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# Unrecognized Epidemic Kills Farmers

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Imagine a job that you never leave day after day and year after year. Your home, your family, your finances, and your future are all tied up in the land beneath your feet. Perhaps your grandparents or even great-grandparents lived and worked on the same land. Now imagine getting only two or three paychecks each year from your production on that land. Finally, imagine running your business each year dependent on a new bank loan. Your imagination just described the modern day family farming operation; the type of farming that makes up 95% of Kentucky's 78,000-plus farms, a multi-billion dollar industry in the Commonwealth. The purpose of this paper is to raise nurses' awareness of stress and depression among farmers and their family members, to present factors that may influence stress, depression, and suicide, and to identify possible resources for nursing practice.

### Sources and Manifestations of Stress

Much research has been conducted on the effects and the role of "job control" to alleviate occupational stress. However, the environment of production agriculture boasts little control. Instead, control is passed to nature – too much or too little rain or winds can destroy a crop, insect infestation or crop disease can destroy a year's work overnight, an injury to the primary farmer places him or her on the sidelines with no one to complete the essential tasks on the farm. Farmers are also faced with additional uncontrollable factors such as fluctuating market prices, changing governmental regulations, and a shrinking labor force. Without question, farming is recognized as a stressful occupation. Untreated stress can lead to anxiety, depression, and chemical dependence. Sometimes farming becomes so stressful that individuals commit suicide rather than leave the occupation.

### Epidemic: What is the Evidence?

Mental health issues associated with farming have been widely discussed in the literature over the years (Booth, Briscoe, & Powell, 2000; Boxer, Burnett, & Swanson, 1995; Browning, Westneat, & McKnight, 2008; Donham & Thelin, 2006; Fraser et al., 2005; Grisso et al., 2008; Milner, Spittal, Pirkis, & La Montagne, 2013; Rossman, 2008; Stallones, 1990), yet there has been no change in the ranking of occupations with the highest suicide

occurrence. Browning et al. (2008) examined suicide among farmers in Kentucky and North Carolina as reported by death certificate. Browning et al. (2008) found that suicide occurrence was highest at each end of the age spectrum, with the greatest risk above age 75. Although the actual mortality rate was slightly smaller than that reported for Kentucky farmers by Stallones (1990), rates were still well above the average for males in Kentucky. The suicide rate by occupational groups in 17 states was recently reported to be the highest (84.5 per 100,000) among the farming, fishing, and forestry group (McIntosh et al., 2016). A current Kentucky report documented 302 farmer suicides between 1998-2016 (occupational data were not collected in 2007-09) with 100 of those between 2010-2016 (KY Injury Prevention Research Center, personal communication, January 26, 2017). The latest report by the KY Injury Prevention Center illustrates that the burden of suicide has not lessened. There are no data on the number of failed suicide attempts, thus the little that is known is merely a glimpse at the underlying epidemic.

### Cultural and Rurality Influence

Suicide occurs at a greater rate in rural compared to urban areas and the gap is widening (Scott, Stone, & Holland, 2017). A recent review of rural suicide literature suggests that risk factors must be viewed from an ecologic perspective (Hirsch & Cukrowicz, 2014). This lens fits well when positioned with farmers. The farmer may have individual characteristics that predisposition him/her to be unable to cope. There may be genetic predisposition to psychiatric illness or the farmer may not be able to physically perform the farm work anymore. Reed, Rayens, Conley, Westneat, and Adkins (2012) reported that for 40% of farmers age 50 and over the ability to work became their definition of health and the percentage rose with advancing age. The family unit may be under stress from a variety of factors, including multigenerational work or no one in the family to carry on the tradition of farming. The results of this stress is particularly salient for the eldest farmers for whom the land is precious (Maciuba, Westneat, & Reed, 2013). Conversely, younger farmers may feel intense pressure to live up to the standards set by the previous generation on the farm. Individual and family characteristics of the farmer's health and their impact on psychological health have received little attention.

The rural community itself can be a formidable obstacle to the good mental health of the farmer. While rural communities are by and large safe and supportive, there is a growing infiltration of large corporate businesses that may not be as amenable to extending loans in lean times as did the locally owned bank or carrying credit on farm supplies over a longer

## SAVE THE DATE

Please join us for the **KNA-Sponsored Nurses Day at the Capitol** on Tuesday, February 6th, 2018. We will have a Rally in the Capitol Rotunda from 11:00 a.m. – Noon EST with activities before and after. More details will be shared in the near future.

Also, in preparation for the event and our roles as advocates, our lobbyist Sheila Schuster will be conducting several advocacy training programs in communities across the state. We anticipate more dates/locations will be added to the calendar soon.

DATE/TIME	CHAPTER	LOCATION	CONTACT	# OF Contact Hours
9/26/17 5:00 pm	Northeast Chapter	St. Claire Medical Center - Morehead	Christa Thompson <a href="mailto:Christa.Thompson@st-claire.org">Christa.Thompson@st-claire.org</a>	1.8
11/14/17	KNA	University of Kentucky	<a href="mailto:admin@kentucky-nurses.org">admin@kentucky-nurses.org</a>	1.8
11/15/17 5:00 pm	Northern KY	St. E's, Erlanger	Teresa Williams <a href="mailto:Teresa.williams@stelizabeth.com">Teresa.williams@stelizabeth.com</a>	1.8
3/8/18	Nightingale	Danville	Pat Calico <a href="mailto:Patricia.calico@gmail.com">Patricia.calico@gmail.com</a>	1.2





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time period. If farmers find themselves despondent or depressed they may not have ready access to appropriately trained mental health professionals. Also, the stigma of mental health issues continues in rural communities. Farmers may actually be fearful of a visit to a mental health facility getting back to the loan officer or other powerful farm community members.

Agriculture once moved at the pace of nature, but now it has become a global industry, bobbing and weaving to international policies and markets. Environmental and animal protection groups hold farmers more accountable in their practices which creates more documentation by the farmer. The constant “ag banging” by some factions of these groups creates angst among farmers who value and protect their land and animals. Stress comes from all directions and farmers can do little to combat it. In recent years the economic downturn of agriculture has left farmers wondering if they can hold on until the next year and will the next year be better or worse? Some farmers elect to participate in the federal crop insurance program, a safety net that hopefully will prevent financial devastation. While other businesses may be able to sell off part of their holdings, farmers cannot sell the land or their equipment and they are expected to be productive.

The physical isolation of the farm and the farmer may also play into depression and suicide. Prolonged alone time on a combine harvesting a crop that you know will not get you out of debt can be a powerful influence. As the attachment to the land becomes more powerful the troubled farmer may see suicide as the only way to save the land. The misguided image of the insurance paying off the farm may become a picture of reality to the farmer. Farmers deal with life and death regularly, they have the means to complete the act. A tractor overturn, a fall from a silo, or a rifle are all at their disposal.

#### What Can We Do as Nurses?

Despite this grim portrait, nurses are in positions to assist these farmers. It starts by simply asking if the person resides in a farm household and, if so, what role does she or he play in the farm enterprise. A follow up question asking, “How are things on your farm?” may give the farmer permission to outline emotions. Mental health screening is becoming standard practice in many clinics. The Patient Health Questionnaire 9 (PHQ-9) is a quick, reliable tool to use to assess and manage depression (Blackwell & McDermott, 2015).

Many nurses in rural communities live, work, and attend church and social gatherings with farmers in the same rural communities. It is important that nurses be aware of local issues that may impact farmers. If the weather has been particularly bad, if damaging winds have caused barns to collapse, if the fields are not being planted at their usual times, or if businesses are closing their doors; all these are signs of potential stress for the local farm economy. An increase in office visits for vague complaints of fatigue, insomnia, or gastrointestinal distress may be markers of increased stress. These symptoms may affect the entire farm family, not just the primary farmer. Also, nurses should become familiar with local and regional resources. Many rural communities do not have specialized mental health clinics, but there may be other supportive organizations available for the farmer. Establishing a link with the school system’s health resources and the local health department may help identify those in need of assistance. Nurses should equip themselves by learning more about the health issues of farmers. Three excellent sources for free education include 1) AgriSafe – a non-profit organization that specializes in agricultural health and safety (located at [www.agrisafe.com](http://www.agrisafe.com)), 2) a more local Facebook site, AgNURSE ([www.facebook.com/Agriculture.nurse](http://www.facebook.com/Agriculture.nurse)), and 3) an online, interactive continuing education course, Mental Health Issues in Agricultural Populations, #1068945 (located at [www.https://ky.train.org/](http://www.https://ky.train.org/)).

#### Conclusion

The enormity of the burden of stress, depression, and suicide on Kentucky farms affects all of us. Kentucky is predominantly an agricultural state and highly dependent on agricultural income. Family farms encompass multiple generations and the stress related to farming extends to all generations on the farm. The link between stress and injury in farming (Grisso et al., 2008) creates an even more commanding reason to examine how farmers can cope with stress without ruining their health. Nurses are trusted professionals in the community and may be the first line of defense for farmers who are experiencing stress and depression and, therefore, serve as the key to the prevention of the spread of the suicide epidemic.

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