

# AGRICULTURE INDUSTRY RISK ASSESSMENT

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## Document Information

Field	Details
Farm/Business Name	_____
Operation Type	<input type="checkbox"/> Crop Farming <input type="checkbox"/> Livestock <input type="checkbox"/> Dairy <input type="checkbox"/> Poultry <input type="checkbox"/> Horticulture <input type="checkbox"/> Other: _____
Assessment Date	_____
Assessor Name	_____
Assessor Position	_____
Area/Section	_____
Review Date	_____
Document Reference No.	RA-AGRI-_____

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## 1. Introduction

This Risk Assessment document is designed to identify, evaluate, and control hazards associated with agricultural operations. The agriculture industry presents diverse risks including machinery hazards, animal handling injuries, exposure to pesticides and chemicals, environmental hazards, and ergonomic injuries. This assessment aims to ensure the health and safety of all farm workers, family members, and visitors by systematically identifying potential hazards and implementing appropriate control measures in accordance with agricultural safety regulations and best practices.

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## 2. Scope of Assessment

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This risk assessment covers the following agricultural activities and areas:

- Field operations (plowing, planting, harvesting)
- Livestock handling and management
- Dairy operations
- Poultry operations
- Greenhouse/nursery operations
- Pesticide and chemical application
- Machinery operation and maintenance
- Grain handling and storage
- Irrigation systems
- Farm buildings and structures
- Farm vehicles and transportation
- Other: \_\_\_\_\_

**Farm Address:** \_\_\_\_\_

**Total Acreage:** \_\_\_\_\_

**Number of Workers:** \_\_\_\_\_

**Seasonal Workers:** \_\_\_\_\_

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### 3. Risk Identification

Risk ID	Risk Description	Risk Category	Affected Area/Personnel
AGRI-001			
AGRI-002			
AGRI-003			
AGRI-004			
AGRI-005			
AGRI-006			
AGRI-007			
AGRI-008			
AGRI-009			
AGRI-010			

### 4. Risk Analysis Matrix

#### Risk Scoring Criteria

##### Likelihood Scale:

Score	Likelihood	Description
1	Rare	May occur only in exceptional circumstances
2	Unlikely	Could occur but not expected
3	Possible	Might occur at some time
4	Likely	Will probably occur in most circumstances
5	Almost Certain	Expected to occur in most circumstances

## Impact Scale:

Score	Impact	Description
1	Negligible	Minor injury, no treatment required
2	Minor	First aid treatment required
3	Moderate	Medical treatment, short-term disability
4	Major	Serious injury, long-term disability
5	Catastrophic	Fatality or permanent disability

## Risk Analysis Table

Risk ID	Likelihood (1-5)	Impact (1-5)	Risk Score (L×I)	Risk Level
AGRI-001				
AGRI-002				
AGRI-003				
AGRI-004				
AGRI-005				
AGRI-006				
AGRI-007				
AGRI-008				
AGRI-009				
AGRI-010				

## Risk Level Classification:

- Low (1-4):** Acceptable risk, monitor and review
- Medium (5-9):** Action required within reasonable timeframe
- High (10-16):** Immediate action required

- **Critical (17-25):** Work must cease until risk is reduced

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## 5. Risk Control Measures

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Risk ID	Current Controls	Additional Controls Required	Responsible Person	Target Date	Status
AGRI-001					<input type="checkbox"/>
AGRI-002					<input type="checkbox"/>
AGRI-003					<input type="checkbox"/>
AGRI-004					<input type="checkbox"/>
AGRI-005					<input type="checkbox"/>
AGRI-006					<input type="checkbox"/>
AGRI-007					<input type="checkbox"/>
AGRI-008					<input type="checkbox"/>
AGRI-009					<input type="checkbox"/>
AGRI-010					<input type="checkbox"/>

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## 6. Agriculture Industry-Specific Hazards

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The following hazards are commonly encountered in agricultural operations:

## **6.1 Machinery Hazards**

- Tractor rollovers and runovers
- PTO (Power Take-Off) entanglement
- Combine and harvester operations
- Auger and conveyor entrapment
- Machinery maintenance injuries

## **6.2 Animal Handling Hazards**

- Kicks, bites, and crushing injuries
- Zoonotic diseases (brucellosis, Q fever, ringworm)
- Allergic reactions to animal dander
- Unpredictable animal behavior
- Confined space with animals

## **6.3 Chemical Hazards**

- Pesticide exposure (organophosphates, herbicides)
- Fertilizer handling
- Fuel and lubricant exposure
- Veterinary medicines
- Cleaning and disinfection chemicals

## **6.4 Environmental Hazards**

- Heat stress and sun exposure
- Cold stress and hypothermia
- Lightning strikes
- Flooding and water hazards
- Uneven terrain and remote locations

## 6.5 Respiratory Hazards

- Grain dust and organic dust
- Mold and fungal spores
- Hydrogen sulfide from manure pits
- Ammonia in livestock facilities
- Pesticide drift

## 6.6 Ergonomic Hazards

- Repetitive motions (harvesting, milking)
- Heavy lifting
- Prolonged awkward postures
- Vibration from equipment
- Extended working hours

## 6.7 Structural Hazards

- Grain bin engulfment
- Silo gas exposure
- Barn and building collapses
- Falls from heights (ladders, lofts)
- Electrical hazards in farm buildings

## 6.8 Biological Hazards

- Insect stings and bites
- Snake encounters
- Tetanus and other infections
- Lyme disease from ticks
- Rabies exposure

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## 7. Machinery Safety Assessment

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### 7.1 Tractor Safety Checklist

Item	Compliant	Action Required
ROPS (Rollover Protective Structure) installed	<input type="checkbox"/> Yes <input type="checkbox"/> No	
Seatbelt available and used	<input type="checkbox"/> Yes <input type="checkbox"/> No	
PTO shields in place	<input type="checkbox"/> Yes <input type="checkbox"/> No	
SMV (Slow Moving Vehicle) emblem	<input type="checkbox"/> Yes <input type="checkbox"/> No	
Lights and reflectors working	<input type="checkbox"/> Yes <input type="checkbox"/> No	
Brakes functioning properly	<input type="checkbox"/> Yes <input type="checkbox"/> No	
Steps and handholds secure	<input type="checkbox"/> Yes <input type="checkbox"/> No	
Operator trained and competent	<input type="checkbox"/> Yes <input type="checkbox"/> No	

### 7.2 Equipment Inventory and Status

Equipment	Guards in Place	Last Inspection	Maintenance Due
	<input type="checkbox"/> Yes <input type="checkbox"/> No		
	<input type="checkbox"/> Yes <input type="checkbox"/> No		
	<input type="checkbox"/> Yes <input type="checkbox"/> No		
	<input type="checkbox"/> Yes <input type="checkbox"/> No		
	<input type="checkbox"/> Yes <input type="checkbox"/> No		

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## 8. Livestock Safety Assessment

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### 8.1 Animal Handling Facilities

Facility/Equipment	Condition	Action Required
Handling yards/pens	<input type="checkbox"/> Good <input type="checkbox"/> Fair <input type="checkbox"/> Poor	
Squeeze chutes/crushes	<input type="checkbox"/> Good <input type="checkbox"/> Fair <input type="checkbox"/> Poor	
Loading ramps	<input type="checkbox"/> Good <input type="checkbox"/> Fair <input type="checkbox"/> Poor	
Fencing	<input type="checkbox"/> Good <input type="checkbox"/> Fair <input type="checkbox"/> Poor	
Gates and latches	<input type="checkbox"/> Good <input type="checkbox"/> Fair <input type="checkbox"/> Poor	
Non-slip flooring	<input type="checkbox"/> Good <input type="checkbox"/> Fair <input type="checkbox"/> Poor	

### 8.2 Animal Health and Biosecurity

Measure	Implemented	Details
Vaccination program	<input type="checkbox"/> Yes <input type="checkbox"/> No	
Quarantine procedures	<input type="checkbox"/> Yes <input type="checkbox"/> No	
Visitor biosecurity	<input type="checkbox"/> Yes <input type="checkbox"/> No	
Pest control program	<input type="checkbox"/> Yes <input type="checkbox"/> No	
Dead animal disposal	<input type="checkbox"/> Yes <input type="checkbox"/> No	

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## 9. Chemical Safety Assessment

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### 9.1 Pesticide Inventory

Product Name	Active Ingredient	Signal Word	Quantity	Storage Location
		<input type="checkbox"/> Danger <input type="checkbox"/> Warning <input type="checkbox"/> Caution		
		<input type="checkbox"/> Danger <input type="checkbox"/> Warning <input type="checkbox"/> Caution		
		<input type="checkbox"/> Danger <input type="checkbox"/> Warning <input type="checkbox"/> Caution		

### 9.2 Chemical Storage Compliance

Requirement	Compliant	Action Required
Locked storage area	<input type="checkbox"/> Yes <input type="checkbox"/> No	
Proper ventilation	<input type="checkbox"/> Yes <input type="checkbox"/> No	
Secondary containment	<input type="checkbox"/> Yes <input type="checkbox"/> No	
SDS available	<input type="checkbox"/> Yes <input type="checkbox"/> No	
Incompatibles separated	<input type="checkbox"/> Yes <input type="checkbox"/> No	
Emergency equipment nearby	<input type="checkbox"/> Yes <input type="checkbox"/> No	

## 9.3 Pesticide Application Safety

Requirement	Compliant	Details
Applicator licensed/certified	<input type="checkbox"/> Yes <input type="checkbox"/> No	
PPE available and used	<input type="checkbox"/> Yes <input type="checkbox"/> No	
Re-entry intervals observed	<input type="checkbox"/> Yes <input type="checkbox"/> No	
Weather conditions checked	<input type="checkbox"/> Yes <input type="checkbox"/> No	
Application records maintained	<input type="checkbox"/> Yes <input type="checkbox"/> No	
Equipment calibrated	<input type="checkbox"/> Yes <input type="checkbox"/> No	

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## 10. Emergency Response Procedures

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### 10.1 Emergency Contacts

Role	Name	Contact Number
Farm Owner/Manager		
Nearest Neighbor		
Emergency Services		911 / 000 / 999
Poison Control		
Veterinarian		
Local Hospital		
Power Company		

### 10.2 Emergency Procedures

#### Tractor Rollover:

1. Call emergency services immediately

2. Do not attempt to lift tractor without proper equipment
3. Provide first aid if trained and safe
4. Keep victim warm and calm
5. Do not move victim unless in immediate danger
6. Preserve scene for investigation

#### **Pesticide Exposure:**

1. Remove victim from contaminated area
2. Remove contaminated clothing
3. Wash skin with soap and water
4. Flush eyes with clean water for 15+ minutes
5. Call Poison Control immediately
6. Provide product label/SDS to medical personnel

#### **Animal Attack/Injury:**

1. Get to safety away from animal
2. Call for help
3. Apply first aid for wounds
4. Seek medical attention
5. Report incident
6. Isolate aggressive animal

#### **Grain Bin Entrapment:**

1. Call 911 immediately
2. Shut off all grain-moving equipment
3. Do not enter bin without proper rescue equipment
4. Provide air to victim if possible
5. Wait for trained rescue team
6. Do not attempt to pull victim out

#### **Heat Stroke:**

1. Move victim to shade/cool area
2. Call emergency services
3. Remove excess clothing
4. Cool with water, ice packs, or fanning
5. Do not give fluids if unconscious
6. Monitor breathing and consciousness

**Fire Emergency:**

1. Call emergency services
2. Evacuate all persons and animals if safe
3. Move equipment away from fire if safe
4. Do not fight fire beyond your capability
5. Meet emergency responders at entrance
6. Account for all personnel

**Farm Map/Emergency Access:** \_\_\_\_\_

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# 11. Personal Protective Equipment (PPE) Requirements

PPE Item	Required	Specification
Safety Boots	<input type="checkbox"/> Yes <input type="checkbox"/> No	Steel toe: <input type="checkbox"/> Yes <input type="checkbox"/> No
Safety Glasses	<input type="checkbox"/> Yes <input type="checkbox"/> No	Type: _____
Hearing Protection	<input type="checkbox"/> Yes <input type="checkbox"/> No	NRR: _____
Gloves	<input type="checkbox"/> Yes <input type="checkbox"/> No	Type: _____
Chemical-resistant Gloves	<input type="checkbox"/> Yes <input type="checkbox"/> No	Material: _____
Respirator	<input type="checkbox"/> Yes <input type="checkbox"/> No	Type: _____
Sun Protection (hat, sunscreen)	<input type="checkbox"/> Yes <input type="checkbox"/> No	SPF: _____
High-Visibility Clothing	<input type="checkbox"/> Yes <input type="checkbox"/> No	Class: _____
Coveralls/Protective Clothing	<input type="checkbox"/> Yes <input type="checkbox"/> No	Type: _____
Other: _____	<input type="checkbox"/> Yes <input type="checkbox"/> No	_____

## 12. Worker Training Requirements

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### 12.1 Training Checklist

Training Topic	Required	Completed	Date
General farm safety orientation	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/>	
Tractor and machinery operation	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/>	
PTO safety	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/>	
Animal handling	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/>	
Pesticide safety (WPS)	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/>	
First aid/CPR	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/>	
Heat illness prevention	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/>	
Confined space awareness	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/>	
Emergency procedures	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/>	

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## 13. Sign-Off and Approval

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### Assessor Declaration

I confirm that this risk assessment has been conducted in accordance with applicable agricultural safety regulations and represents an accurate evaluation of the identified hazards.

Assessor Name:	_____
Signature:	_____
Date:	_____

## Reviewer Declaration

I have reviewed this risk assessment and confirm that the control measures identified are appropriate and adequate.

Reviewer Name:	_____
Position:	_____
Signature:	_____
Date:	_____

## Farm Owner/Manager Approval

I approve this risk assessment and authorize the implementation of the identified control measures.

Owner/Manager Name:	_____
Signature:	_____
Date:	_____

## 14. Review Schedule

Review Type	Frequency	Next Review Date
Daily Equipment Checks	Daily	
Seasonal Review	Each season	
Comprehensive Review	Annually	
Post-Incident Review	As required	
New Worker Orientation	On hiring	

### Triggers for Immediate Review:

- Any workplace incident or near-miss
- New equipment or machinery
- New chemicals or pesticides
- Changes in operations
- New workers (especially seasonal)
- Regulatory changes
- Weather-related incidents

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## Document Control

Version	Date	Author	Changes Made
1.0			Initial version

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*This document is a template and should be customized to meet specific farm requirements and local agricultural safety regulations.*