



ACKNOWLEDGEMENTS

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BACKGROUND

Addressing suicide in Ohio's farming community is critical due to the unique challenges faced by farmers which can impact their mental health and well-being. Farmers often face high levels of stress from factors such as financial instability, unpredictable weather, market changes, long work hours, and limited access to services. The combination of these stressors can make them more vulnerable to depression, anxiety, and suicidal ideation. **Issues of concern include the following:**

High Risk for Suicide: Farmers are considered high-risk due to the combination of occupational stressors, cultural stigma around seeking mental health support, and easy access to lethal means.

Economic and Social Impact: The farming community plays a vital role in Ohio's economy and social makeup. When farmers experience mental health crisis, it can affect not only their personal well-being, but also their families, communities, and the overall agricultural sector. Addressing mental health proactively can help sustain this critical workforce.

Stigma or Barriers to Seeking Help: There is often a strong cultural emphasis on self-reliance in farming communities, which can discourage farmers from seeking mental health support. Tackling this issue requires a targeted approach that recognizes these unique cultural factors and promotes mental health awareness and acceptance.

Geographic/Social Isolation and Limited Access to Services: Many farming communities are in rural areas where access to mental health services is limited. Long work hours and seasonal demands leave little opportunity for socializing, maintaining friendships or participating in community activities which can further contribute to feelings of isolation. Addressing mental health in these areas requires understanding the specific barriers to care and developing strategies to overcome them.

Impact of External Stressors: Farmers face a range of external stressors, such as extreme weather events, trade policies and fluctuating commodity process, which can exacerbate feelings of hopelessness and anxiety. Addressing these challenges at a community and policy level is vital to improving farmers' mental health.



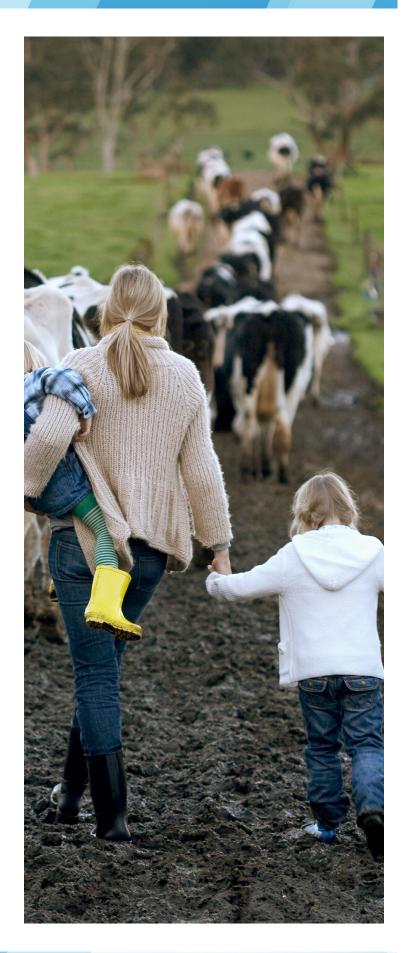
BACKGROUND

It should also be noted that farmers have protective factors and strengths that can assist in building resilience and wellbeing. **Some of these include:**

- Strong Sense of Purpose and Identity
- Close Family Connections and Support
- Community Support and Engagement
- Experience and Adaptability
- Connected to Nature
- Connected to Faith-Based or Spiritual Communities
- Resilience and Perseverance

By collecting and analyzing data on farm stress and mental health, Ohio can better understand the specific needs of its farming community, identify gaps in services, and develop an actionable, evidence-informed plan to prevent suicide and promote mental well-being among farmers. **The results of this survey will help in:**

- Identifying Needs and Gaps
- Guiding Action Plans
- Enhancing Prevention Strategies
- Informing Policy and Advocacy
- Reducing Stigma and Raising Awareness
- Fostering Community Involvement



METHODS

The purpose of this study was to identify stressors and factors that affect the mental health of Ohio farmers, farm families, and agricultural workers, as well as to assess their overall well-being. The survey was developed by The Ohio State University in partnership with the Ohio Department of Mental Health and Addiction Services (Ohio MHAS) and the Ohio Department of Health (ODH). Feedback from a pilot group, coordinated with the Ohio Farm Bureau, was used to finalize the survey instrument.

Participants were invited to complete a 31-question survey through a QR code distributed via social media and news releases from Alliance partners. Additionally, postcard invitations were handed out at various agricultural events and meetings across the state. Data collection was managed through Qualtrics, and analysis was conducted using SPSS software. The survey was designed to ensure anonymity; no personal identifiers were collected from the respondents.



DEMOGRAPHICS AND FARM-RELATED DEMOGRAPHICS

There were 460 survey responses¹. All percentages provided in this summary are valid percentages in which the missing data are excluded. A full report will be published by the Alliance with raw data contained in this summary.

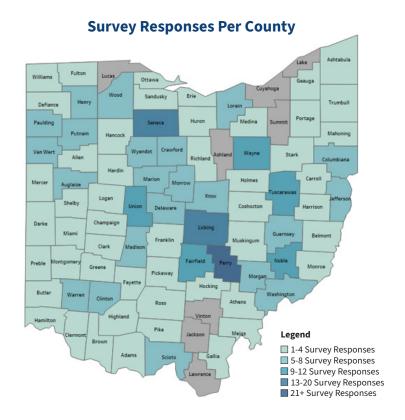
Age Groups	Percentage of Respondents	Number of Respondents
Under 25	5.4%	17
25 to 34	18.9%	60
35 to 44	28.1%	89
45 to 54	18.9%	60
55 to 64	15.8%	50
65 to 74	10.1%	32
75 to 84	2.2%	7
85 and over	0.6%	2

- Over half (52.2%) of the survey respondents were women, and 46.6% were men. Four individuals stated "Other" or "Prefer not to answer" for the gender question. The age group of 35 to 44 was the most common age group, with over one quarter (28.1%) of all respondents.
- Respondents were able to select multiple races/ethnicities. All (100.0%) of the respondents were White/Caucasian. Of this total, one respondent identified as a mix of White/Caucasian and Black/ African American, and one respondent identified as a mix of White/Caucasian, Native American/ Alaskan Native, and "Some Other Race." None of the respondents identified as Hispanic/Latino.
- Four of every five (81.0%) respondents were married or living with a domestic partner. One of every ten (10.0%) have never been married. The remaining respondents were divorced (5.0%), widowed (3.0%), or separated (1.0%).
- Half (50.5%) of respondents had a 4-year college degree or higher. An additional quarter (27.1%) of respondents had some college, and 20.3% were high school graduates. Six individuals (2.0%) had some high school.
- Three of every five (60.9%) respondents were farmers, and an additional 5.2% were farmers/ landowners who were not directly involved in the operation of the farm. One in five respondents were either a family member involved in farm decision-making (16.7%), or a family member not involved in farm decision-making (4.6%). The remaining respondents worked in the agricultural industry but did not have on-farm responsibilities (10.0%), were hired agricultural workers (2.2%), or were custom contractors that provided services directly to farms (0.4%).

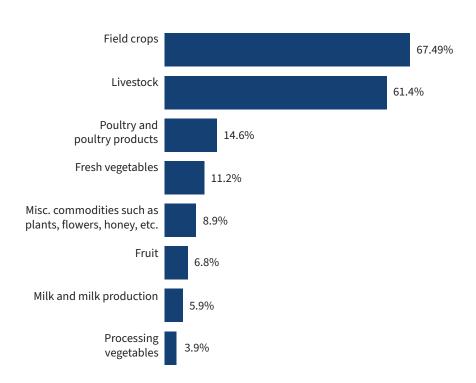
RESULTS

All respondents except for one individual both resided in Ohio and worked on a farm in Ohio. One respondent resided outside of Ohio but worked on an Ohio farm. The counties with the most respondents were Perry County (17.1%), Seneca County (3.3%), Licking County (3.1%), Noble County (2.8%), Tuscarawas County (2.6%), and Wayne County (2.6%). Eighty of the 88 Ohio counties had at least one respondent.

Respondents were able to select multiple commodities that they worked with or produced on their farms. The most frequent commodity respondents worked with were field crops (67.4%), livestock (61.4%). Respondents also worked with poultry and poultry products (14.6%), fresh vegetables (11.2%), fruit (6.8%), milk and milk production (5.9%), processing vegetables (3.9%), and miscellaneous commodities such as plants, flowers, honey, etc. (8.9%).



Farming Commodities Worked with or Produced



Forty percent (40.3%) of farms represented by survey respondents were 500 acres or larger. Over one third (36.7%) were 50 to 499 acres, and 23.0% were less than 50 acres.

Two of every five (41.8%) respondents indicated that their farm and/or agricultural-related income provided 50% or more of their household income, with 15.6% stating that farm/agricultural income was 100% of their household income. Sixteen percent (16.4%) indicated that farm/agricultural income accounted for 25 to 49% of household income, while 41.8% indicated that farm/agricultural related income was 24% or less of their household income.

FARM-RELATED STRESSORS AND SATISFACTION

Farm-Related Stressors

Respondents were asked about a number of farm-related stressors and if they caused little, moderate, or severe stress. According to the average responses, the cost of farmland, the cost of farm inputs (such as feed, seed, fertilizer, or pesticides), and concern over the future of farming were the potential stressors that caused the highest levels of stress across all respondents, with averages of 4.0, 3.9, and 3.8 out of 5.

The most common stressors that caused moderate to severe stress were the cost of farm inputs such as feed, seed, fertilizer, or pesticides (90.2% of respondents identified this as moderately to very stressful), the cost of farm inputs such as fuel, maintenance, and parts (87.0%), market prices for crops and livestock (86.5%), and cost of farmland (85.4%).

Life Satisfaction

Respondents were asked how satisfied they were with aspects of their farm operation. According to the average responses, the ability to be one's own boss, farm production/yield, and the ability to spend time with one's family were the aspects of farming that gave the highest levels of satisfaction across all respondents, with averages of 4.1, 3.7, and 3.5 out of 5.

The aspects of farming with the lowest levels of satisfaction were the cost of farm inputs, net farm income, and the prices received for commodities, with averages of 2.3, 2.6, and 2.9 out of 5.

Respondents were asked how satisfied they were with aspects of life in general. According to the average responses, relationships with children, relationships with spouse/partner, overall quality of life, and relationships with neighbors were the aspects of life that gave the highest levels of satisfaction, with averages of 3.9, 3.7, 3.6, and 3.6 out of 5.

The aspects of life in general with the lowest levels of satisfaction were household income and amount of time off from the farm, both with averages of 3.0 out of 5.



MENTAL HEALTH AND WELLBEING

General Mental Wellbeing

38.9% of respondents indicated that their mental wellbeing was "Very Good or Excellent." Additionally, 37.8% of respondents indicated that their mental well-being was "Good," resulting in three out of every four respondents having a positive perception of their overall mental wellbeing. A little under one quarter (23.3%) had more negative perceptions of their mental wellbeing, with 19.2% indicating that it was "Fair" and 4.1% indicating that it was "Poor."

Poor Mental Health Days

Respondents were asked how many days during the past 30 days a mental health condition or emotional problem kept them from doing their work or other usual activities. The majority of respondents (62.3%) reported that their work and activities were minimally affected (1, 2, or no days of the past 30).

The average number of days across all responses was 4.2 days, meaning, on average across all respondents, poor mental health kept individuals from their usual work and activities for 4.2 days out of the past 30. One of every ten (9.9%) respondents were highly affected and reported that mental health conditions or emotional problems kept them from their work and usual activities 14 or more days of the past 30.



Anxiety and Depression

The Patient Health Questionnaire (PHQ-4) is an instrument commonly used in medical settings to screen for anxiety and depression. It cannot be used to diagnose mental health conditions, but high scores can suggest that a person is experiencing effects of anxiety and/or depression.

Overall, two thirds (67.0%) of respondents had scores that suggested that they were not affected (37.9%) by or were minimally affected (29.1%) by symptoms of anxiety and/or depression within the past 14 days. Other respondents were more affected, with 17.0% scoring as moderately affected and 16.0% scoring as severely affected by symptoms of anxiety and/or depression.

On the subscales for anxiety and depression, 42.2% of respondents had scores that suggested they might be experiencing significant effects from anxiety, while 28.2% had scores that suggested they might be experiencing significant effects from depression.

Results of Patient Health Questionnaire

	Symptoms of Depression and/or anxiety		Symptoms of Depression and/or Anxiety	Symptoms of Anxiety
Not Affected	37.9%	Does not suggest significant symptoms	71.8%	57.8%
Minimally Affected	29.1%			
Moderately Affected	17.0%	Suggests	20.20/	42.20/
Severely Affected	16.0%	significant symptoms	28.2%	42.2%
Total	100.0%		100.0%	100.0%

Resilience

The Response to Stressful Experiences Scale Brief (RSES-4) was used to measure resilience. The instrument asks questions about how a person typically responds to stressful events, with higher scores indicating more resilience to stress.

It should be noted that the RSES-4 can be scored using a scale of 0 through 4 or 1 through 5, resulting in different ranges of total scores (0 - 16 or 4 - 20). Therefore, when comparing mean scores between surveys that have used this instrument, care should be taken to ensure that the compared scores are from the same numeric scale.

The mean score was 15.8 (or 11.9 using lower scale). This mean score of resilience is comparable to other scores that have been reported in the academic literature for populations that often experience stressful events, such as military veterans, first responders, and social work students working during the COVID-19 pandemic.

Seven of every ten (70.6%) respondents had a mean answer across the four questions of greater than 3.5, suggesting that they view themselves as likely to respond to stressful events with resilience.

LONELINESS AND SOCIAL SUPPORT

Loneliness

Respondents were asked if they had participated in various types of social activities in the past 12 months. Nine of every ten respondents (89.0%) had participated in social events with family or relatives. A little more than half of the respondents had participated in church, religious, or spiritual groups (55.8%), sports events or activities (54.4%), and volunteering activities (54.2%). Also popular were online groups/social media (48.3%) and educational activities (47.7%). About one third (33.5%) of respondents participated in an interest/hobby group.

Most respondents had participated in three (17.4%), four (19.0%), or five (19.8%) of the seven types of social activities in the past 12 months. About one quarter of respondents participated in two (13.4%), one (10.7%), or no (1.1%) social activities. If social activities with family and relatives are not counted, then 8.3% of respondents did not participate in any additional social activities.

Even with access to social activities, it can be possible to experience loneliness. One half of respondents (50.7%) scored as likely to be experiencing loneliness, with nearly one in five (18.9%) stating that they often feel isolated from others.

UCLA Loneliness Scale

How often do you feel that you lack companionship?

Hardly Ever - 42.6%	Some of the Time - 41.6%	Often - 15.8%			
How often do you feel left out?					
Hardly Ever - 37.1%	Some of the Time - 44.0%	Often - 18.9%			
How often do you feel isolated form others?					
Hardly Ever - 42.3%	Some of the Time - 38.8%	Often - 18.9%			

Social Support

Respondents reported that they were most likely to turn to partners (70.6%), family members (59.7%), and friends (58.0%) for support if they were having an emotional or mental health problem.

About half of the respondents reported that they would be likely to turn to their doctor or primary care physician (56.9%) or to a mental health professional (49.4%) for support.

In addition, some respondents identified ministers or religious leaders (44.9%), and phone or text helplines (34.2%) as sources of support if they were experiencing emotional or mental health problems.

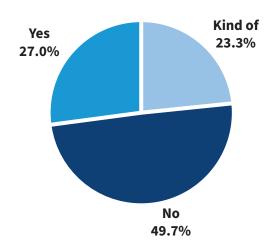
One in five respondents (20.6%) reported that it was likely that they would not seek support from anyone.

KNOWLEDGE, ACCESS, AND BARRIERS

Access and Barriers

If Respondents Were Able to Get Care/Services

Of those that felt they needed care, "Were you able to get the care/services that you needed?"

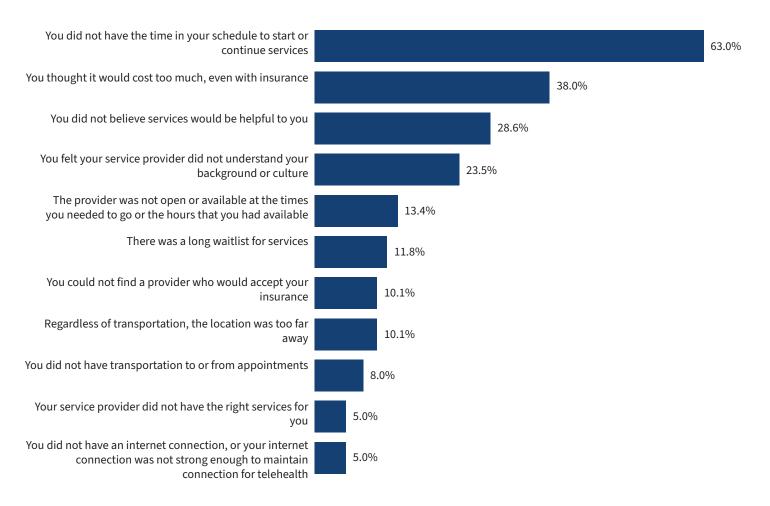


44.4% of the respondents stated that there was a time in the past 12 months when they felt they needed mental or emotional health care or counseling services. Of those respondents, one half (49.7%) stated that they did not get the services they needed, and nearly one quarter (23.3%) stated that they got some services but felt that they needed more or different services.



RESULTS

Reasons Respondents Did Not Receive Services



Respondents were able to select multiple reasons why they felt they did not get their service needs met. Many reported that time, cost, and perceived benefit were of high concern.

Over half (63.0%) stated that one reason they did not get the services they needed was that they did not have time in their schedule to start or continue services. Respondents stated that providers were not open or available at convenient times (13.4%), there was a long waitlist for services (11.8%) and regardless of transportation, the location of the provider was too far away (10.1%).

One in three respondents (37.8%) stated that they thought services would cost too much, even with insurance. One in ten stated that they could not find a provider that would accept their insurance (10.1%).

More than one quarter (28.6%) of those that did not receive the services they needed did not believe mental health services would be helpful to them. A little under one quarter (23.5%) felt their service provider did not/would not understand their background or culture.

RESULTS

Knowledge

One half (49.3%) of respondents answered that they felt "quite" to "very" confident that they could identify signs and symptoms of stress in someone, while 41.7% felt "quite" to "very" confident that they could recognize the warning signs of suicide. Four of every ten respondents (39.7%) felt "quite" to "very" confident that they could communicate with someone experiencing personal distress.

Three of every four respondents agreed (35.6%) or somewhat agreed (39.9%) that they would know where to start looking for non-emergency professional help for a mental health concern (depression, anxiety, stress, etc.) for themselves or a loved one.

Four of every five respondents agreed (43.8%) or somewhat agreed (36.3%) that they would know how to get immediate help if they or a loved one were having an emergency mental health crisis (suicidal thoughts or threats, threat of harm to self or others, etc.).

Attitude Toward Professional Help

Respondents were asked to rate their agreement with statements regarding seeking out professional help for mental health concerns. A majority of respondents agreed or somewhat agreed that professional help would be useful to them if they experienced a crisis (71.9%), and they would want to get professional help if they were worried or upset for a long period of time (78.1%).

However, many respondents did display some ambivalence toward seeking professional help. Four in every ten (41.8%) agreed or somewhat agreed that they admire people who are willing to cope with their problems and fears without seeking professional help. Echoing the concerns about time and money that were identified earlier in the survey, 52.3% of respondents agreed or somewhat agreed that they were not sure counseling or therapy would benefit them, given the amount of time and money involved.



SUMMARY

Anonymously, members of the farming community answered a series of questions related to mental health and agriculture that garnered information related to demographics, farm-related stressors, mental health and well-being, loneliness and social support, and knowledge, access, and barriers to support. **Key highlights collected from the survey data show:**

- 39% of respondents indicated their mental well-being is "Very good or Excellent." Additionally, 38% of respondents indicated that their mental well-being was "Good," resulting in three out of every four respondents having a positive perception of their overall mental wellbeing.
- 23% of respondents had negative perceptions of their mental well-being.
- 10% of respondents reported that mental health conditions or emotional problems kept them from their work and usual activities 14 or more days of the past 30.
- 50% of respondents scored as likely to be experiencing loneliness, with nearly one in five stating that they often feel isolated from others.
- 44% of the respondents stated that there was a time in the past 12 months when they felt they needed mental or emotional health care or counseling services. Of those, half stated that they did not get the services they needed, and nearly one quarter stated they received some services, but felt they needed more or different services.
- The most frequent commodity respondents worked with included field crops, livestock, poultry, fresh vegetables, fruit and miscellaneous commodities such as plants, flowers, honey, etc.
- 40% of farms represented by survey respondents were 500 acres or larger.

The survey highlights significant stressors related to farm management and financial pressures, with substantial impacts on mental health and overall life satisfaction. While many respondents show resilience and a network of social support, there are notable barriers to accessing mental health services. The Ohio Agricultural Mental Health Alliance is committed to addressing these challenges by expanding resources and support tailored to the needs of the farming community. The forthcoming recommended actions will aim to enhance support, reduce stigma, and improve access to mental health resources.



ENDNOTES

¹ Over six hundred individuals accessed the survey. Some of the surveys were blank, suggesting that people were looking at the questions before committing to answer them. There were 460 viable full or partial responses.

















Department of Agriculture

Department of Mental Health & Addiction Services