

CHAIRMAN'S WORD



On 24 October 2014 the Hon Jeremy Rockliff, the Minister for Agriculture, presented the PASS committee with the Tasmanian Agricultural Productivity Group's "Award for Excellence" in recognition of the Committee's extensive work in promoting agricultural safe practice. The PASS committee are greatly honoured to receive this award from this esteemed organisation. www.tapg.net

Conference Highlights

The 9th Farmsafe Australia National Farm Safety conference held in Launceston 14-16 October 2014 was a great success. The theme "Safe Farms – Healthy Farmers" was addressed by many papers most of which can be accessed from www.farmsafe.org.au

The standout "take home" quote, supplied by a Tasmanian farmer Richard Gardner, was **"The standard you walk past is the standard you accept."** In other words, if you see anything which you consider unsafe, be it a person's behaviour or the physical condition of machinery, or an unsafe environment, it is vital to act immediately to make it safer.

Richard also posed the question: **"Are your safety efforts to cover your arse or to keep people safe?"** He went on to answer the question with: **"When you keep people safe you cover your arse."**

Other highlights included:

- The field trip to the Bond Family farm and lamb feedlot was magnificent and inspiring. The delegates were very impressed with the high standard of "Safety Management" teamed with the high productivity of the various enterprises. During the bus trip

the delegates received a comprehensive talk on Tasmanian Agriculture from TIA representatives Michael Hart & Sue Hinton.

- Bruce Byron AM, a former CEO and Chairman of the Civil Aviation Safety Authority, (CASA) messages: **"Safety is not absolute as this will send a business broke, but there is a middle ground where safety is reasonable & practical"** and **"Information is King" - He emphasised "Fatalities and near misses must all be investigated" and "The stories shared with all the industry so others can prevent a similar experience"**
- David Sadler, a consultant to the mining industry statement: **"Culture and behaviour have the largest impact on safety."**
- Gary Kode's, presentation (a Launceston surgeon) **"Accidental Injections of Veterinary Products"** which highlighted these risks.
- The Quad Bike Forum at which delegates received information on
 - The research at NSW University on the Australian Quad Bike Performance Project and the future possible safety rating for each of the different models.
 - The development of robots to replace quad bikes.
 - The reduction in fatalities by Crush Production Devices (CPD).
 - Understanding Quad Bike Roll Over Protection on New Zealand Farms.

2014 National Farm Fatality Data:

54 fatalities were recorded by Media Monitors of which 12 were quad bike, 10 tractor and 7 children 15 years and under. Plus there were 2 quad bike fatalities recorded as "on-road" when turning in / out of farm properties. The total recorded quad bikes fatalities nationally for 2014 was 15. ■

DID YOU KNOW?

- Farm Safety For Just Kids in USA** offers various resources and programs to help teach farm safety. http://www.farmsafetyforjustkids.org/?page_id=32%20for%20resources%20on%20Chemical%20Safety,%20Grain%20Safety,%20Animal%20Safety
- People living in rural areas are more likely to have arthritis than their city counterparts and often fare worse due to limited access to specialist care.
- Early treatment, (ideally within weeks of the onset of symptoms) especially of the inflammatory forms of arthritis such as rheumatoid arthritis, provides a much better result. Reference: <http://www.ruralhealth.org.au/partyline/November2014>
- Replacement of protective eyewear should be based on inspection of condition. There is no specified shelf life or use-by-date for prescription safety eyewear within the standard AS/NZS 1337.6 or for standard protective safety eyewear as per AS/NZS 1337.1.
- 9 volt batteries can start fires** if stored improperly. Safety Tips:
 - Always keep batteries in their package prior to use.
 - Do not carry opened batteries in your pocket – as they can short out with keys & coins.
 - Cover terminals of opened batteries with electrical tape when not in use.

More information: <https://www.youtube.com/watch?v=CnVDayl-gwl> ■

WHAT'S NEW?

- Taking kids safely to work on the farm this Christmas:** a campaign by Primary Industries Partnership campaign released 8 Dec 2014 or <http://www.farmsafe.org.au/news/new-child-safety-promotions>
- Quad bike dangers for kids** ACCC media release on 5 Dec 2014: <http://www.farmsafe.org.au/news/new-child-safety-promotions> or <https://www.accc.gov.au/media-release/accc-warns-parents-about-quad-bike-dangers-for-kids>
- Fact sheets on various health issues in rural Australia:** <http://www.ruralhealth.org.au/factsheets/thumbs> ■

KEEPING SAFE AROUND SILICA DUST

Like most dusts silica dust can cause irritation to the eyes, nose and throat, resulting in tearing, sneezing or coughing. Inhalation of very fine (respirable) crystalline silica dust can also cause irreversible scarring of the lungs - a disease called silicosis.

There is no medical treatment to treat or reverse silicosis. The long term effects can be debilitating, leading to inability to work and loss of quality of life. People with silicosis are also at greater risk of developing bronchitis and lung cancer.

Concrete, mortar, clay bricks, calcium silicate bricks, and both concrete and terracotta roof tiles all contain silica. Mechanical cutting or grinding of these products is likely to generate significant volumes of respirable silica dust. The risk of persons inhaling this dust must be eliminated or minimised.

The best and preferred way to eliminate dust or minimise the risk of a person inhaling the dust is to:

- adopt alternative work practices which do not require the use of power tools.
- use tools with water supply for dust suppression.
- use tools with dust extraction systems. However, these are often less effective than the water suppression tools.

Respiratory protective equipment (PPE – dust mask P2) should be used where it is not practical to implement the above methods, or where the use of such tools does not reduce exposure sufficiently. Safety glasses or goggles should also be worn to protect the eyes.

Employers should seek advice from their supplier to ensure they purchase appropriate equipment. Workers must receive appropriate instruction on the safe use of all the measures selected to control the risk of silica dust exposure.

More information:

- AS/NZS 1716 Respiratory protective devices
- AS/NZS 1715 Selection, use and maintenance of respiratory protection ■

PASS it on

Newsletter of Proactive Agricultural Safety & Support Inc



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REMEMBER
ACCIDENTS HURT SAFETY DOESN'T

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DRUGS ON THE FARM EVERYBODY'S BUSINESS

Preventing drug misuse on the farm is crucial to ensuring a safe place in which to work or play – but how to do this is the big question.

It is everyone's business to take a proactive approach to drug misuse - be it alcohol, tobacco, illicit drugs or prescription drugs - before it becomes a problem.

Induction is the ideal time to begin a conversation with new staff and contractors about your farm's policy on all drugs. This frank conversation could include:

- The importance of everyone's safety in the farm environment.
- Setting out your expectations around drug and alcohol use.
- Seeking clarification from all employees, contractors and visitors on their understanding of your drug and alcohol policies.
- Outlining specific policies that your workplace has enacted, e.g. zero tolerance on alcohol/tobacco while using equipment or vehicles.
- Being clear that your workplace actively supports a healthy workforce.
- Information about programs available for counselling, quitting and treatment of drug abuse.
- The disciplinary process and possible outcomes if drugs are misused on the farm.

The conversation can be ongoing through newsletters, team discussions and workplace education sessions to remind your staff of the health and safety risks of drug misuse and to reinforce positive social norms on your farm.

It is important for us all to know and understand the effects of all the various drugs and the time they last on the individual user.

Some farms are choosing to implement a workplace drug and alcohol testing regime. It is important the process is clearly defined; and that everyone understands its purpose and the steps involved. Ideally, the process for testing and the accompanying comprehensive policy would have

been developed in consultation with all employees and management before being put in place.

In cases where drug testing is not mandated by law there are a number of issues to consider.

- Does it create a compliance driven environment instead of a people oriented work environment? Is there a way in which tests can be avoided?
- Is there potential for the testing to be perceived as targeting some individuals?
- The costs and availability of sample collection in rural and regional areas of Tasmania.
- The reliability of test results and their ability to show a clear link to impaired performance.
- That test results only provide an indication of recent use.
- The possibility that test samples can be tampered with.

Drug testing alone will not create behaviour change. In the context of an overall drug and alcohol policy a positive workplace culture and a clear communication strategy will ensure that a drug testing process will be more effective.

The Drug Education Network (DEN) argues that drug and alcohol misuse can be more effectively addressed by developing a positive workplace culture that supports everyone to make healthy lifestyle choices. Combine this with robust induction processes and ongoing education and the end result is your farm workers and volunteers recognise that preventing drug misuse on the farm is everybody's business.

For more information visit:

- Drug Education Network: www.den.org.au
Ph: 03) 6211 2350 or 03) 6336 7950.
- Australian Drug Foundation: www.adf.org.au
Ph: 03) 9611 6100 or www.druginfo.adf.org.au
for fact sheets Ph: 1300 858584.
- Alcohol and Drug Information (Tasmania)
1800 811 994 – a 24 hour telephone and counselling service. ■

DID YOU KNOW?

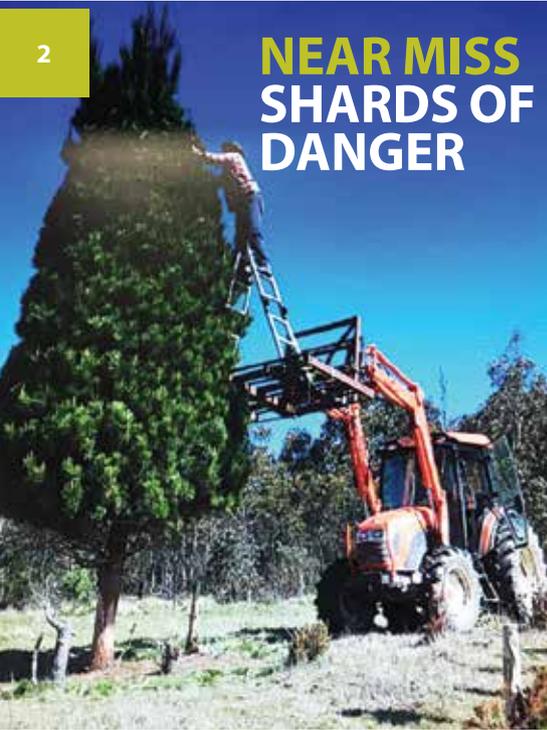
The impact of alcohol & other drugs on safety at workplaces is not only due to those consumed during work hours, but also due to hangovers and small amounts remaining in the blood resulting in:

- Impaired decision making.
- Impaired motor skills.
- Impaired concentration.

The Australian Institute of Criminology estimates alcohol use costs \$6 billion a year due to:

- Loss of productivity.
- Absenteeism.
- Workplace injuries, accidents and deaths.

NEAR MISS SHARDS OF DANGER



Acknowledgement: Photo Victorian WorkCover Authority's "Absolute Shocker"

A worker received a serious chest injury when a shard of hardened steel embedded itself in his chest while he was using a sledge hammer to strike and loosen the hardened bucket tooth on earthmoving equipment.

How could this happen?

- Using the incorrect tool, such as the steel sledge hammer, to strike a hardened steel bucket tooth.
- Lack of knowledge regarding hazards associated with using hardened steel tools on hardened surfaces
- Not following the manufacturer's procedure to remove the component.

Many steel tools or implements are hardened, or contain components made from hardened steel. They include hammers, chisels, drill bits, pin punches, letter and numeric stamp punches, split wedges, crowbars and wrecking bars, cutting tools and various machinery parts.

Bending, twisting, a sudden impact against another hardened surface, or even applying extreme force to hardened steel tools or implements could result in sharp metal fragments (shards) being ejected at very high speed. Serious injury can result when a shard penetrates the human body.

How to prevent this incident:

- Ensure all workers who use steel tools or implements are aware of the limitations when striking hardened surfaces.
- Investigate alternative methods such as using a pinch bar or an air gun or impact tool / jack hammer or a machine that would otherwise loosen the faulty part rather than by using physical impact.
- Ensure that a hazard identification and risk assessment is conducted. Where the risk cannot be eliminated, ensure the worker is protected and the risk has been minimised so far as is reasonably practicable.
- Only authorised workers should carry out repair and maintenance tasks.
- Wear appropriate Personal Protective Equipment (PPE), such as face shield, earmuffs, gloves and long sleeved clothing. Hint: a face shield and ear muff combined is a very useful PPE.
- Chisels, wedges or similar tools should be regularly inspected. Look for signs of dents, cracks, chips, mushrooming (splaying) or excessive wear. They can be redressed if the damage is minor but always discard when major since such faults increase the chances of fragmentation and flying shards. ■

Acknowledgment: SafeWorkSA Safety Alert

HAZARD AND INCIDENT CONTROL DEVELOPMENT – A QUAD BIKE EXAMPLE

When considering safety improvements it is helpful to look at three aspects of control:

1. **"Safe me"** – what protective equipment do I need? e.g. ear muffs, clothing, eye goggles, helmet, roll bars?
2. **"Safe tools and equipment"** – what tools and equipment are safe to use?
3. **"Safe way"** – what is the best way to carry out the task? What skills are required? This relies on behaviour – knowing what to do and doing what we know.

These three aspects should always be considered when developing a safe method of working.

These controls can be represented on what is known as a bow tie diagram. One general example is Diagram 1. It provides a quick and easy way to record the hazards and control methods and shows whether these controls are preventative (i.e. help prevent the incident occurring) or mitigating (i.e. help prevent damage if the incident does occur).

1st Ask: Why the need to control quad bikes?

Answers:

- Quad bikes cause more fatalities on farms than anything else.
- Quad bikes cause many more serious injuries on farms than anything else,

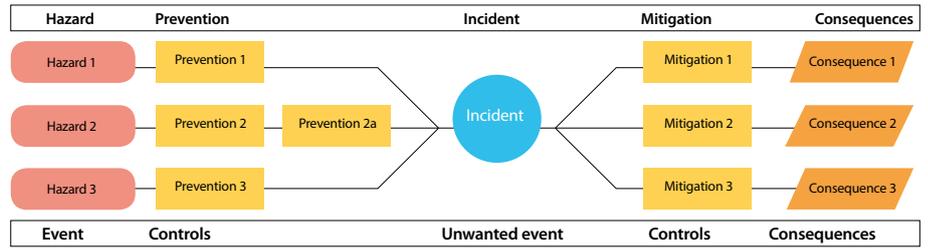
To decrease this fatality and injury rate something different must occur.

Diagram 2 clearly shows some of the key aspects that need to be controlled if quad bike fatalities and injuries are to be eliminated.

For example, research has clearly identified engineering issues around stability of the quad bikes and protection of the driver. Visit www.farmsafe.org.au / conference proceedings to read the relevant papers.

Some engineering controls have also been developed (e.g. roll bars and helmets) which will

DIAGRAM 1



reduce the likelihood of being injured or killed. This bow tie diagram also aids development of policy and procedure that all riders must adhere to. For example it clearly indicates:

- All riders must be trained and tested as competent by an authorised body.
- Pre start checks must be carried out to include condition of tyres, lights and safety devices (roll bars, alarm devices).
- Helmets must always be worn, with straps securely fastened.

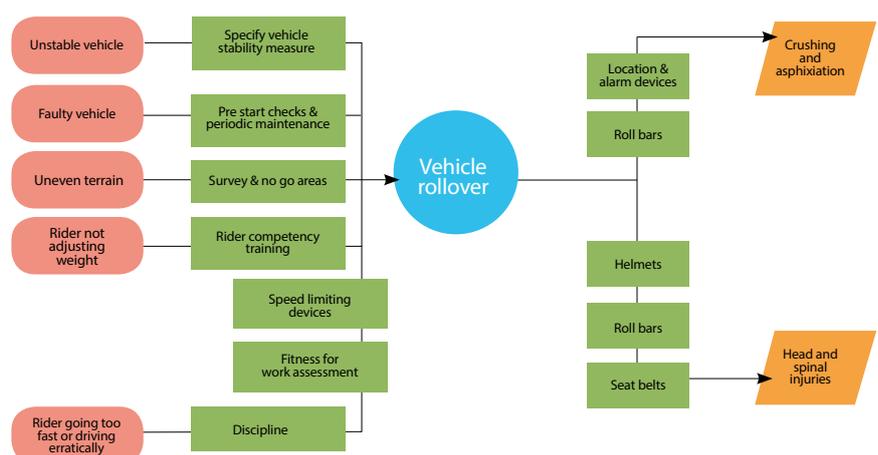
- All quad bikes must be fitted with roll bars or crush protection devices.

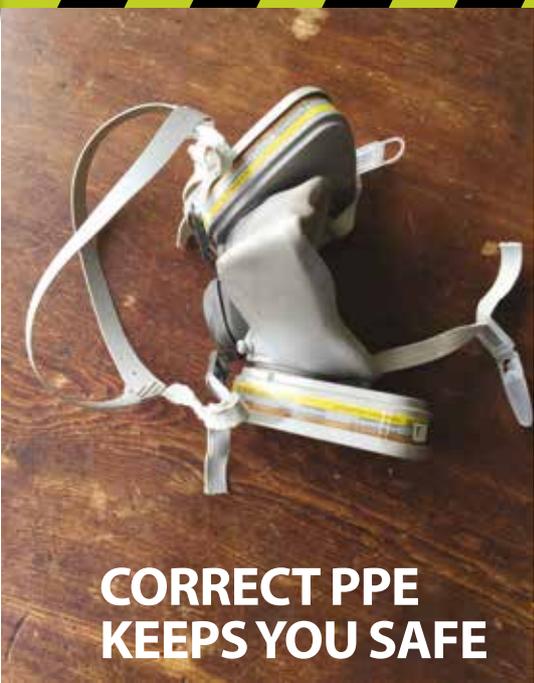
If these controls are applied with some rigour, then there is no doubt that there will be a reduction in the number of quad-bike related incidents that occur on our farms every year. Once again, in 2014, quad bikes were the leading cause of farm fatalities (see *Chairman's Report*).

SUGGESTION:

Apply the bow tie "Incident Control" to this scenario in the photo above. ■

DIAGRAM 2





CORRECT PPE KEEPS YOU SAFE

AROUND COMMONLY-USED CHEMICALS

This article is in response to a Tasmanian farmer's request. He wanted to know "Which colour filter I need to use when I am mixing and handling concentrated chemicals and applying them with a back pack, or adjusting the nozzles of the boom spray."

Personal Protective Equipment (PPE) to protect airways and to prevent inhaling the chemicals includes disposable or reusable half masks or full facemasks with the correct gas/vapour filter for each chemical. These are identified by colour. Consult the table below.

For all of the chemicals listed the relevant gas/vapour filter is an A type (A1 or perhaps A2). These are brown and have a brown label.

NOTE - When spraying these products a mist/aerosol is created so particle protection is needed as well as the gas/vapour filter. A particle filter of rating P1 or P2 or P3 will be suitable.

NOTE - This filter solution provides protection when using concentrates, or mixing the spray solution as well as during spray operations. However, each task should be assessed and the appropriate level of protection considered, e.g. when adjusting spray nozzles wear disposable rubber gloves as well as a mask with brown labelled filters.

The mask suitable for those chemicals listed is one with filters or combination filters having a rating of A1P1, A1P2 or A1P3 or A2P1, A2P2 or A2P3.

On a half mask these filters will give a trained, fitted, clean shaven wearer a minimum reduction in exposure of 10 times.

A perfect tight fitting face mask is crucial. If the mask does not fit the individual's face, the airborne contaminants will leak past the mask and into the lungs. All wearers of tight fitting masks (disposable type or reusable type, half mask or full facemask) need to be clean shaven – i.e. no facial hair on the skin where the mask sits.

More information:

3M has a TechAssist Helpline (1800 064 424) that anyone can call for information on use of PPE - including filter recommendations.

<http://www.youtube.com/watch?v=Tzpz5fko-fg> = Face Mask & Respiratory Seal Test = 9.16 minutes

<http://blogs.cdc.gov/niosh-science-blog/category/respiratory-health/>

<http://blogs.cdc.gov/niosh-science-blog/2014/09/05/n95day-2014/>

<http://www.hse.gov.uk/respiratory-protective-equipment/fit-testing-basics.htm>

<http://www.hse.gov.uk/respiratory-protective-equipment/how-to-choose.htm> ■

BREATHE EASY - KNOW THE PHOSPHINE FUMIGATION HAZARDS

Careless phosphine fumigation can be a health risk to humans as well as resulting in a poor strike rates of the immature pest, potentially increasing their resistance levels. Small amounts of the highly toxic phosphine gas can cause immediate harm to humans.

Tablets, pellets or bag chains of aluminium phosphide or magnesium phosphide are most commonly used whilst zinc phosphide is more commonly used to control rodents.

The highly toxic poisonous phosphine gas is released when the tablet comes into contact with water, including the moisture in the air.

When the phosphine tablet comes into contact with high quantities of water other than moisture in the air, there is a greater risk of fire or explosion in or adjacent to silos, containers and storage areas.

These risks can be controlled by:

- Before purchasing /using, read the safety data sheet for specific information on toxicity, handling, use of PPE (personal protective equipment), storage and emergency procedures.
- Checking breathing apparatus is in perfect working condition.
- Using extreme care when handling the tablets.
- Ensuring phosphine is released only in confined, gas-tight areas.
- Using the gas only in areas free of ignition sources.
- Placing signage on access doors and hatches to restrict access to areas under fumigation or not yet cleared after fumigation.
- Restricting entry into areas that have previously been fumigated.
- Preventing unauthorised entry to all potentially toxic and flammable air environments by guarding or fences.
- Testing air environments after fumigation, by using gas monitoring meters and phosphine compatible respirators.
- Checking the integrity of gas-tight storage areas by using the five-minute half-life pressure test.
- Never transporting phosphine inside a vehicle cabin.
- Never storing in plastic bags or other small gas-proof containers.
- Storing safely
 - In the closed original container in dry, cool, well ventilated areas out of direct sunlight.
 - Locked away from children, animals, food, seed, fertilizers and animal feed.
 - Away from liquids.

More Information:

GRDC Advice sheet: <http://www.grdc.com.au/uploads/documents/keepssafe.pdf>

GRDC 13 page pdf "Fumigating with phosphine" <http://www.grdc.com.au/uploads/documents/GRDC-Fumigating-with-Phosphine-other-fumigants-and-controlled-atmospheres.pdf?shortcut=1>

39 minute You-tube "Fumigating On-Farm Grain Bins with Aluminium Phosphide" - uploaded 2010. ■

Chemical	Common Name	Action	Required Respirator filter label colour	Particle filter rating
24D Amine	24D		A type - Brown	P1 or P2 or P3
Alpha Cypermethrin	Astound	Insecticide	A type - Brown	P1 or P2 or P3
Bromoxynil	Bromocide	Herbicide	A type - Brown	P1 or P2 or P3
Chlorpiriifos	Chlorpiriifos 500	Insecticide	A type - Brown	P1 or P2 or P3
Clethodim	Clethodim 240	Herbicide	A type - Brown	P1 or P2 or P3
Clomazone	Command	Herbicide	A type - Brown	P1 or P2 or P3
Clopyrald	Archer	Herbicide	A type - Brown	P1 or P2 or P3
Dimethoate	Dimethioate	Insecticide	A type - Brown	P1 or P2 or P3
Diquat	Reglone	Herbicide	A type - Brown	P1 or P2 or P3
Fenitrothion		Insecticide	A type - Brown	P1 or P2 or P3
Glyphosate 450		Herbicide	A type - Brown	P1 or P2 or P3
Mancozeb	Dithane	Fungicide	A type - Brown	P1 or P2 or P3
Metsulfuron Methyl	Associate	Herbicide	A type - Brown	P1 or P2 or P3
Propiconazole	Bumper	Fungicide	A type - Brown	P1 or P2 or P3
Triclopyr & Picloram	Grazon	Herbicide	A type - Brown	P1 or P2 or P3
	Activator	Surfactant	Particle filter	P1 or P2 or P3
	Deluge	Wetter Agent	Particle filter	P1 or P2 or P3