

# FOOD SAFETY

from the farm



to the mill



# PRESENTATION OUTLINE

A “CASE STUDY” of the Canadian approach to introducing on-farm food safety to the agricultural sector

- **Background - food safety**
- **The increasing push for food safety**
- **Canada’s approach to food safety/grain assurance**
- **Future activities in food safety**

# FOOD SAFETY

## In recent decades

- improved sanitary practices have become common
- many diseases have been reduced or eliminated
- availability of our food supply has become more secure
- there is more diversity in the choice of food.....

.....so, we have turned our attention to the SAFETY of our food supply

# FOOD SAFETY

## Definition

- Food safety refers to the conditions and practices that preserve the quality of food to prevent contamination and foodborne illnesses

# FOOD SAFETY

## International Incidents

**Incidents that affect the safety of our food supply have become more publicized and have created concern and fear**

- **1995** - Bovine Spongiform Encephalopathy (BSE)
- **1996** - E. coli 0157
- **1999** - Dioxin - Belgium
- **2007** - China – Tainted Gluten
- **Today** - Avian Influenza A (H5N1)

# FOOD SAFETY

Increasing Awareness

a global affair



# FOOD SAFETY – in Canada

- ✓ Canadian farmers produce safe food
- ✓ Consumers want safe food
- ✓ Despite the exceptional record, some still say “show me”
- ✓ Since mid-1990’s farmers have been taking a very active approach
- ✓ Question if food safety for the grain sector is a general desire or an isolated demand for a niche market

***Food processing customer quote:***

***“At the end of the day, if we invest in all of this, then the least we expect is the supply chain to match our effort and support our vision”***



# FOOD SAFETY – in Canada

Four main “drivers” to develop commodity-specific on-farm food safety programs

- consumer concerns
- government initiatives
- customer demands
- competitor actions

# FOOD SAFETY – in Canada

- Starting in 1997 the federal government encouraged the agricultural industry to develop voluntary HACCP-based national food safety systems
- Provided financing to get organized, hold meetings and develop programs
- To date, twenty (20) national organizations have developed and are implementing 29 commodity-specific on-farm food safety programs covering 99 per cent of primary agriculture production in Canada

# FOOD SAFETY – in Canada

## *Early goals:*

- Develop national programs
- Provide international recognition to improve market access
- Build consumer confidence
- Key, uniform standards to be set by the Canadian Food Inspection Agency (CFIA)
- Each Commodity manages its program

# FOOD SAFETY – in Canada

## Commodity-specific programs

**Aquaculture**

**Beef Cattle**

**Bison**

**Broiler Hatching**

**Eggs**

**Chicken**

**Dairy**

**Table Eggs**

**Herbs and Spices**

**Field Crops**

**Hogs**

**Honey**

**Horticulture**

**Mushrooms**

**Sheep and Lamb**

**Turkey**

**Veal**

**Goats**

# FOOD SAFETY – in Canada

- The Canada Grains Council, a national industry group covering Canadian field crops, led the advancement for the **grains sector**.
- 16 different farm organizations representing cereal, oilseed and special crop producers worked together on the

## **CANADA ON-FARM FOOD SAFETY COMMITTEE (COFFS)**



# FOOD SAFETY – COFFS (1997)

- Alberta Barley Commission
- Agricultural Producers Association of Saskatchewan
- Atlantic Grains Council
- Canadian Canola Growers
- Canadian Federation of Agriculture
- **Canadian Wheat Board**
- Fédération des Producteurs de Cultures Commerciales du Québec
- Grain Growers of Canada
- Ontario Corn Growers
- Ontario Grain and Oilseeds
- Prairie Oat Growers
- Saskatchewan Pulse Growers
- Western Barley Growers
- Western Canadian Flax Growers
- Western Canadian Wheat Growers
- Wild Rose Agricultural Producers



# FOOD SAFETY

## Wheat



# Existing role in grain safety assurance



## Canadian Grain Commission (CGC)

*Federal government authority  
Designated under the Canada Grain Act  
Grains, Oilseeds, Pulses and Special Crops*

**Much of the responsibility for the quality of Canadian grain belongs with the Canadian Grain Commission (CGC).**

**Establish and maintain Canada's grain grade standards**



**Canadian Grain  
Commission**

**Commission canadienne  
des grains**



# Existing role in grain safety assurance



Canadian Grain  
Commission

Commission canadienne  
des grains

- ✓ **Comprehensive assurance programs which address **ALL** major grain safety issues**

**[www.grainscanada.gc.ca](http://www.grainscanada.gc.ca)**



# Existing role in grain safety assurance



Canadian Grain  
Commission

Commission canadienne  
des grains

- ✓ **Continuous monitoring program -**
  - ✓ elevators, railcars, containers
- ✓ **Random testing on selected vessels**
- ✓ **Provides scientific basis for official CGC *Statement of Assurance* on food safety issues**
- ✓ **Enhances the marketability of Canadian grain**



# Existing role in grain safety assurance



Canadian Grain  
Commission

Commission canadienne  
des grains

- **Minimizes the risk of commercial shipments being out of compliance with domestic and foreign food safety standards and to reassure customers about the safety of Canadian grain**



# Existing role in grain safety assurance



# Canadian Approach to Food Safety

## Grain Sector Program (Cereals, oilseeds, pulse and special crops)

- Despite a good grain safety record, government, industry and farmers felt the need to develop a voluntary program
- Grain initiative began in 2001, Canada Grains Council forming a steering committee of farmers and industry
- Considerations:
  - determine need, feasibility and demand
  - ensure it was farmer and market driven
  - focus on prevention vs. end product testing
- Also wanted to develop HACCP based food safety (post farm) model for each link of the food chain
  - truck → elevator → rail → lake freight → transfer elevator

# Canadian Approach to Food Safety

## Grain Sector Program

(Cereals, oilseeds, pulse and special crops)

- I. Establish a Management Committee and plan
- II. Build a generic model for a Producer Manual
- III. Complete a technical review of the manual
- IV. Develop farmer and auditor training process
- V. Develop a national Management System, get CFIA approval
- VI. Implementation

# Canadian Approach to Food Safety

## Grain Sector Program

(Cereals, oilseeds, pulse and special crops)

- Producer led
- National, commodity specific and accessible
- Voluntary
- HACCP based
- Auditable
- Ability to integrate with other programs
- Market driven
- Government recognized
- Internationally accepted (credible)
- Affordable & practical
- Customers want more? - negotiate and pay costs
- Build customer assurance

# Canadian Approach to Food Safety

## Grain OFFS Program Name *(available to farmers as of March 2006)*

### *PRODUCERS MANUAL*



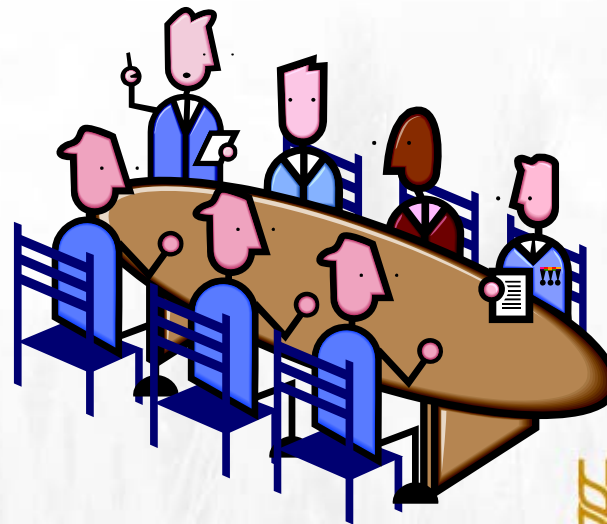
**HACCP Based  
On-Farm Food Safety Program**

# Canadian Approach to Food Safety

## CWB GRAIN SAFETY ASSURANCE WORKSHOP

March 12 -13, 2007

**Examine the operational understanding between the  
supply chain participants**



# Future Activities

- Determination how 'traceability' fits with the On-farm Food Safety Program concept
  - **Traceability**
  - retention of documentation through an identity preserved supply chain that could be used to
    - (1) trace back to find the source of a problem
    - (2) trace forward to identify end use products that may have been affected

# Future Activities

- Develop steps to meet government “Certification” requirement
- Develop audit process to ensure compliance (Certifarm)
- Determine the audit frequency –
  - 4, 6 or 8 year cycle
  - one form of audit annually
  - full or partial, record review
  - self audit

# Future Activities

- Develop a producer training program
- Develop an auditor training program
- Further enhance the Management System
  - (requires 3<sup>rd</sup> party audit)
- Establish a documentation process to determine which farms are certified, who sets standards and processes
- Provide information to farmers on the benefits of on-farm programs and market access opportunities

# Future Activities

- Assess demand from customers and capability of competitors
- Continue and improve current approach  
*(emphasis on meeting market demand NOT creating it)*
- Extract value for new services
- Continue to let our customers know that

***CANADIAN GRAIN IS SAFE!***



**Prairie strong, worldwide**