Child safety on farms: Priorities for best practice

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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

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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.

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 ¾ 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 2/3 being 10-14 yrs.

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

Australian Centre for Agricultural Health and Safety 2007
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

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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
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.
Safe Play Areas on farms -

• Around ¾ of respondents across all field days said they had a safe play area on farm for children.

• Only around ½ 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.

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

* 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 ($X^2=13.1 \ df=3 \ p \leq .01$)

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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 ($X^2=15.6$ 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 ($X^2=23.8$ df=6 $p<.01$)

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How often children ride in the back of utes.
AgQuip Field Days 2003-2006

0% 10% 20% 30% 40% 50% 60% 70% 80% 90% 100%

2003
n=194

2004
n=132

2005
n=242

2006
n=201

Year

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<th>sometimes</th>
<th>often/always</th>
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<td>2006</td>
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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 ($X^2=22.6\text{ df}=6\ p<.01$).

• 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 ($X^2=24.7\text{ df}=6\ p<.01$).
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, ½ 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 (X^2=15.3 df=6 p<.02).
Awareness and practices on farm
Ag Field Day Surveys

• Wear seatbelts in farm vehicles

• 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

Child Safety on Farms Strategy

- Education
- Promotion
- Improving child safety outcomes
- Research
- Evaluation
- Evidence base - risks and culture
- Consultation
- Stakeholder networks
- Sponsors
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

*Australian Centre for Agricultural Health and Safety 2007*