

## Suicide and Farmers

Due to a combination of stressors, lack of social and mental health support, and easy access to lethal means, farmers are at an increased risk for suicide. This phenomenon has been observed for some time, and there appears to be a significant increase in the trend in recent years. In a review of news and current research, the problem seems especially acute in Great Britain, Australia, India and the U.S. Anecdotally, the news media portrays the crisis as one of hard working people struggling in declining markets, just getting by, when a devastating financial blow threatens the loss of their farm. The farmer’s despair is well illustrated in the following quote from a suicide note written by a farmer to his wife.

“The only thing I will regret is leaving the children and you. This farming has brought me a lot of memories, some happy, but most of all grief. The grief has finally won out – the low prices, bills piling up, just everything. The kids deserve better and so do you. I just don't know how to do it. This is all I know and it's just no good anymore.”

(Obtained from the Internet, February 11, 2009: [http://www.omh.state.ny.us/omhweb/suicide\\_prevention/rural/farm\\_net.html](http://www.omh.state.ny.us/omhweb/suicide_prevention/rural/farm_net.html))

Formal research in suicide among farmers is a relatively new field. No dairy farmer-specific research was identified in this review, although they were included with other types of farmers in the research reviewed. However, one study offers an observation that may account for the sudden rise of suicides specific to dairy farmers. Freeman, Schwab and Jiang (2008) found that farmers who primarily raised livestock (i.e., horses) had higher stress levels than other types of farmers.

To date, most research has focused on demographic or situational factors. The tables below summarizes the trends identified in this brief review.

### Demographics

General topic	Research Finding	References
Age	<p>For male farmers, the following age groups were especially at risk:</p> <ul style="list-style-type: none"> <li>• 25-34 years</li> <li>• 75-84 years</li> <li>• 85 years and older</li> </ul> <p>Older male farmers completed disproportionately more suicides than younger male farmers and were more likely to use a firearm to complete the act.</p>	<p>Browning, Westneat &amp; McKnight, 2008</p> <p>Hawton, Fagg, Simkin, Harriss &amp; Malmberg, 1998</p> <p>Stallones, 1990</p>

General topic	Research Finding	References
Gender	<p>Male farmers had an elevated suicide rate (34 per 100,000) to the general male population (24 per 100,000).</p> <p>Female farmers completed suicide at the same rate as the general female population (6 per 100,000).</p>	Browning, Westneat & McKnight, 2008

### Situational Factors

General topic	Research Finding	References
Methods used	<p>Firearms are the most common means for male farmers in countries where firearms are available.</p> <p>As firearm availability declined the use of the other methods increased, especially hangings.</p> <p>Farmers have easy access to many methods for suicide and use what means are available.</p> <p>A long term British study of suicides by male farmers, found:</p> <ul style="list-style-type: none"> <li>• 40% firearm deaths</li> <li>• 30% hanging deaths</li> <li>• 16% carbon monoxide deaths</li> <li>• 8% poisonings</li> <li>• 6% other methods</li> </ul> <p>Older farmers were more likely to use firearms and less likely to use carbon monoxide.</p>	<p>Hawton, Fagg, Simkin, Harriss, Malmberg &amp; Smith, 1999</p> <p>Liu &amp; Waterbor, 1995</p> <p>Stallones, 1990</p>

General topic	Research Finding	References
Stressors unique to farming	<p>Financial, especially foreclosure of mortgages.</p> <p>Health problems, especially disabling physical injury.</p> <p>Crop loss due to machinery breakdown or weather.</p> <p>Farmers whose primary focus was raising livestock (i.e., horses) had more high-stress items than other farm types.</p> <p>Older farmers reported higher numbers of stressors.</p> <p>Women farmers reported higher numbers of stressors than men.</p>	<p>Freeman, Schwab &amp; Jiang, 2008</p> <p>May, 1998</p>
Mental health issues and utilization of mental health services	<p>Farmers have limited access to mental health services.</p> <p>Males especially are reluctant to seek help for, or even discuss, depression and other mental health issues.</p> <p>The combination of many stressors, lack of a close confidant and untreated clinical depression is relatively common and essentially a prescription for suicide.</p>	<p>Beeson, 2007</p> <p>Grisso, et al., 2008</p> <p>Malmberg, Simkin &amp; Hawton, 1999</p>
Exposure to agricultural chemicals	<p>Although no direct research was found, numerous references were made to a link between long term exposure to agricultural chemicals such as pesticides</p>	<p>Beeson, 2007</p>

General topic	Research Finding	References
	that may impact serotonin levels in the brain and increase farmers' risk for mood disorders and suicide.	
Seasonality	A strong seasonal pattern was found for farmers. Farmers are far more likely to complete suicide during spring planting or fall harvest. There was speculation that farmers are strongly tied to the seasonal cycle and are either naturally responding to that cycle or to the increases in workload and stresses driven by the seasonal cycle.	Beeson, 2007

Risk & causal factors

Research has focused on a number of stress and situational risk and causal factors that may be related to the higher suicide rates among farmers, and further notes that farmers may carry a higher number of serious stressors than non-farmers. The list below details some of these farm-specific risk factors (Freeman, Schwab & Jiang, 2008; Grisso, et al., 2008; Malmberg, Hawton & Simkin, 1997).

- Risk & causal factors
  - Financial stress is especially high for farmers
  - Tremendous pressure about losing family farm, especially family farms owned for many generations
  - Many year pattern of decline in family owned farms
  - Farming is a physically, mentally and financially stressful business
  - Long hours, 24/7 demand throughout the growing season
  - Exposure to agricultural chemicals
  - Livestock farmers report higher stress levels than other types of farmers
  - Untreated mental health issues, especially depression
  - Reluctance to seek help for mental health issues, especially males
  - Social isolation and lack of confiding relationships
  - Seasonality effect on farmer suicides
  - Farmers have ready access to many suicide methods

Prevention. No farmer-specific suicide prevention programs were identified in this review. The general suicide prevention practice is to make farmers aware of or refer them to existing suicide hotlines, crisis centers, and mental health services. England and Australia have many local farmer support groups, banding together to meet adversity as farmers have always done.

Another approach is to offer farmers financial and other support during crises. For example, the California Farm Bureau Farm Stress webpage offers numerous suicide prevention resources (<http://www.cfbf.com/programs/rhs/farmstress2.cfm>). A Canadian farm crisis-specific webpage (<http://www.thefarmline.ca/index.html>) offers suicide prevention resources, as well as information on stress reduction, grieving, communication skills, farm support groups, etc.

The Idaho Public Television Farm Issues website (<http://www.thefarmline.ca/index.html>) provides basic access to some farm support resources, although suicide prevention is not directly discussed. However, the following Idaho resources are available for anyone in Idaho considering suicide.

- Northwest Suicide 24 Hour Crisis Hotline
  - 800-564-2120
  - Based in Oregon, serving the Northwest
  
- Idaho CareLine
  - 800-926-2588
  - Idaho Department of Health & Welfare
  - M-F, 8-6pm MST
  - In Idaho, dial 211
  
- **Idaho Department of Health & Welfare (IDHW) Regional Resources**
  - IDHW Region 1 - Benewah, Bonner, Boundary, Kootenai & Shoshone Counties
    - Coeur d'Alene - Regional Mental Health Services - 24 Hour Crisis Line
    - 888-769-1405 or 208-769-1406
  
  - IDHW Region 2 - Clearwater, Idaho, Latah, Lewis & Nez Perce Counties
    - Lewiston - Regional Mental Health Services - 24 Hour Crisis Line
    - 208-799-4440
  
  - IDHW Region 3 - Adams, Canyon, Gem, Owyhee, Payette & Washington Counties
    - Caldwell - Regional Mental Health Services - 24 Hour Crisis Line
    - 208-459-0092
  
  - IDHW Region 4 - Ada, Boise, Elmore & Valley Counties
    - Boise - Regional Mental Health Services - 24-Hour Crisis Line
    - 800-600-6474 or 208-334-0808

- IDHW Region 5 - Blaine, Camas, Cassia, Gooding, Jerome, Lincoln, Minidoka & Twin Falls Counties
  - Twin Falls - Regional Mental Health Services - 24 Hour Crisis Line
  - 208-736-2177
  
- IDHW Region 6 - Bannock, Bear Lake, Bingham, Caribou, Franklin, Oneida & Power Counties
  - Pocatello - Regional Mental Health Services - 24-Hour Crisis Line
  - 888-573-7652
  
- IDHW Region 7 - Bonneville, Butte, Clark, Custer, Fremont, Jefferson, Lemhi, Madison & Teton Counties
  - Idaho Falls - Regional Mental Health Services - 24-Hour Crisis Line
  - 208-528-5700

Intervention. No farmer-specific suicide intervention programs were identified in this review. Several pilot studies were found that investigated the teaching of strategies for coping with stress, reducing barriers to accessing mental health services and the role of local support groups. However, the early results were mixed. The preliminary conclusion was that this is a difficult group to reach; that they don't easily discuss their emotional and mental health needs; and this makes it difficult to conduct successful pilot studies. The authors pledge to conduct further studies.

### Conclusions

A general pattern emerges across the studies surveyed for this review. Farming is a physically, mentally, socially and financially demanding and stressful occupation. In addition to carrying an unusually high numbers of serious life stressors, farmers are unlikely to seek help when they become overwhelmed by stress or depression. The combination of these regular farm-related stressors and the recent rise in financial crises and farm foreclosures that lead to the loss of the family farm may explain the recent surge in farmer suicides.

“To farmers, ‘the land is 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 forbearers and dashing the hopes for successors.”

(Conference presentation by Rosmann, 2003).

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