

# The Welfare of the Agricultural Industry

Richard Rusk, DVM, MD  
Medical Officer of Health  
Manitoba Health

November 29<sup>th</sup> 2016

# The Agrarian Imperative

“To farmers, land means everything. Ownership of a family farm is the triumphant result of the struggles of multiple generations. Losing the family farm is the ultimate loss—bringing shame to the generation that has let down their forebears and dashing the hopes for successors.”





# One Health Definition

- The One Health concept recognizes that the health of humans is connected to the health of animals and the environment.
- CDC uses a One Health approach by working with physicians, ecologists, and veterinarians to monitor and control public health threats. We do this by learning about how diseases spread among people, animals, and the environment.



# One Health Paradigm

- “The collaborative effort of multiple disciplines — working locally, nationally, and globally — to attain optimal health for people, animals and the environment”<sup>1</sup>
- “Traditional public health measures for animal-borne diseases such as culling discount the interests of animals”<sup>2</sup>

1. AVMA One Health Initiative Task Force. "One Health: A New Professional Imperative". July 15, 2008
2. Culling and the Common Good: Re-evaluating Harms and Benefits under the One Health Paradigm. Chris Degeling c., et al. Public health ethics. , 2016, Vol.9(3), p.244-254

# One Welfare Definition

- “Through a ‘One Health, One Welfare’ lens, the increased empathy, compassion, and stewardship of early career veterinary professionals will undoubtedly lead to improved animal and human welfare, and thus improved community health.”<sup>1</sup>
- Is this an approach we should have for all health professionals?

# One Welfare Realities

- ‘The separation between human, social, and animal welfare is an artificial compartmentalisation. These disciplines rely on the same set of scientific measures and heavily depend on each other in an ecological context’



# One Welfare outcomes

- Reduction in animal and human abuse
- Improved animal welfare – addressing social problems
- Improved animal welfare – improved human wellbeing
- More efficient multidisciplinary approaches
- Improved animal and farmer welfare – improved farming productivity
- Improved animal welfare – improved food security and sustainability



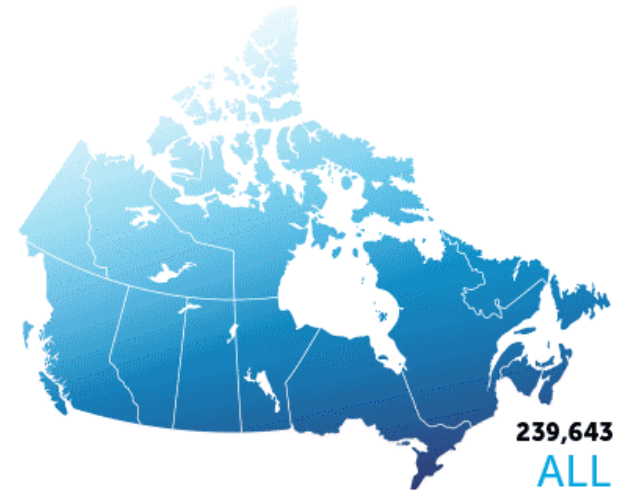
Source: "One Welfare – a platform for improving human and animal welfare" Pinillos RG, et al, Veterinary Record 2016;179:412-413

# One Health Ethics

1. Do more good than harm (beneficence, nonmalificence)
2. Fair process of decision making (fairness, natural justice)
3. Ensure an equitable distribution of risk (equity)
4. Seek optimal use of limited risk management resources (utility)
5. Promise no more risk management that can be delivered (honesty)
6. Impose no more risk that you would tolerate yourself (the Golden Rule)
7. Be cautious in the face of uncertainty ("better safe than sorry")
8. Foster informed risk decision making for all stakeholders (autonomy)
9. Risk management processes must be flexible and evolutionary to be open to new knowledge and understanding (evolution, evaluation, iterative process)
10. The complete elimination of risk is not possible (life is not risk free)

# Workplace Injuries

## 2014 Injury Statistics Across Canada



### LOST TIME CLAIMS

#### BY GENDER

Male  
149,342

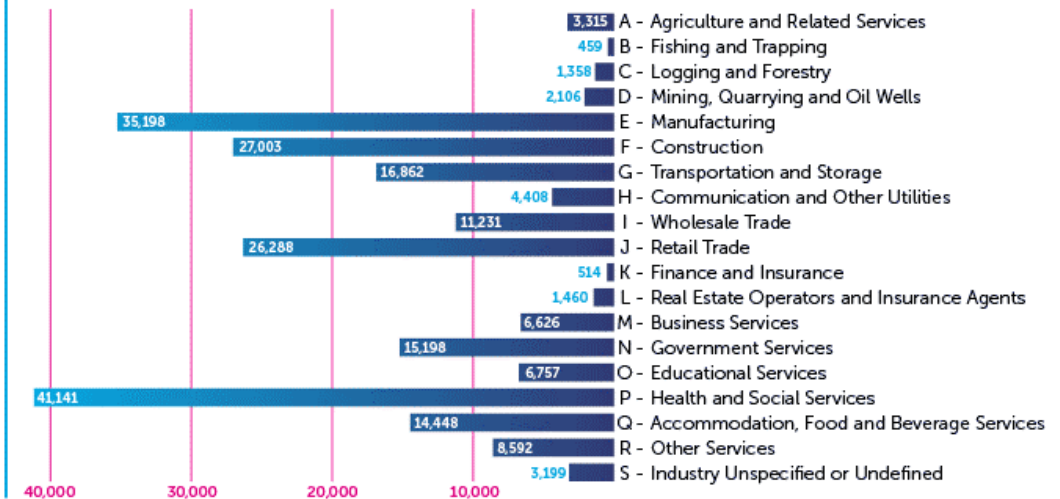


Female  
90,285

#### BY AGE

15-19	7,998
20-24	22,587
25-29	24,331
30-34	25,246
35-39	25,448
40-44	26,545
45-49	29,387
50-54	32,466
55-59	25,414
60-64	13,534
>64	6,506

#### BY INDUSTRY

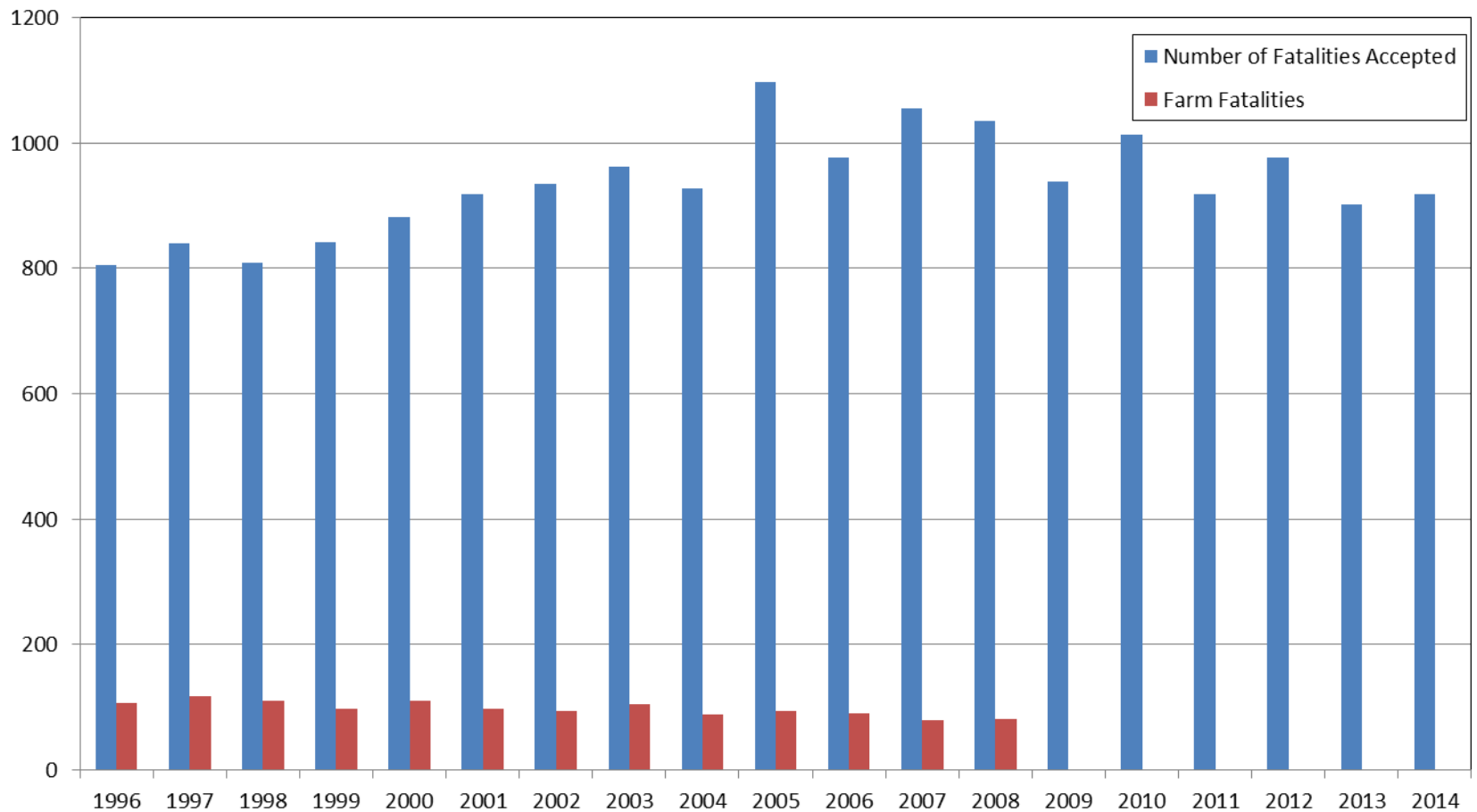


# Workplace Injuries

- The rate of agricultural fatalities in Canada has declined by 38% from 1990 - 2008
- 70% of those fatalities were machine-related, with the top three most common sources of injury being rollovers, run-overs and entanglements
- Between 1990 - 2000, almost 170 children under 15 years of age were killed in agricultural incidents.
- Between 2000 - 2008, the number of child fatalities fell to 80



# Workplace Fatalities for 1996-2014



SOURCE DATA: AWCBC.org Workplace Statistics AND Canadian Agricultural Injury Reporting 2012 report

Farm fatalities trended from 14% down to 8% of total workplace fatalities between 1996-2008

# Professional Risks

- Approximately 1 in 11 veterinarians had serious psychological distress
- 1 in 6 experienced suicidal ideation since leaving veterinary school<sup>1</sup>
- Physician suicide rate between 28-40/100,000, compared with the rate in general population of 12.3/100,000<sup>2</sup>

1. Nett RJ et al. Risk factors for suicide, attitudes toward mental illness, and practice-related stressors among US veterinarians. JAVMA 2015 Oct 15;247(8):945-55
2. Council on Scientific Affairs: Results and implications of the AMA-APA Physician Mortality Project, Stage II. JAMA 1987; 257:2949-2953



# Other Key Definitions

- **A Psychologically Healthy and Safe Workplace**
- “is one that actively works to prevent harm to worker psychological health, including in negligent, reckless, or intentional ways, and promotes psychological well-being”

# Other Key Definitions

- **Psychological First Aid**
- “involves humane, supportive and practical help to fellow human beings suffering serious crisis events.”

# The Agrarian Imperative

- Dr. Michael Rosmann – farmer in Harlan, Iowa
- “Genetic and anthropological evidence is accruing that suggests that acquiring territories of land (to farm) has an inherited basis that is encoded into our genetic material”
- There are specific behavioral traits that are characteristic of persons who are engaged in agriculture
- The inability to farm successfully is associated with an increased probability of suicide



# Mental Health in Perspective

- 1 in 5 Canadians will have a mental health or addiction problem this year.<sup>1</sup>
- 44% of Canadian employees report experiencing mental health problems<sup>2</sup>
- Among Canadians with a mental illness or addiction in any given year, only one-third will seek help<sup>3</sup>

1. Kessler, R.C. et al., Archives of General Psychiatry, 2005, 62(6), 617-627

2. The Conference Board of Canada. (2011). Building mentally healthy workplaces: perspective of Canadian workers and front-line managers. Ottawa, Ontario: Thorpe, K. & Chenier, L.

3. Statistics Canada. (2003). Canadian community health survey: mental health and well-being

# Mental Health in Perspective

- Mental illness costs the Canadian economy an estimated \$51 billion annually in healthcare and lost productivity<sup>1</sup>
- Approximately five million Canadians (or about 1 in 7 people) use health services for a mental illness annually.<sup>2</sup>
- Mental Health spending approximately 3-7% of health budget<sup>3</sup>

1. Dewa et al (2008). A New Population-Based Measure of the Burden of Mental Illness in Canada

2. PHAC Report from the Canadian Chronic Disease Surveillance System: Mental Illness in Canada, 2015

3. CMHA Executive Summary, 2014

# Complex Social Issues

- Determinants of health affect more than just humans
- Complex interplay of social, welfare and mental health forces
- Workplaces have an important role to play
- Community resources and support important for successful results
- Require multiple partners to address – One Health, One Welfare

# Occupational Mental Health

- Promotion of communication in the workplace is associated with reduced psychological distress among workers
- Occupational Mental Health activities may also be useful in reducing psychological distress



# Occupational Mental Health

- Farmers had higher odds of having high depression scores compared to both other occupational groups and their siblings who were not working as farmers
- Working in agriculture may impact mental health

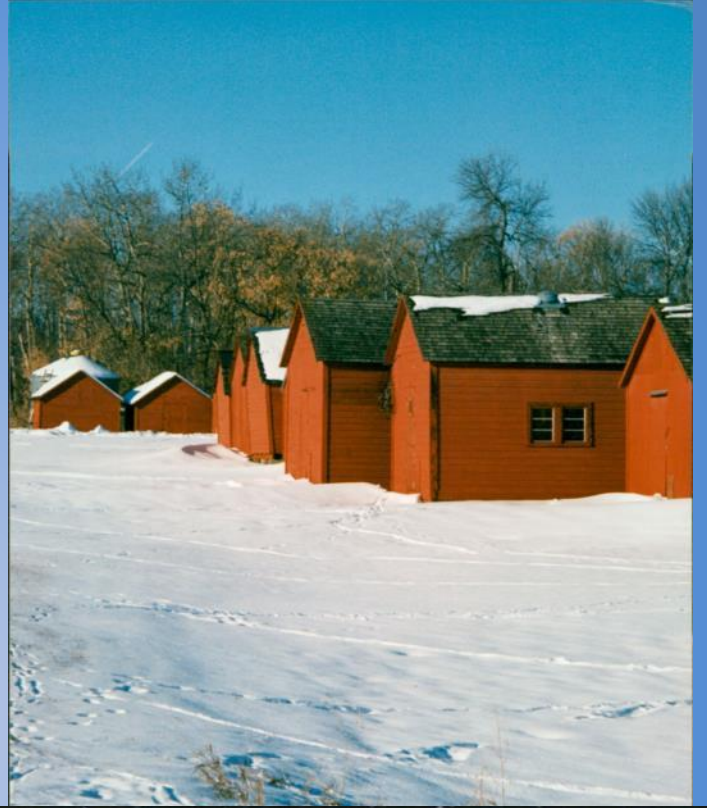
# Occupational Mental Health

- Farmers and their partners/spouses had significantly higher scores than those for the non-farming population, indicating higher psychological morbidity among farmer families.
- Approximately 35% of farmers had scores 12 and higher (recommended cut-off for psychiatric disorders), compared to 27% of non-farmers.



# Support for Farmers

- The association between unique rural community characteristics and rural stressors (such as drought) and measures of mental health, suggesting the important mediating role of social factors and community characteristics.
- There is an important role in the use of social capital in mental health.



# Support for Farmers

- Just over one-half of Canadians with a common mental health condition report that their sense of community belonging is strong.
- Recovery from mental health problems is improved through social networks and community connections.
- Farmers prefer to relate to others in the agricultural community when dealing with stress

# Support for Farmers

- Farm Stress Lines across the country
- Manitoban Farm and Rural Stress Line
- 7 major themes of callers: (a) coping mechanisms, (b) financial concerns, (c) health issues, (d) family salvation, (e) uncontrollable events, (f) family stress, and (g) farm culture
- More research needed to understand needs

# Workplace Benefits

- Participating in interventions on care farms positively influences mental health.
- Care farming may be used as a supplementary approach in mental health rehabilitation
- Animal interactions offer meaningful and engaging activities





# Workplace Benefits

- Animal-assisted therapy helps psychiatric patients overcome anxiety and depression
- Heart attack victims experience lowered blood pressure while with an animal
- Fish aquariums have a positive effect on Alzheimer's patients
- Children bond with animals
- Pets overall contribute to relaxation, lowered depression and anxiety, and increased happiness

# Can Farming be a Profession?

- Ethical practice
- Standards of care
  - Care for animals AND care for colleagues
- Professional bodies have support systems to ensure return to work as soon as possible
- What farmer does not want to be on their farm?

# Professional Qualities

- “It’s ingrained in us that if we just work harder, we’ll get rid of these problems.”<sup>1</sup>
- Work ethic among agricultural workers greater than in many other industries
- Collegial support part of the work ethic
- Self imposed standards set high

# Agricultural Welfare Success

- What does success look like?
- What are the most important goals?
- Who are core stakeholders to success?
- Do we need new regulations and legislation?
- What are valid funding models?

# Agricultural Associations

- 88 National groups
- 11 Regional groups
- 438 Provincial groups
  
- NFAHWC – 5 representative groups
  - Professional bodies
  - Government representatives

# Welfare Supports

- Community mental health
- Appropriate referrals to resources
- “Patient navigator”
- Continuity of care across different departments, support groups and social settings

# Workplace Supports

- Psychological First Aid addresses basic mental health support in the workplace
- Workplaces need to change the culture and attitudes to mental health
- Education and courses are the first step
- Recognise and support for colleagues at work will ultimately increase productivity and reduce costs



# Community Supports

- Need more than just passionate advocates
- NGOs, non-for-profit groups, municipalities and regional organisations offer different aspects of support
- Common goal and common venue to collaborate

# Team Mobilization

- Grass roots AND upper management (policy makers)
- Political support
- Clear vision of success
- Designated resources vs. off the side of your desk
- Ample resource documents are available

# Outcomes and Goals

- Farmers have always been the backbone of emerging society
- Genotype and phenotype factors will sustain change and resilience
- Farming communities are less fragmented than urban society – 20% vs. 80% population
- The agricultural industry has an opportunity for self determination of their health

# Agricultural Welfare Success

- What does success look like?
- What are the most important goals?





Thank you for  
your time.  
Questions?



*The Magaliesberg Mountains*