



The University of Sydney

Child safety on farms: Priorities for best practice

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Australian Government

Department of Health and Ageing

Overview

1. Child farm injury

2. Priority recommendations

3. Child safety awareness & practices on farms

4. Summary

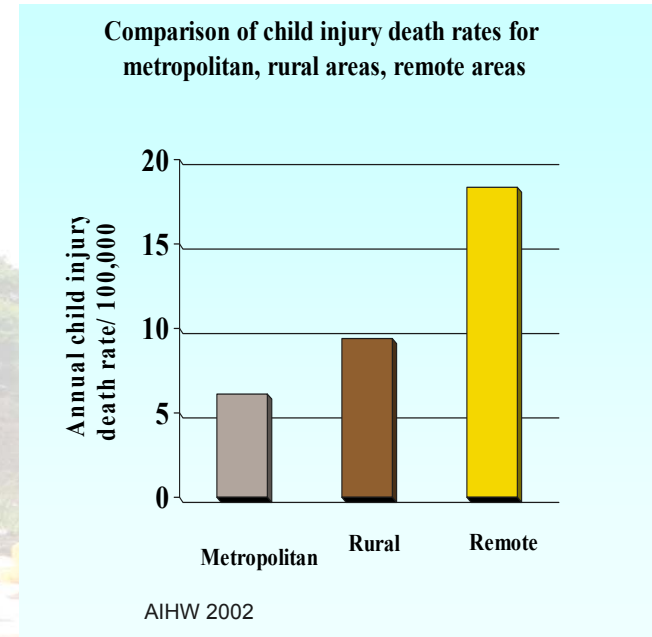
Child injury on Australian farms

On average.....

...around 20 children under 15 yrs are fatally injured on farms each year and another 500-600 are admitted to hospital for farm injury.

By age:

- Children 0-4 yrs – account for around 2/3 of child farm fatalities & 1/5 of injury admissions
- Children 5-9 yrs - around 1/5 of fatalities & 1/4 child farm injury hospital admissions
- Children 10-14 yrs - around 15% of fatalities, but over 50% of hospital admissions for farm injury



Children under five years are most “at risk” of fatal injury

Child farm injury - causes

At a glance...

- Drowning in dams is the most common single cause of child injury death on farms.
- ATVs (four wheeled motorcycles) are the second most common cause, followed by farm vehicles (utes/cars).
- ATVs are the most common cause of fatal injury for children who visit farms.

• Farm injury statistics are compiled by the National Farm Injury Data Centre (NFIDC) at ACAHS

Drowning

Around 40% of all child farm fatalities, nearly 90% of whom are under 5 yrs

Farm vehicle and machinery

Around 1/3 of all child farm fatalities, 60% of whom are under 5 yrs and often related to vehicle & tractor runover

Farm motorcycles (2 & 4 wheel motorcycles – ATV's)

Around 1/5 of all child farm fatalities & 20- 40% of child farm injury hospital admissions. Mainly boys & older children, with $\frac{3}{4}$ being 10-14 yrs.

Horse related injury

Around 5% of child farm fatalities, but 60% are 5-9yrs. Around 15% of farm injury admissions. Mainly girls & older children, with $\frac{2}{3}$ being 10-14 yrs.

Priority recommendations

Priorities safety actions based on the injury profile (NFIDC) and solutions research and consultation with working groups involving farmers ...*

- Provide a safe and secure place for children to play, supported by close supervision and family rules
- Children wear seatbelts / child restraints whilst in vehicles on farm
- Children do not ride on tractors, ATV's or the back of utes
- Children wear helmets when riding bikes, motorbikes & horses



**PRIMARY TARGET –
ADULTS**
**who have the power
and responsibility to
make changes**

* Fragar et al 2003, ACAHS

Priority recommendations –

Safe Play Areas on Farms

- Providing a securely fenced house yard or safe play area, helps prevent young children from gaining unsupervised access to dams, creeks & other farm hazards
- A securely fenced safe play area, works on the same principle of a pool fence, but in reverse. It is likely to be most effective in reducing toddler deaths on farms.

***Safe play areas on farms –
a key recommendation for
prevention of drowning***



Priority recommendations -

Features of a good safe play area

- Located where children can be easily supervised
- Surrounded by an effective fence (eg. 1.2-1.5m high, < 100mm ground clearance & vertical rail clear space, no foot-holds)
- Suitable gate (child resistant latches, self-closing) and free of movable structures (for climbers)
- Includes interesting play areas / items and excludes drowning & vehicle hazards
- Aim towards AS 1926.1 – 2007



The aim is to prevent young children gaining unsupervised access to water and other farm hazards

Priority recommendations –

Examples of common fencing types



Awareness and practices on farm

Ag Field Day Surveys

Over 2600 farmers were surveyed at agricultural field days in NSW, SA, Vic & WA from 2003–2006 (ongoing); about child safety practices on farm and recall of key safety messages in media.

Results – Childcare

- Two-thirds rated childcare arrangements as adequate / mostly adequate, although two-thirds also cared for children whilst doing farm work, at least sometimes.
- Lack of childcare access was associated with increased incidence of children being cared for in the farm workplace.



Awareness and practices on farm

Ag Field Day Surveys

Safe Play Areas on farms -

- Around $\frac{3}{4}$ of respondents across all field days said they had a safe play area on farm for children
- Only around $\frac{1}{2}$ of these were rated as difficult / almost impossible for a child < 6yo to breach –whether respondents had children or not.
- Most common types of fences:
 - Solid panel (29%)
 - Netting fences (25%)
- Two thirds (66%) were fully enclosed with a gate



Year	% Field day respondent s with a safe play area (SPA)	% respondents with a SPA self-rated as difficult or almost impossible for a child under 6 yrs to breach
2003	77%	40%
2004	69 - 79 %	37 - 44 %
2005	66 - 76 %	37 – 49 % *
2006	59 - 86% *	31 - 55% *

* Significant variation between field days

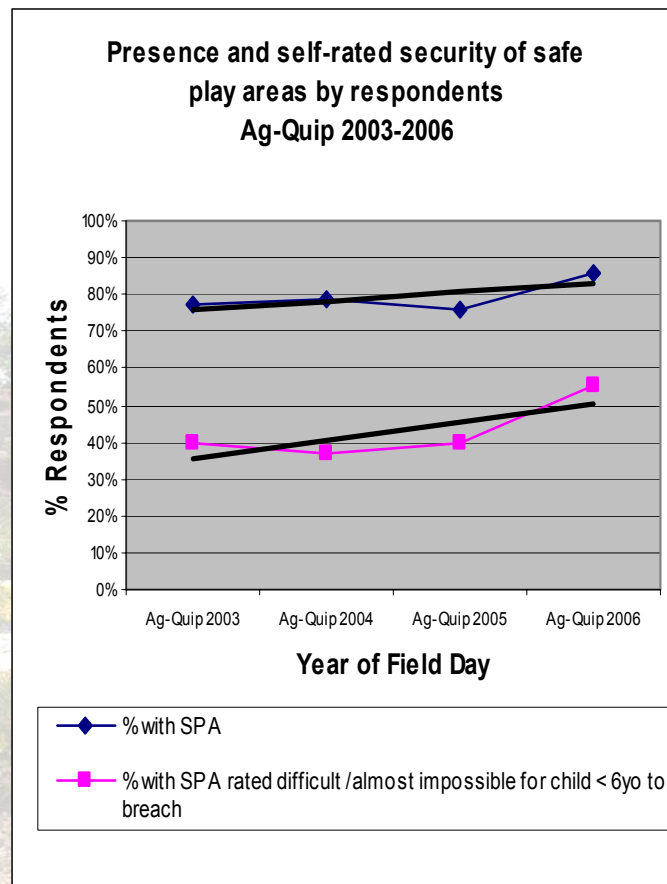
Awareness and practices on farm

Ag Field Day Surveys

Safe Play Areas on farms—

Change over time (Ag-Quip)

- An overall improvement in respondents with a safe play area from 77% to 86%, 2003 - 2006 (but not statistically significant).
- Slight increase from 40% to 55% from 2003 – 2006 those stating safe play area was difficult /almost impossible for a child < 6yo to breach ($X^2=13.1$ $df=3$ $p\leq.01$)

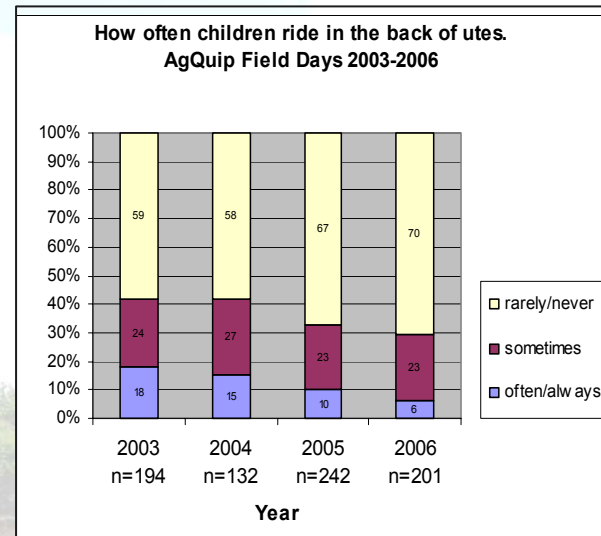


Awareness and practices on farm

Ag Field Day Surveys

- Riding in the back of utes**

On average, 2/3 said children “rarely / never” ride on the back of utes. Those who said children “often / always” ride on the back of utes at Ag-Quip declined from 18% in 2003 to 6% in 2006 ($\chi^2=15.6$ df=6 $p<.02$).



- Riding as tractor passengers**

Around 2/3 of farmers said children “rarely / never” ride as passengers on tractors. At Ag-Quip, those who said children “often / always” ride on tractors declined from 12% to 4% from 2003 -2006 ($\chi^2=23.8$ df=6 $p<.01$)



Awareness and practices on farm

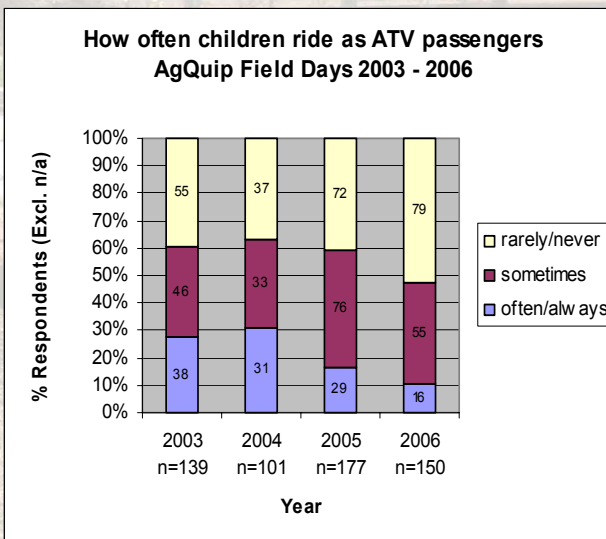
Ag Field Day Surveys

- **Children operating ATVs**

Overall, around ½ of farmers said children operate ATVs at least sometimes. At Ag-Quip, those who said children “often/always” operate ATVs, declined from 28% in 2003 to 12% in 2006 ($\chi^2=22.6$ df=6 $p<.01$)

- **Riding as passengers on ATVs**

Again, around ½ said children riding as passengers on ATVs at least sometimes. Those who said children “often/always” ride as passengers on ATVs at Ag-Quip, declined from 27% in 2003 to 10% in 2006 ($\chi^2=24.7$ df=6 $p<.01$).



Awareness and practices on farm

Ag Field Day Surveys

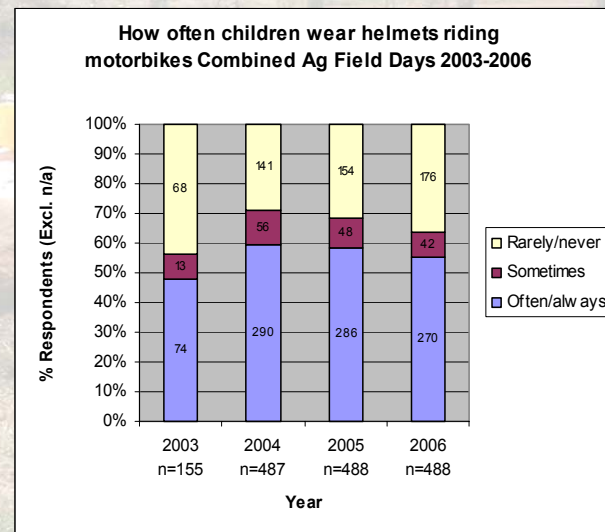
How often children wear helmets –

- when riding horses

On average, 3/4 of farmers reported children “often / always” wear helmets when riding horses. There was no real change from 2003-2006; and there was significant regional variation.

- when riding motorbikes

Overall, 1/2 said children “often/always” wear helmets, whilst 1/3 said children “rarely/never” wear helmets riding motorbikes. Those who “often/ always” wore helmets improved from 48% in 2003 to 55% in 2006 ($\chi^2=15.3$ df=6 $p<.02$).



Awareness and practices on farm

Ag Field Day Surveys

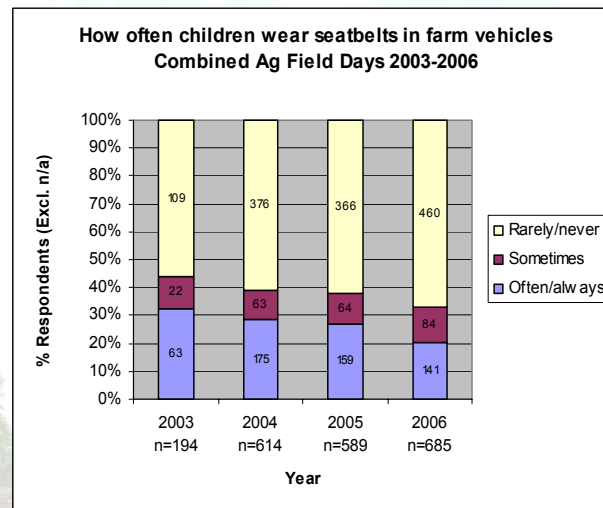
- **Wear seatbelts in farm vehicles**

On average, nearly 2/3 of farmers said children “rarely / never” wear seatbelts in farm vehicles. Slight decline in % reporting seatbelt wearing 2003-2006.

- **Specific child safety actions**

Around 1/3 of farmers at Ag Quip from 2003 – 2006 said they had done something specific about child safety in the previous 12 months. Most common actions related to:

- (1) Fences /safe play areas
- (2) Rules
- (3) Other barriers



Awareness and practices on farm

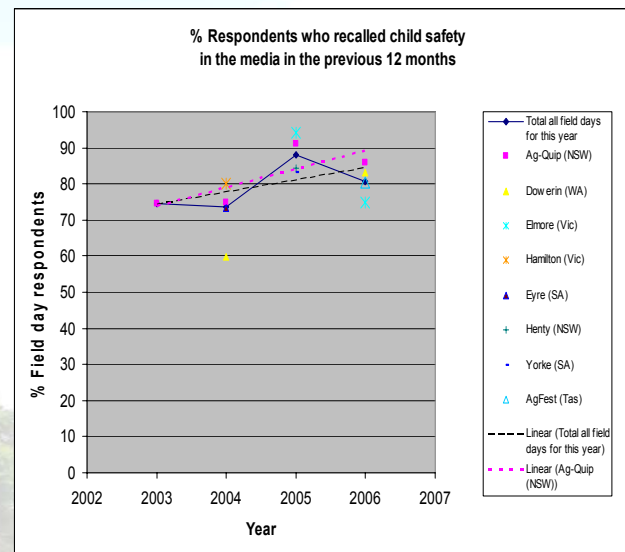
Ag Field Day Surveys

Media messages

- Overall improvement in recall of child safety messages in media from 2003 - 2006 (74- 84%), with TV reported as most common source

- Over all field days, most commonly recalled messages related to:

- (1) fences / safe play areas
- (2) tractors / machinery
- (3) other (eg. Hazard, safety event)
- (4) location / supervision of children
- (5) water safety – dams, pools etc.



Summary - change over time

- Despite limitations with field day studies, there is some indication of improvement in the security of safe play areas on farms, reduced access to farm hazards & practice of some priority safety rules.
- Research indicates that child farm injury fatalities have declined in recent years*, particularly drowning in farm dams and tanks (toddlers). However, ATV fatalities remain an issue.
- Hospital admissions also appear to be slightly down**, although caution is needed in comparing data. Motorbike / ATV injury admissions remain an issue.

*NFIDC 2007, **AIHW 2007



Summary – where to from here

- Focus of further child farm injury prevention work should relate to:
 - Improved security of fenced house yards - as safe play areas
 - Children not riding on ATVs
 - Wearing helmets riding farm motorbikes (and horses)
 - Wearing seatbelts and restraints in vehicles on farm
- Health, safety and farmer networks, supported with resources and public awareness campaigns, are promoting child safety in farming communities
- Strategic efforts needed to continue to 'normalise' safety behaviours and make changes faster



Appx: Elements of a strategic approach



Appx: Farm safety structures in Australia

FARMSAFE AUSTRALIA

- * National Farmers' Federation
- * Country Women's Association of Australia
- * Australian Workers Union
- * Department of Agriculture, Fisheries and Forestry
- * Australian Safety and Compensation Commission
- * Rural Industries Research & Development Corporation
- * Agrifoods Skills Council
- * Tractor and Machinery Association of Australia
- * Motor Traders Association of Australia
- * Australian Women in Agriculture
- * Australian Centre for Agricultural Health & Safety
- State Farmsafes



**STATE FARMSAFE
ORGANISATIONS**
(farmer led bodies)



**LOCAL FARM
SAFETY COMMUNITY
GROUPS**



ACAHS- Uni.of Sydney
**National Farm Injury Data
Centre**