrauma'.



The causes of cumulative microtrauma can include exposure to the following actions or conditions:

- Repetitive or sustained force
- High or sudden force
- Repetitive movement
- Sustained or awkward postures
- Exposure to whole-body vibration
- Exposure to hand arm vibration



Examples of work tasks common in the wine industry which expose workers to these hazards include:

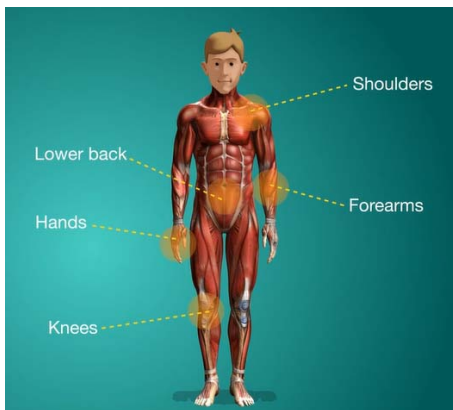
- Driving tractors
- Handling posts
- Pruning or harvesting
- Trellis maintenance
- Irrigation maintenance

Digging Holes Module



Discuss what the main situations are when holes must be dug.

Are there situations when many holes must be dug on a continual or frequent basis?



The body parts most at risk of injury when performing this task include:

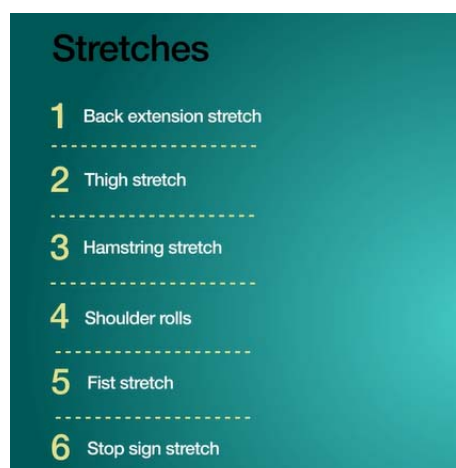
- Lower back
- Shoulders
- Forearms / hands
- Knees

Do any workers experience discomfort digging holes?



Discuss the risks associated with digging holes.

- Repetitive force
- High or sudden force
- Repetitive and awkward postures



Do you have a stretch and exercise program at your site?

Do you encourage workers to perform exercises at work?

Equipment & Work Practices

Choose the right tool

Maintain your tools

Rotate with your workmates

Pace yourself & take short breaks



What type of digging tools do you use onsite?

Do workers use crowbars to break through hard rocky earth?

Do workers avoid using straight bladed tools to break through hard dirt types?

Do you use long handled shovels?

Do workers share the load and rotate between tasks?

Do workers take short breaks to rest their bodies?

Are the blades of digging tools kept sharp?

Are digging tools inspected and maintained?

Are broken tools removed from use?

FIT4WORK TECHNIQUE MODULE Digging Holes

Correct equipment

Correct technique

Pace yourself & stretch

After reviewing the correct technique tips in the online module, practice these with the worker(s).

Identify what some of the different issues are with the terrain at your site and the equipment you use.

Is the equipment suitable and can more appropriate equipment be purchased?

Focus on the key points made in the module and use the **Technique Prompt** sheet (see Appendix) to help refresh your memory.

Attaching Implements to Tractors

FIT4WORK TECHNIQUE MODULE Attaching Implements to Tractors

Exposed Body Spots

Stretches

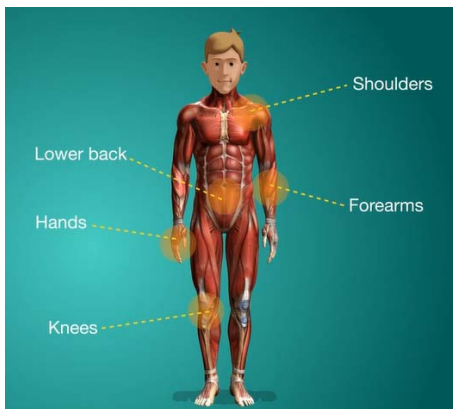
Work Practice Tips

Specific Techniques

Discuss what types of implements need to be attached to tractors and how often.

What features of the tractors can assist the workers perform the task, i.e. adjustment controls of the lifting arms.

Have all the workers who perform this task be appropriately trained in performing this task?



The body parts most at risk of injury when performing this task include:

- Lower back
- Shoulders
- Forearms / hands
- Knees

Do any workers experience discomfort when attaching implements to tractors?



Discuss the risks associated with attaching implements to tractors:

- Sustained force
- High or sudden force
- Sustained and awkward postures

Stretches

1 Back extension stretch

2 Thigh stretch

3 Hamstring stretch

4 Shoulder rolls

5 Fist stretch

6 Stop sign stretch

Do you have a stretch and exercise program at your site?

Do you encourage workers to perform exercises at work?

Equipment & Work Practices

Choose level ground

Align the tractor with attachment

Set machine controls

Maintain the equipment

Can you attach implements to tractors on level ground?

Are there any other environmental barriers that make this task difficult?

Does the worker have a clear view of the lifting arms when reversing the tractors?

Do workers know that they must ensure:

- tractor is off and in park with the handbrake on
- PTO is in neutral before attaching the shaft
- hydraulic oil is released before connecting / disconnecting the leads
- PTO shaft is well maintained and lubricated on a regular basis



Do workers use 3 points of contact when getting in / out of the tractor?

Do workers maintain their footwear, i.e. cleaning mud off them or replace when tread is worn?

FIT4WORK TECHNIQUE MODULE Attaching Implements to Tractors

Good decisions

Correct technique

Stretch

After reviewing the correct technique tips, practice these with the worker(s).

Identify what are some of the different features of other implements like slashers, graders and mulchers.

Focus on the key points made in the module and use the **Technique Prompt** sheet (see Appendix) to help refresh your memory.

Mind Your Health

FIT4WORK TECHNIQUE MODULE Mind Your Health

Heat Stress

Fatigue Management

Exercise & Fitness

This module covers information on the topics of:

- Heat Stress
- Fatigue Management
- Exercise and Fitness

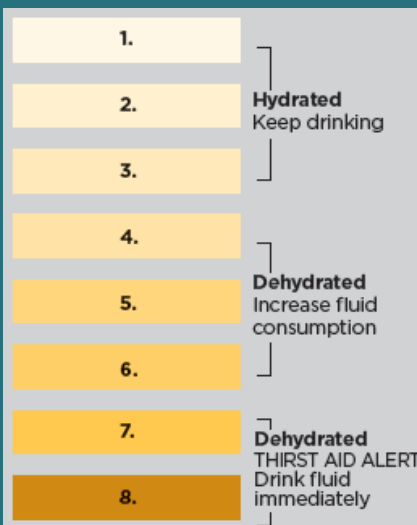
Do you have a 'Working outdoors' and 'Fatigue Management' policy?

Do you monitor fatigue levels?

Do the workers know the signs and symptoms of heat stress and heat stroke?

Additional resources are provided below to assist you with learning more about the topics.

Heat stress



Disclaimer: This chart is designed to be a guide only. Consider seeking medical advice if urine colour falls within 7-8 range. Vitamin supplements, alcohol and certain diets may effect colour.

Heat Stress Signs & Symptoms

- Heat rash
- Muscle cramps
- Light headedness, dizziness or fainting
- Dry mouth / thirst
- Reduced concentration
- Confusion

Dehydration Signs & Symptoms

- Sleepiness / Headache
- Dark urine / Decreased urination
- Dry skin
- Constipation
- Rapid Heart rate

Heat Stress Management

- Come to work fully hydrated
- Carry drink bottle at all times and drink while commuting to and from work
- Drink 250ml every 20 minutes throughout the day
- Consume food at regular intervals to maintain energy levels
- Limit consumption of caffeinated drinks & alcohol - they contribute to dehydration
- Rehydration drinks such as Hydralyte / Gastrolyte are better choices than sugared sports drinks and soft drinks.

Heat stress

Where to find additional resources?

Guide to Managing the Risks of Working in Heat

https://www.safeworkaustralia.gov.au/system/files/documents/1902/guide_for_managing_the_risks_of_working_in_heat_1.pdf

Heat Stress Calculator

<https://fswqap.worksafe.qld.gov.au/etools/etool/heat-stress-basic-calculator-test/>

How to Stay Hydrated at Work

<https://au.thorzt.com/Article/93/how-to-stay-hydrated-at-work-6-easy-strategies>

Products



Insulated water bottles

Insulated water bottles can keep water and hydration drinks cool for up to 90 hours.

Keep bottles within easy walking distance of your work area.



Hydration Vests

Wearing your water or hydration drink is another great way to make it easy to keep hydrated.

Packs can in a range of capacities from 1.5L – 5L. Be aware that the more water you carry, the more effort will be required to carry it around.

Consider taking 1-2L with you into the vineyard and top up the water bladder at break time.



Cooling Clothing

Consider wearing some cooling clothing items to help keep cool during hot weather.

Caps, neck ties, scarves and vests can all help to keep a worker cool. A cooler body also sweats less and less sweating means reduced risks of dehydration.

Fatigue Management

Fatigue is a state of mental or physical exhaustion which reduces a person's ability to perform work safely and effectively.

Signs & Symptoms of Fatigue

- Excessive yawning or falling asleep at work
- Short term memory problems and lack of concentration
- Impaired decision making
- Reducing hand-eye coordination
- Headaches, dizziness, blurred vision
- Need for extended sleep on days off
- Digestion problems
- Increased susceptibility to illness

Staying awake for 24 hours straight affects the human body almost exactly like a blood alcohol level of .10% which exceeds our states legal limit for drivers.

Fatigue is increased by:

- Performing boring or repetitive tasks
- Dim lighting
- High temperatures
- High Noise
- High comfort
- Tasks performed over long periods of time

Fatigue increases:

- Tendency for risk taking
- Forgetfulness
- Errors in judgement
- Sick time and absenteeism
- Medical costs
- Accident rates

Managing Fatigue

- Take additional breaks
- Stay well fed & hydrated
- Improve your quality of sleep
- Take a nap, eat or sleep at work
- Modify your work schedule
- Rotate between tasks
- Avoid lengthy travel after long shifts - team up with a friend or use onsite accommodation for sleep
- Consume caffeine strategically
- Limit overtime
- Look out for your work mates



Fatigue Management

Where to find additional resources?

Fatigue Management – a Worker's guide

<https://www.safeworkaustralia.gov.au/system/files/documents/1702/fatigue-management-a-workers-guide.pdf>

Managing the risk of Fatigue

<https://www.safeworkaustralia.gov.au/system/files/documents/1702/managing-the-risk-of-fatigue.pdf>

Improving sleep

Ways to get a good sleep,
day or night!

National Sleep Foundation

<https://www.sleepfoundation.org/articles/healthy-sleep-tips>

Getting to sleep can be a challenge particularly if you have worked at night and are trying to sleep during the day. Some simple tips to help get to sleep and stay asleep are listed below:

Block out noise

Noise can have a significant impact on being able to get to sleep. Consider the following:

- Sleeping in a quieter area of the house
- Installing solid doors on bedrooms and key passage ways to limit noise travel to sleeping areas
- Using an earmuff to cover ears
- Ensuring family members / co-habitants are aware you are sleeping and need to keep quiet

Block out light

Light falling on our eyes, even when they are closed can have the effect of making the brain think it is day time, the time to be awake. Exposure to light causes the body's natural body clock to change by blocking the release of Melatonin into the body, a chemical which assist us in falling asleep. Therefore it is very important to block out light in the room you are sleeping in and limit your exposure to light before bedtime.

Consider the following:

- Use block out curtains on windows
- Install block out roller shutters on windows
- Use a face mask to block out light

Before bedtime

- Avoid viewing mobile devices, computer screens and tablets 1 hour before sleeping
- If you need to view mobile devices, change the setting to 'night time mode' which reduces the brightness of the screen.

Improving sleep

Ways to get a good sleep, day or night!

Establish a routine for bedtime

Wind down. Your body needs time to shift into sleep mode, so spend the last hour before bed doing a calming activity such as reading or meditation.

Avoid alcohol, cigarettes and heavy meals

Avoid alcohol, cigarettes, and heavy meals in the evening. Alcohol, cigarettes and caffeine can disrupt sleep.

Eating big or spicy meals can cause discomfort from indigestion that can make it hard to sleep. If you can, avoid eating large meals for two to three hours before bedtime. Try a light snack 45 minutes before bed if you're still hungry.

Driving Home

Reduce the risk of an accident

Don't take the risk

After working consecutive days during vintage, the bodies level of alertness is significantly impaired, the equivalent of driving with a blood alcohol reading of '0.10' which is well over the states limit. You place yourself and others in the car or on the road at risk of injury, so consider the following:

- Travel with another worker
- Sleep at a friend's house closer to work to limit lengthy travel
- If available, sleep at quarters provided by your employer or hotel accommodation.

Remember, you must have at least 10 hours break between ending and commencing you next shift. If travelling over 1 hour on each direction eats into this time, you limit getting sufficient rest and sleep.

Seek Help

If you have ongoing sleep issues, consult your doctor get help. There may be an underlying issue which can be treated.

Exercise & Fitness

There are many different aspects that contribute to a person's overall level of fitness. And given the sometimes physically demanding nature of vineyard work, being in good physical condition helps to manage your risk of injury.

The different types of fitness include:

- Cardiovascular fitness
- Strength
- Endurance
- Flexibility

All of these will impact on your ability to work in vineyards.

Evaluate where you can improve and start working on your fitness level today.

Benefits of Exercise

- Maintaining a healthy body weight
- Reducing risk of injury
- More energy
- Reducing risk of diabetes, heart disease and some cancers
- Your body function better
- The 'high' you get after exercising
- Great stress relief
- Better sleep
- Feeling more confident and comfortable in your own skin
- Achieving a goal
- More 'happy endorphins' from exercise

Overcoming Barriers

Finding the time and interest to build physical activity into your daily life can sometimes be difficult. We can all come up with lots of excuses to avoid exercise.

Check out the Appendix for some tips on how to overcome these barriers.



get healthy
Information & Coaching Service

WE PROVIDE FREE PERSONAL HEALTH COACHING

Your free SA Health service providing the expertise and motivation to help you reach your health goals.

A HEALTHIER YOU THE JOURNEY

'Get healthy'

<https://www.gethealthy.sa.gov.au/>

This site provides an array of information on ways to improve your health and wellbeing, as well as FREE personal Health coaching.

The 'Get Healthy' service has two streams, Information Only and a 6 month coaching program, allowing you to pick what's right for you.



Team up

Start an exercise group or team up with another worker to start doing some regular exercise together. It could be doing 5-10 minutes of strengthening exercises and stretching together at break times.

The main point is to motivate each other and keep each other accountable for doing exercises together.

Pick a goal that you can achieve together. It doesn't have to be a weight goal; it could be doing a running event together or hiking a trail.



Parkrun

<https://www.parkrun.com.au/>



Parkrun is a FREE running / walking event held every Saturday at 8am at hundreds of locals within Australia. It is volunteer run and provides the opportunity for participants to set themselves a challenge and exercise on a regular basis. The website keeps track of each time you run / walk and time it took you to complete the 5Km distance, allowing you to watch your progress.

There are no medals or prize money awarded, just the reward of regularly exercising.

Find the location nearest you.

Appendix – Technique Prompts

Appendix – Heat Stress Toolbox talk discussion points

Workers performing physically demanding tasks in hot conditions while wearing heavy clothing and PPE can sweat out as much as 2 or even 3 L an hour. If this is not replaced dehydration will occur leading to reduced work capacity, changing concentration and lowered reaction times. Are

Daily Water Recommendations

Outdoor workers - 8 to 10 glasses plus when working in hot and humid conditions drink around 250ml of fluid every 15 to 20 minutes.

How much water do your workers consume each day in hot weather?

Questions / answers to generate discussion

What do you think the signs and symptoms of heat stress / dehydration are?

- | | | |
|--|--|--|
| <input type="checkbox"/> Heat rash | <input type="checkbox"/> Dry skin | <input type="checkbox"/> Rapid heart rate |
| <input type="checkbox"/> Muscle cramps | <input type="checkbox"/> Constipation | <input type="checkbox"/> Decreased urination |
| <input type="checkbox"/> Headache | <input type="checkbox"/> Lightheaded | <input type="checkbox"/> Sleepiness |
| <input type="checkbox"/> Dark urine | <input type="checkbox"/> Increased first | <input type="checkbox"/> Dry mouth |

Do your workers take drink bottles with them at all times?

Where do workers take breaks at your site? Are these appropriately cool, shaded?

Appendix – Exercises & Fitness Toolbox talk discussion points

QUESTIONS / ANSWERS TO GENERATE DISCUSSION

These are the most common barriers to being more active. Ask your workers how they could overcome them.

<p>I HAVE NO TIME</p>	<ul style="list-style-type: none"> • Identify available time slots. Monitor your daily activities for one week. Identify at least three 30-minute time slots you could use for physical activity. • Add physical activity to your daily routine. For example, walk or ride your bike to work or shopping, organize school activities around physical activity, walk the dog, exercise while you watch TV, park farther away from your destination, etc • Select activities requiring minimal time, such as walking, jogging, or stair climbing.
<p>LACK OF MOTIVATION/ I DON'T HAVE THE WILL POWER</p>	<ul style="list-style-type: none"> • Plan ahead. Make physical activity a regular part of your daily or weekly schedule and write it on your calendar. • Invite a friend to exercise with you on a regular basis and write it on both your calendars. • Join an exercise group or class.
<p>I HAVE FAMILY OBLIGATIONS</p>	<ul style="list-style-type: none"> • Exercise with the kids-go for a walk together, play tag or other running games. You can spend time together and still get your exercise. • Jump rope, ride a stationary bicycle, or use other home gymnasium equipment while the kids are busy playing or sleeping. • Try to exercise when the kids are not around (e.g. during work breaks)
<p>FEAR OF INJURY OR NOT FIT ENOUGH</p>	<ul style="list-style-type: none"> • See your doctor for a full medical check-up before starting any physical activity program, particularly if you are obese, over 40, haven't exercised in a long time or have a chronic medical condition. Your doctor can assist and support you to make changes to your lifestyle. • Learn how to warm up and cool down to prevent injury. • Learn how to exercise appropriately considering your age, fitness level, skill level, • Choose activities involving minimum risk like walking or swimming. Any activity is better than none, start slowly for 10 minutes a day.