

The Farm Injury Optimal Dataset.
Version 1.2

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FOREWORD

Injury occurring on Australian farms is costing the industry and rural communities dearly, and the Rural Industries Research and Development Corporation has taken the lead in assembling the Farm Health and Safety Joint Research Venture to address the problem. The Joint Venture includes the Rural Industries Research and Development Corporation, the Woolmark Company, the Grains Research and Development Corporation and the Cotton Research and Development Corporation.

The Joint Venture is investing in a program of research in farm occupational health and safety, including funding of the National Farm Injury Data Collection, that is maintained by the National Farm Injury Data Centre at the Australian Centre for Agricultural Health and Safety.

Critical to the maintenance of a farm injury data collection that is useful for industry, is the establishment of the minimum data requirements and definitions for data collections use by all who manage databases or who undertake research in farm injury and its prevention.

This document provides that technical guidance and its use is to be encouraged in the interests of agriculture in Australia.

Peter Core
Managing Director
Rural Industries Research and Development Corporation

CONTENTS

	Page
Foreword	iii
Contents	iv
Introduction	1
Development	2
Scope	3
General information items	4
Main external cause of injury	6
Intent	7
General activity	8
Place	9
Agricultural enterprise	11
Agricultural context/ work phase	13
Agent	24
Text description of injury event	29
Nature of injury and body part	30
Appendix 1 Mechanism of injury classification	33

INTRODUCTION

The optimal dataset has been developed to assist researchers to accurately describe the injury experience of persons working on, resident on and/or owning and managing Australian farms. The document is not a questionnaire, rather it is a coding guide.

The dataset provides guidance for persons designing farm injury surveys and for coders putting data from surveys into computer based databanks.

A standardised system of classifying the work process will allow for disparate research work to be brought together and compared, and in some situations, to be analysed as a whole. Without such a framework, agricultural industries will not find sufficient data to assist in determining the injury priorities, and causal factors.

DEVELOPMENT

A literature review of farm injury research methodologies and a survey of government data collections of farm injury was undertaken. Relevant findings of that review included:

- That the data relating to farm injury morbidity and mortality is incomplete.
- Various methodologies have been used to define the farm injury problem. Inconsistencies arise due to different methodologies, reflecting different aims and definitions.
- Many inconsistencies could be overcome by the development of a logical and consistent method for classifying farm injury.
- It is difficult to ascertain values for the denominator (population at risk) for farming incidence and prevalence calculations. This has led to the predominance of descriptive epidemiological studies.

From these findings flow the aims of the National Farm Injury Data Collection Project;

- Developing recommendations for the improvement of farm injury data collection in Australia.
- Developing systems of classifying and defining farm exposures leading to injury.
- Where possible encourage analytical epidemiological research by using numerator data that can be combined with meaningful denominator information.

The optimal dataset is designed to help meet these objectives by classifying farm injury events in a consistent manner thereby helping to define exposures that result in injury. The document is structurally based upon the National Data Standards for Injury Surveillance (National Injury Surveillance Unit, 1994¹).

The dataset was originally developed by consultation between staff members in Australian Centre for Agricultural Health and Safety each with expertise in different areas of farm safety, including farm safety management, pesticide injury prevention, adolescent and young adult injury, horse injury prevention, research methods and medicine. Following agreement among the staff, the dataset was circulated among members of a Steering Committee of the National Farm Injury Data Collection Project for their expert comments on injury control and epidemiological aspects. The document has been distributed to the members of Farmsafe Australia for comment on the individual work phase groupings and agent categories. Recommendations for changes are being considered on a continuous basis, and the document updated.

The current version is set out below with rationale for each grouping.

¹ National Injury Surveillance Unit. (1994) *National Data Standards for Injury Surveillance*. Australian Institute for Health and Safety. Adelaide.
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SCOPE

The farm injury optimal dataset is designed to enable the collection and coding of farm injury data to be done in a consistent manner. Those persons interested in data collection and coding can use the document to guide questionnaire design and subsequent coding.

The scope of the guidelines is limited to description of injury occurring on agricultural enterprises, or in other places associated with agricultural work.

Certain data items described may have limited use in some areas, for example a mail out survey would have no use for the mode of separation category, while a hospital accident and emergency department would find such information very useful. The use of data items within the general information items will require some judgement by individual researchers.

GENERAL INFORMATION ITEMS (1)

These fields provide essential information relating to the injured person.

1.1	Establishment Identifier	AAAAAA
1.2	Patient Identifier	NNNNNN
1.3	Sex	1=Male 2=Female 9=Unknown
1.4	Date of Birth	DD/MM/YY
1.5	Date of Attendance	DD/MM/YY
1.6	Area of Usual Residence	NNNN
1.7	Mode of Separation (Hospital data only)	N 0 = Admitted 1 = Discharge/Transfer to an(other) acute hospital 2 = Discharge transfer to a nursing home 3 = Discharge/Transfer to an(other) psychiatric hospital 4 = Discharge/Transfer to other health care accommodation 5 = Statistical Discharge - Type Change 6 = Left against medical advice/Discharge at own risk 7 = Statistical Discharge from leave 8 = Died 9 = Other (includes discharge to usual residence / own accommodation / welfare institution)

1.8	Country of Birth	NN ABS - 2 digit classification (00-99) ²
1.9	Aboriginality	N 1 = Aboriginal or Torres Strait Islander 2 = Other
1.10	Employment Status	N 1 = Child not at school 2 = Student 3 = Employed 4 = Unemployed 5 = Home duties 6 = Other
1.11	Occupation	NNNN ABS 4 digit Australian Standard Classifications of Occupations ³ .
1.12	Preferred Language	NN ABS Classification of Languages ⁴
1.13	Date of Injury	DD/MM/YY
1.14	Time of Injury	HH:MM 24 hr clock

² Australian Bureau of Statistics.(1996) *Australian standard classification of countries for social statistics*. Australian Bureau of Statistics. Cat 1269.0. Canberra

³ Australian bureau of Statistics (1997) *Australian standard classification of occupations. 5th Edition*. Australian Bureau of Statistics. Cat 1220.0. Canberra

⁴ Australian Bureau of Statistics (1997) *Australian standard classification of languages*. Australian Bureau of Statistics. Cat 1267.0. Canberra

MAIN EXTERNAL CAUSE OF INJURY (2)

The use of main external cause categories has been criticised for attempting to identify a single cause of injury. The inclusion of the National Data Standards for Injury Surveillance 'main external cause' categories enables matching and comparison of data with other injury interest groups. Several categories within the main external cause grouping are areas which Farmsafe have identified as priorities for prevention.

- 01 Motor Vehicle - driver
- 02 Motor Vehicle - passenger
- 03 Motorcycle - driver
- 04 Motorcycle - passenger
- 05 Pedal cyclist or pedal cycle passenger
- 06 Pedestrian
- 07 Horse related
- 08 Other transport related circumstance
- 09 Fall - low (same level, or <1m, or no info re: height)
- 10 Fall - high
- 11 Drowning, submersion - swimming pool
- 12 Drowning, submersion - other
- 13 Other threat to breathing (incl strangulation and asphyxiation)
- 14 Fire, flames, smoke
- 15 Hot drink, food, water, other fluid, steam, gas, or vapour
- 16 Hot object or substance
- 17 Poisoning - medication
- 18 Poisoning - other substance
- 19 Firearm
- 20 Cutting, piercing object
- 21 Dog related
- 22 Animal related (not horse or dog)
- 23 Struck by object or person
- 24 Machinery in operation
- 25 Electricity
- 26 Hot conditions (natural origin, incl sunlight)
- 27 Cold conditions (natural origin)
- 28 Other specified external cause
- 29 Other unspecified external cause
- 99 Unknown

INTENT (3)

The role of intent and the preventative strategies involved in non-accidental injury may well be beyond the scope of a farm injury data collection. However, it is important. Where possible, to define those injuries that were non-intentional, so that prevention programs are relevant.

Prevention programs to address intentional injury will require different strategies to the non-intentional injury issue. There is a growing interest in the issues of farm suicide.

01	Accident
02	Intentional Self Harm
03	Sexual Assault
04	Neglect or maltreatment by parents or guardian
05	Maltreatment by domestic partner
06	Other assault
07	Event of undetermined intent
08	Legal intervention or operations of war
09	Adverse effect or complications of medical and surgical care
10	Other specified intent
99	Intent not specified

GENERAL ACTIVITY (4)

There is often some difficulty in establishing the boundaries between work and leisure activities on farms and this can reduce the usefulness of a general activity classification. It has been decided to include the classification to allow for further research into some of the less well studied areas of farm safety, such as education and sport. It is envisaged that in the majority of cases, work will prove to be the defining activity.

- 01 Sports activity
- 02 Leisure activity
- 03 Working for income
- 04 Other type of work (Incl housework)
- 05 Resting, eating, sleeping, other personal activity
- 06 Being cared for
- 07 Engaged in formal education activity
- 08 Other specified activity
- 99 Unspecified activity

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PLACE (5)

The description of the various places upon a farm that an injury can occur is seen as vitally important.

The breakdown 100-104 inclusive allows for the classification of cases where the only information is that it occurred on a farm but outside the residence, upon paddocks under crop, cleared for grazing, under natural vegetation or on a paddock where the use is unspecified. These classifications were included because of a belief that each paddock type was the result of different work processes and therefore may result in different risks of injury.

The breakdown 105-116 inclusive, reflects places other than paddocks where there is an injury risk. Each classification was chosen as a likely place for known injury problems. For example stockyards (105) are a likely source of animal injury, while a workshop is a potential source of trauma or eye injuries. Classification 199, farm excluding residence NEC (Not Elsewhere Classified) suggests a place that has been specified but which does not fit into this classification, such a code identifies limits in the dataset, it is different from 100 Farm excluding residence which identifies a limit in data collection. It is expected that if large numbers of 199 are collected the dataset would be updated. In the light of current data, the breakdown is expected to be able to identify the majority of injury places.

The farm residence and surrounds are likely sites of injury events. Farm residence (200) includes all non-specified injury in and around the primary residence. Farm House (201) is coded when it is certain that the injury occurred inside the home. (202) will be coded when it is certain that an injury occurred in the garden of the residence. Farm residence NEC will include specified residence areas that do not fit into the preceding 3 coding options.

Place code 300 will probably be expanded in future drafts of the optimal dataset. It is expected that it will include such locations as "Agricultural Retailers" or "Saleyards". The members of Farmsafe Australia have been asked to comment on this classification. The inclusion or otherwise of this classification was debated due to the probable difficulty of collecting data relevant to this group. It was decided that the optimal dataset should give guidance and it would be up to individual researchers to overcome the problems of ascertainment of cases.

100 Farm excluding residence

- 101 Paddock Under Crop,
- 102 Cleared for grazing,
- 103 Natural Vegetation,
- 104 Unspecified.

- 105 Stockyards including horse yards
- 106 Workshop
- 107 Roads and lanes
- 108 Dam / Water Reservoir / Irrigation Channel
- 109 River / Creek
- 110 Hay Shed
- 111 Machinery shed
- 112 Shed / farm building NEC
- 113 Dairy

-
- 114 Woolshed / Shearing Shed
 - 115 Piggery
 - 116 Storage Shed other
 - 117 Disposal Pit
 - 118 Aviary
 - 119 Windmill incl. Troughs
 - 120 Animal shed other incl. broiler shed
 - 121 Sorting / Packing Shed
 - 199 Farm Excluding Residence NEC.
- 200 Farm residence
- 201 farm house
 - 202 farm yard/garden
 - 203 Shearers Quarters
 - 299 Farm Residence NEC
- 300 Other Place Associated with Agricultural Work
- 301 Saleyards
 - 302 Rural Retailer
 - 303 Road
 - 304 Agricultural Shows incl. Field days
 - 305 Grain Handling Facilities
 - 399 Other place associated with agricultural work not specified

AGRICULTURAL ENTERPRISE (6)

The optimal dataset will classify industries according to the Australian AND New Zealand Standard Industrial Classification produced by the Australian Bureau of Statistics⁵. As most states workers compensation statistics are produced according to this classification comparisons will be possible. While this system may not provide detailed information about some smaller industries this problem is counter-balanced by the benefits of classifying in line with the Australian Bureau of Statistics. Most importantly the ability to relate injury numbers to published workforce figures in each industry, thereby calculating incidences of injury. The classification according to ANSIC codes will foster ease of reporting to industry bodies.

01 AGRICULTURE.

011 Horticulture and fruit growing

- 0111 Plant nurseries
- 0112 Cut flower and flower seed growing
- 0113 Vegetable growing
- 0114 Grape growing
- 0115 Apple and pear growing
- 0116 Stone fruit growing
- 0117 Kiwi fruit growing
- 0119 Fruit growing nec

012 Grain, sheep and beef cattle farming

- 0121 Grain growing
- 0122 Grain-sheep and grain-beef cattle farming
- 0123 Sheep-beef cattle farming
- 0124 Sheep farming
- 0125 Beef cattle farming

013 Dairy cattle farming

- 0130 Dairy cattle farming

014 Poultry farming

- 0141 Poultry farming (meat)
- 0142 Poultry farming (eggs)

⁵ Australian Bureau of Statistics (1993) *Australian and New Zealand standard industry classification* (ANZIC) Australian Bureau of Statistics. Cat 1292.) Canberra

015 Other livestock farming

- 0151 Pig farming
- 0152 Horse farming
- 0153 Deer farming
- 0159 Livestock farming nec

016 Other crop growing

- 0161 Sugar cane growing
- 0162 Cotton growing
- 0169 Crop and plant growing nec

02 SERVICES TO AGRICULTURE; HUNTING AND TRAPPING

021 Services to agriculture

- 0211 Cotton ginning
- 0212 Shearing services
- 0213 Aerial agricultural services
- 0219 Services to agriculture nec

022 Hunting and trapping

- 0220 Hunting and trapping

03 FORESTRY AND LOGGING

030 Forestry and logging

- 0301 Forestry
- 0302 Logging
- 0303 Services to forestry

AGRICULTURAL CONTEXT/ WORK PHASE (7)

Following on from the classification of industry it is desirable to be able to define work phase in which the injury event occurred. This will allow us to accurately assess the injury experience of people involved in mixed farming activities, as well as to define the risks associated with production activity.

The work phase grouping has been designed in two categories cover those activities that are common through the growing season firstly in animal industries and secondly in cropping. In terms of reporting from the dataset this means we will be able to report quite easily upon injuries that occurred in animal handling (08), as well as being able to create breakdowns of animal handling by industry and work phase. The development of the work-phase group is a major step in coding injuries on farm in Australia. This system follows on from work done by the Finnish Farmers Social Insurance Institution.⁶ The classifications devised here are more specific and chronologically ordered. While it wasn't considered at the time of the development of the document, the chronological nature of the work phase coding may aid coders to code accurately and quickly.

The work phase classification has also been used for cropping. Once again the seasonal nature of agriculture was the basis of the system. The groupings are designed in the same way as the place codes in that they are able to classify minimal information eg. Cropping (200) and also able to record detail eg Cropping and Pesticide application (200 | 03)

Members of Farmsafe Australia have been asked for information regarding local usage of many of the terms in these groups. Local usage will be important if coding is done at the source of injury.

AGRICULTURAL CONTEXT – WORK PHASE AT TIME OF INJURY.

100.00 Animal production activity

101	Cattle production for meat, incl stud	.01	Mustering / Herding
		.02	Drafting
		.03	Drenching
		.04	Branding
		.05	Marking / Banding/ Tailing
		.06	Tagging
		.07	Feeding / Watering
		.08	Handling Animal NEC
		.12	Loading / Unloading
		.15	Tanning
		.16	Dipping / Jetting
		.20	Handling / Feeding Dogs
		.21	Carting / Transport
		.22	Inspecting
		.23	Calving
		.24	Vaccinating
		.25	Other Veterinary Activity
		.99	Other nec.

⁶ Siitonen T, Patiala A. (1993) *Farmers' employment accident insurance in Finland*. The Farmers Social Insurance Institution. Espoo.

102	Dairy/milk production	.01	Mustering / Herding
		.02	Drafting
		.03	Drenching
		.04	Branding
		.05	Marking / Banding/ Tailing
		.06	Tagging
		.07	Feeding / Watering
		.08	Handling Animal NEC
		.11	Training
		.12	Loading / Unloading
		.13	Milking
		.16	Dipping / Jetting
		.20	Handling / Feeding Dogs
		.21	Carting / Transport
		.22	Inspecting
.23	Calving		
.24	Vaccinating		
.25	Other Veterinary Activity		
.99	Other nec.		
103	Sheep/wool production	.01	Mustering / Herding
		.02	Drafting
		.03	Drenching
		.04	Branding
		.05	Marking / Banding/ Tailing
		.06	Tagging
		.07	Feeding / Watering
		.08	Handling Animal NEC
		.12	Loading / Unloading
		.13	Milking
		.14	Shearing
		.15	Tanning
		.16	Dipping / Jetting
		.17	Crutching
		.18	Mulesing
		.19	Baling / Pressing
		.20	Handling / Feeding Dogs
		.21	Carting / Transport
.22	Inspecting		
.24	Vaccinating		
.25	Other Veterinary Activity		
.99	Other nec.		
104	Pig production	.01	Mustering / Herding
		.02	Drafting
		.03	Drenching
		.04	Branding
		.05	Marking / Banding/ Tailing
		.06	Tagging
		.07	Feeding / Watering
		.08	Handling Animal NEC
		.09	Shoeing
		.12	Loading / Unloading
		.16	Dipping / Jetting
		.21	Carting / Transport
		.22	Inspecting
		.24	Vaccinating
		.25	Other Veterinary Activity

		.99	Other nec.
105	Poultry for meat	.07	Feeding / Watering
		.08	Handling Animal NEC
		.12	Loading / Unloading
		.21	Carting / Transport
		.22	Inspecting
		.24	Vaccinating
		.25	Other Veterinary Activity
		.26	Egg Collecting
		.99	Other nec.
106	Poultry for eggs	.07	Feeding / Watering
		.08	Handling Animal NEC
		.12	Loading / Unloading
		.21	Carting / Transport
		.22	Inspecting
		.24	Vaccinating
		.25	Other Veterinary Activity
		.26	Egg Collecting
		.99	Other nec.
107	Horse stud/ farming	.01	Mustering / Herding
		.02	Drafting
		.03	Drenching
		.04	Branding
		.05	Marking / Banding/ Tailing
		.06	Tagging
		.07	Feeding / Watering
		.08	Handling Animal NEC
		.09	Shoeing
		.10	Breaking In.
		.11	Training
		.12	Loading / Unloading
		.21	Carting / Transport
		.22	Inspecting
		.24	Vaccinating
		.25	Other Veterinary Activity
		.99	Other nec.
108	Goat farming	.01	Mustering / Herding
		.02	Drafting
		.03	Drenching
		.04	Branding
		.05	Marking / Banding/ Tailing
		.06	Tagging
		.07	Feeding / Watering
		.08	Handling Animal NEC
		.12	Loading / Unloading
		.13	Milking
		.14	Shearing
		.15	Tanning
		.16	Dipping / Jetting
		.17	Crutching
		.19	Baling / Pressing
		.20	Handling / Feeding Dogs
		.21	Carting / Transport
		.22	Inspecting
		.24	Vaccinating

.25 Other Veterinary Activity
.99 Other nec.

109	Bee keeping	.08	Handling Animal NEC
		.12	Loading / Unloading
		.21	Carting / Transport
		.22	Inspecting
		.99	Other nec.
199	Animal production NEC.	.01	Mustering / Herding
		.02	Drafting
		.03	Drenching
		.04	Branding
		.05	Marking / Bang Tailing
		.06	Tagging
		.07	Feeding / Watering
		.08	Handling Animal NEC
		.09	Shoeing
		.10	Breaking In.
		.11	Training
		.12	Loading / Unloading
		.13	Milking
		.14	Shearing
		.15	Tanning
		.16	Dipping / Jetting
		.17	Crutching
		.18	Mulesing
		.19	Baling / Pressing
		.20	Handling / Feeding Dogs
		.21	Carting / Transport
		.22	Inspecting
		.23	Calving
		.24	Vaccinating
		.25	Other Veterinary Activity
		.26	Egg Collecting
		.99	Other nec.

200 Cropping production activities

201 Grain excl rice production

- .01 Cultivating / Ground Preparation
- .02 Fertilising
- .03 Pesticide Application/ Aerial Spraying
- .04 Pesticide Application / Ground Rig
- .05 Pesticide Application other
- .06 Planting / Seeding
- .07 Irrigating
- .09 Chipping / Manual Weeding
- .10 Burning Off
- .11 Harvesting / Picking / Cutting
- .12 Elevating / Augering
- .13 Boxing / Carting / Grading
- .15 Storing
- .16 Haymaking
- .17 Manual Loading / Unloading
- .18 Mechanical Loading / unloading
- .19 Transporting
- .20 Inspecting
- .99 Other NEC.

202 Fruit incl. Stone, Pome Citrus

- .01 Cultivating / Ground Preparation
- .02 Fertilising
- .03 Pesticide Application/ Aerial Spraying
- .04 Pesticide Application / Ground Rig
- .05 Pesticide Application other
- .06 Planting / Seeding
- .07 Irrigating
- .08 Pruning
- .09 Chipping / Manual Weeding
- .10 Burning Off
- .11 Harvesting / Picking / Cutting
- .12 Elevating / Augering
- .13 Boxing / Carting / Grading
- .15 Storing
- .17 Manual Loading / Unloading
- .18 Mechanical Loading / unloading
- .19 Transporting
- .20 Inspecting
- .99 Other NEC.

203 Bananas / Pineapples

- .01 Cultivating / Ground Preparation
- .02 Fertilising
- .03 Pesticide Application/ Aerial Spraying
- .04 Pesticide Application / Ground Rig
- .05 Pesticide Application other
- .06 Planting / Seeding
- .07 Irrigating
- .08 Pruning
- .09 Chipping / Manual Weeding
- .10 Burning Off
- .11 Harvesting / Picking / Cutting
- .12 Elevating / Augering
- .13 Boxing / Carting / Grading
- .15 Storing

		.17	Manual Loading / Unloading
		.18	Mechanical Loading / unloading
		.19	Transporting
		.20	Inspecting
		.99	Other NEC.
204	Vegetables		
		.01	Cultivating / Ground Preparation
		.02	Fertilising
		.03	Pesticide Application/ Aerial Spraying
		.04	Pesticide Application / Ground Rig
		.05	Pesticide Application other
		.06	Planting / Seeding
		.07	Irrigating
		.09	Chipping / Manual Weeding
		.10	Burning Off
		.11	Harvesting / Picking / Cutting
		.12	Elevating / Augering
		.13	Boxing / Carting / Grading
		.15	Storing
		.17	Manual Loading / Unloading
		.18	Mechanical Loading / unloading
		.19	Transporting
		.20	Inspecting
		.99	Other NEC.
205	Cotton,		
		.01	Cultivating / Ground Preparation
		.02	Fertilising
		.03	Pesticide Application/ Aerial Spraying
		.04	Pesticide Application / Ground Rig
		.05	Pesticide Application other
		.06	Planting / Seeding
		.07	Irrigating
		.09	Chipping / Manual Weeding
		.10	Burning Off
		.11	Harvesting / Picking / Cutting
		.12	Elevating / Augering
		.13	Boxing / Carting / Grading
		.14	Pressing / Module Making
		.15	Storing
		.17	Manual Loading / Unloading
		.18	Mechanical Loading / unloading
		.19	Transporting
		.20	Inspecting
		.99	Other NEC.
206	Sugar		
		.01	Cultivating / Ground Preparation
		.02	Fertilising
		.03	Pesticide Application/ Aerial Spraying
		.04	Pesticide Application / Ground Rig
		.05	Pesticide Application other
		.06	Planting / Seeding
		.07	Irrigating
		.09	Chipping / Manual Weeding
		.10	Burning Off
		.11	Harvesting / Picking / Cutting

		.12	Elevating / Augering
		.13	Boxing / Carting / Grading
		.15	Storing
		.17	Manual Loading / Unloading
		.18	Mechanical Loading / unloading
		.19	Transporting
		.20	Inspecting
		.99	Other NEC.
207	Hay / Fodder		
		.01	Cultivating / Ground Preparation
		.02	Fertilising
		.03	Pesticide Application/ Aerial Spraying
		.04	Pesticide Application / Ground Rig
		.05	Pesticide Application other
		.06	Planting / Seeding
		.07	Irrigating
		.09	Chipping / Manual Weeding
		.10	Burning Off
		.11	Harvesting / Picking / Cutting
		.12	Elevating / Augering
		.13	Boxing / Carting / Grading
		.15	Storing
		.16	Haymaking
		.17	Manual Loading / Unloading
		.18	Mechanical Loading / unloading
		.19	Transporting
		.20	Inspecting
		.99	Other NEC.
208	Greenhouse / incl. mushrooms		
		.01	Cultivating / Ground Preparation
		.02	Fertilising
		.05	Pesticide Application other
		.06	Planting / Seeding
		.07	Irrigating
		.09	Chipping / Manual Weeding
		.11	Harvesting / Picking / Cutting
		.13	Boxing / Carting / Grading
		.15	Storing
		.17	Manual Loading / Unloading
		.18	Mechanical Loading / unloading
		.19	Transporting
		.20	Inspecting
		.99	Other NEC.
209	Flowers		
		.01	Cultivating / Ground Preparation
		.02	Fertilising
		.04	Pesticide Application / Ground Rig
		.05	Pesticide Application other
		.06	Planting / Seeding
		.07	Irrigating
		.08	Pruning
		.09	Chipping / Manual Weeding
		.10	Burning Off
		.11	Harvesting / Picking / Cutting

		.12	Elevating / Augering
		.13	Boxing / Carting / Grading
		.15	Storing
		.17	Manual Loading / Unloading
		.18	Mechanical Loading / unloading
		.19	Transporting
		.20	Inspecting
		.99	Other NEC.
210	Grapes		
		.01	Cultivating / Ground Preparation
		.02	Fertilising
		.03	Pesticide Application/ Aerial Spraying
		.04	Pesticide Application / Ground Rig
		.05	Pesticide Application other
		.06	Planting / Seeding
		.07	Irrigating
		.08	Pruning
		.09	Chipping / Manual Weeding
		.10	Burning Off
		.11	Harvesting / Picking / Cutting
		.12	Elevating / Augering
		.13	Boxing / Carting / Grading
		.14	Pressing / Module Making
		.15	Storing
		.17	Manual Loading / Unloading
		.18	Mechanical Loading / unloading
		.19	Transporting
		.20	Inspecting
		.99	Other NEC.
211	Tea		
		.01	Cultivating / Ground Preparation
		.02	Fertilising
		.03	Pesticide Application/ Aerial Spraying
		.04	Pesticide Application / Ground Rig
		.05	Pesticide Application other
		.06	Planting / Seeding
		.07	Irrigating
		.08	Pruning
		.09	Chipping / Manual Weeding
		.11	Harvesting / Picking / Cutting
		.12	Elevating / Augering
		.13	Boxing / Carting / Grading
		.15	Storing
		.17	Manual Loading / Unloading
		.18	Mechanical Loading / unloading
		.19	Transporting
		.20	Inspecting
		.99	Other NEC.
212	Peanuts		
		.01	Cultivating / Ground Preparation
		.02	Fertilising
		.03	Pesticide Application/ Aerial Spraying
		.04	Pesticide Application / Ground Rig
		.05	Pesticide Application other
		.06	Planting / Seeding

	.07	Irrigating
	.08	Pruning
	.09	Chipping / Manual Weeding
	.10	Burning Off
	.11	Harvesting / Picking / Cutting
	.12	Elevating / Augering
	.13	Boxing / Carting / Grading
	.15	Storing
	.17	Manual Loading / Unloading
	.18	Mechanical Loading / unloading
	.19	Transporting
	.20	Inspecting
	.99	Other NEC.
213		Other cropping
	.01	Cultivating / Ground Preparation
	.02	Fertilising
	.03	Pesticide Application/ Aerial Spraying
	.04	Pesticide Application / Ground Rig
	.05	Pesticide Application other
	.06	Planting / Seeding
	.07	Irrigating
	.08	Pruning
	.09	Chipping / Manual Weeding
	.10	Burning Off
	.11	Harvesting / Picking / Cutting
	.12	Elevating / Augering
	.13	Boxing / Carting / Grading
	.14	Pressing / Module Making
	.15	Storing
	.17	Manual Loading / Unloading
	.18	Mechanical Loading / unloading
	.19	Transporting
	.20	Inspecting
	.99	Other NEC.

Other than what is normally considered pure farming work, there are other activities that are work-related and are potential injury related activities. These have been considered and coded below.

The phase system is applied to hunting. This is due to a wide range of hunting types coupled with homogenous stages in hunting where it is believed there exists different risks of injury.

It should be remembered that these groupings are activity groups not agents of injury. Within the transport group for instance, the limited categories are designed as they are to highlight the current areas of transport related concern. Other concerns such as motor vehicles will be highlighted in the agent category.

Household activity has been included in an attempt to ascertain any increased home based risks to farm residents.

300 Forestry		
	301	Felling / Clearing
	302	Trimming
	303	Butting

- 304 Snigging
- 305 Loading
- 306 Transporting
- 307 Milling
- 399 Other Forestry work NEC.

400 Farm Maintenance of Buildings / Structures / Equipment/ Land

- 401 Building Maintenance
- 402 Other Structures
- 403 Machinery Maintenance
- 404 Vehicle Maintenance
- 405 Earth Moving / Bulldozing
- 406 Dam Maintenance
- 407 Fencing
- 408 Fire Fighting
- 409 Burning
- 410 Inspecting
- 411 Road Maintenance
- 412 Weed Control
- 499 Other Maintenance NEC

500 Hunting

- 501 Kangaroo shotting
 - .01 Shooting
 - .02 Trapping
 - .03 Slaughtering
 - .04 Skinning
 - .05 Loading
 - .06 Transporting
 - .99 Other NEC

- 502 Pig Shooting
 - .01 Shooting
 - .02 Trapping
 - .03 Slaughtering
 - .04 Skinning
 - .05 Loading
 - .06 Transporting
 - .99 Other NEC

- 503 Rabbiting
 - .01 Shooting
 - .02 Trapping
 - .03 Slaughtering
 - .04 Skinning
 - .05 Loading
 - .06 Transporting
 - .99 Other NEC

- 504 Fishing
 - .01 Shooting
 - .02 Trapping
 - .03 Slaughtering
 - .04 Skinning
 - .05 Loading

	.06	Transporting
	.99	Other NEC
599		Hunting NEC
	.01	Shooting
	.02	Trapping
	.03	Slaughtering
	.04	Skinning
	.05	Loading
	.06	Transporting
	.99	Other NEC

600 Leisure / Sport

700 Transport

- 701 Horse Riding / Handling
- 702 Ag. Bike Riding
- 703 Flying
- 704 Vehicle Other

800 Household Activity

- 801 Lawn Mowing / Gardening
- 802 Handling / Feeding Dogs
- 803 Building Maintenance incl cleaning / clearing

AGENT (8)

The agent of injury classification is a step forward in farm injury surveillance methods for two significant reasons. Firstly it is the most comprehensive list of potential farm injury agents available. Secondly the agents are classified in logical groups that will aid in the coding process. The list of agents has been compiled by reviewing agents considered in other studies, by consultation among staff at the Australian Centre for Agricultural Health and Safety and within the Farmsafe network. Some agents listed are known to be the cause of injury while others are suspected but are masked by inaccurate injury data. The injuries related to farm motorcycles is an example of this problem. The limited data available makes it difficult to determine whether the injuries are as a result of riding 2,3 or 4 wheel bikes. By allowing for the coding of each, a more accurate picture can be developed.

A conscious effort has been made to include the common agents from the various industries and work phases listed above. It is envisaged that most researchers will code injury events with more than one agent.

0100 Farm Vehicle

- 0101 Truck
- 0102 Utility
- 0103 Car
- 0104 Trailer
- 0105 Motorcycle 2 Wheel
- 0106 Motorcycle 3 Wheel
- 0107 Motorcycle 4 Wheel
- 0108 Bicycle
- 0109 Mobile Bin
- 0110 Aircraft
- 0111 Manual Barrow
- 0199 Farm Vehicle other NEC

0200 Mobile Farm Machinery / Plant

- 0201 Tractor
- 0202 Linkage
- 0203 Tillage/cultivating equipment
- 0204 Locomotive
- 0205 Spraying Equipment
- 0206 Fertiliser Spreader
- 0207 Earth Moving Equipment
- 0208 Harvesting machine
- 0209 Grain Auger
- 0210 Elevator / Conveyor
- 0211 Slasher
- 0212 Hay Rake
- 0213 Hay Baler
- 0214 Cherry Picker
- 0215 Posthole Digger
- 0216 Log handling plant

-
- 217 Power Take Off (PTO)
 - 218 Forklift
 - 219 Earth moving tractor attachments
 - 220 Carryall
 - 221 Other tractor mounted load lifting attachments
 - 222 Seeder/planter
 - 223 Grader
 - 224 Crawler
 - 0299 Mobile Farm Machinery / Plant other NEC.

0300 Fixed Plant / Equipment

- 0301 Shearing Plant
- 0302 Shearing Handpiece
- 0303 Dairy Plant
- 0304 Dairy Milkline
- 0305 Fencing Equipment
- 0306 Irrigating Equipment
- 0307 Pump
- 0308 Generator
- 0309 Honey extracting plant
- 0310 Hammer Mill
- 0311 Feed Mixer
- 0312 Gas storage tank
- 0313 Module builder
- 0399 Fixed Plant / Equipment NEC

0400 Workshop Equipment

- 0401 Welder
- 0402 Gas Bottles
- 0403 Bench Grinder
- 0404 Angle Grinder
- 0405 Ladder excluding ladder attached to structure
- 0406 Power Saw incl circular saw
- 0407 Electric Drill
- 0418 Other Power and Workshop Tools
- 0419 Air compressor
- 0420 Oxyacetylene welder
- 0499 Workshop Equipment other NEC

0500 Handtools

- 0501 Hooks
- 0502 Axe
- 0503 Knife
- 0504 Hand tools incl hammer/ handsaw nec
- 0505 Garden tools inc spades/ shovels nec
- 0506 Hoe
- 0599 Other NEC

0600 Powered Implements

-
- 0601 Chainsaw
 - 0602 Brush Cutter
 - 0699 Other powered implement NEC

0700 Materials

- 0701 Rope
- 0702 Wire Barbed
- 0703 Wire other
- 0704 Steel
- 0705 Iron Sheeting
- 0706 Timber
- 0707 Nails
- 0709 Stockfeeds
- 0710 Round Bales
- 0711 Hay bales other
- 0712 Saltblock
- 0713 Laden carton
- 0714 Laden bag
- 715 Seed
- 716 Drums
- 717 Battery
- 718 Tyres
- 0799 Materials other NEC

0800 Farm Structure

- 0801 House
- 0802 House Yard
- 0803 Swimming Pool
- 0804 Tank
- 0805 Fence
- 0806 Gate
- 0807 Ramp / Grid
- 0808 Stockyard
- 0809 Animal Crush / Restraint
- 0810 Dam
- 0811 Windmill
- 0812 Creek / River
- 0813 Embankment
- 0814 Irrigation Channel
- 0815 Feed Trough
- 0816 Water Trough
- 0817 Silo-Grain
- 0818 Field Bin
- 0819 Silage Storage
- 0820 Shearing Shed
- 0821 Hay Shed
- 0822 Other Shed
- 0823 Dairy
- 0824 Rail Tracks

-
- 0825 Powerlines
 - 0826 Water storage nec
 - 0827 Fuel store
 - 0828 Chemical store
 - 0829 Lane/road/track
 - 0830 Bridge
 - 0831 Channel/water crossing
 - 0899 Other farm structure NEC

0900 Animal

- 0901 Horse
- 0902 Cattle
- 0903 Sheep
- 0904 Pig
- 0905 Poultry
- 0906 Dog
- 0907 Snake
- 0908 Spider
- 0909 Insect
- 0910 Alpaca
- 0911 Goat
- 0912 Ostrich
- 0913 Emu
- 0914 Deer
- 0999 Other animal NEC

1000 Farm Chemicals

- 1001 Fertiliser
- 1002 Pesticides – insecticides
- 1003 Pesticides – herbicides
- 1004 Pesticides – fungicides
- 1005 Pesticides – rodenticides
- 1006 Pesticides – Plant growth regulants
- 1007 Pesticides – nec
- 1008 Pesticides not specified
- 1003 Diesel
- 1004 Petrol
- 1005 Fuel not specified
- 1004 Anhydrous ammonia
- 1005 Gases nec or not specified
- 1005 Veterinary Chemicals
- 1006 Explosives
- 1007 Sanitisers
- 1099 Other Farm Chemical NEC

1100 Working Environment

- 1101 Dust Particle
- 1102 Bush / Vegetation
- 1103 Water

-
- 1104 Fire / Smoke
 - 1105 Ground / Rock / Stump
 - 1106 Lumber
 - 1107 Heat
 - 1108 Wind
 - 1109 Trees being felled
 - 1110 Solar radiation
 - 1199 Other Working Environment NEC

1300 Other

- 1301 Firearms
- 1302 Explosives
- 1303 Public road
- 1304 Other public facility nec
- 1305 Working Motion and Postures
- 1306

TEXT DESCRIPTION OF INJURY EVENT (9)

The text field is a very useful field for injury surveillance work. Previous fields list allow for selection of a group of cases of interest, the text field should then be consulted to determine what actually happened. A text field should be constructed to prompt responses from an injured party.

What were you doing?

What went wrong?

What actually caused the injury?

Use Brand and Model Names Wherever Possible!

For example; During the harvest I was climbing on a Ford 5000 tractor. I slipped off the tractor and my head hit the ground.

NATURE OF MAIN INJURY (10), AND BODILY LOCATION OF INJURY (11)

The number of injuries to be included should be determined. You may select up to 3. This code is that used by the National Injury Surveillance System

For each injury, the nature of the injury and the bodily location should be coded.

eg Injury 1 NN NNN
Injury 2 NN NNN
Injury 3 NN NNN

NATURE OF INJURY

Soft tissue

- 01 cut/laceration
- 02 puncture
- 03 bite
- 04 superficial abrasion
- 05 penetrating wound
- 06 other wound, incl. Amputation
- 07 haematoma / bruising
- 08 haemorrhage
- 09 inflammation/oedema/tenderness
- 10 burn, full thickness
- 11 burn, partial thickness
- 12 foreign body in soft tissues
- 13 damage to major blood vessel
- 14 crushing injury

Bone, tendon or joint

- 20 fracture
- 21 dislocation
- 22 sprain/strain

Systemic and special injury

- 91 poisonings (through skin/lungs/mouth etc)
- 93 asphyxiation or respiratory difficulty
- 94 electric shock
- 95 over-exertion, heat/cold stress
- 96 concussion
- 97 dental injury
- 99 no injury detected

BODILY LOCATION OF INJURY

Head

- 101 eye
- 102 ocular adnexum
- 103 nose
- 104 mouth
- 105 ear
- 106 face/cheek/forehead/scalp
- 107 skull base
- 108 skull vault
- 109 neck, NEC
- 198 other injury to head

Upper extremity

- 201 clavicle
- 202 scapula
- 203 shoulder, NEC
- 204 humerus
- 205 upper arm, NEC
- 206 radius, ulna
- 207 elbow
- 208 forearm
- 209 wrist
- 210 carpal bone
- 211 metacarpal bone
- 212 digit/phalanx
- 213 hand, NEC
- 298 other injury to upper extremity

Lower extremity

- 301 hip
- 302 femur
- 303 upper leg, NEC
- 304 knee
- 305 tibia/fibula
- 306 lower leg, NEC
- 307 ankle
- 308 tarsal bone
- 309 metatarsal bone
- 310 digit/phalanx
- 311 foot, NEC
- 398 other injury to lower extremity

Systemic and special injury

- 000 defined as in Nature of Injury above

Trunk

- 401 rib(s)
- 402 sacroiliac joint
- 403 spine (inc. cervical), excluding cord
- 404 pelvis
- 405 chest, NEC
- 406 abdomen, NEC
- 407 upper back, NEC
- 408 lower back, NEC
- 409 genitalia
- 410 heart
- 498 other injury to truck

Respiratory tract

- 501 pharynx
- 502 larynx
- 503 trachea
- 504 bronchus
- 505 lung
- 598 other injury to respiratory tract

Digestive tract

- 601 mouth internal eg. gum, palate
- 602 oesophagus
- 603 stomach
- 604 small bowel
- 605 colon
- 606 rectum
- 607 liver
- 608 spleen
- 609 injury to other internal organs
- 698 other injury to digestive tract

Nervous system

- 701 brain, not concussion
- 702 brain stem
- 703 cervical spinal cord
- 704 thoracic spinal cord
- 705 lumbar spinal cord
- 706 peripheral nerve
- 798 other injury to nervous system

Appendix 1.

MECHANISM OF INJURY CLASSIFICATION.

Major Groups.

0. Falls, trips and slips of a person
1. Hitting objects with a part of the body
2. Being hit by moving objects
3. Sound and pressure
4. Body stressing
5. Heat, radiation and electricity
6. Chemicals and other substances
7. Biological substances
8. Mental stress
9. Other and unspecified mechanisms of injury

Source Worksafe Australia: