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# Building Resilient Agricultural Communities: A Process for Addressing Mental Health Challenges in Agricultural Communities

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## ABSTRACT

The impacts of stress on physical and mental health are increasingly salient, and understanding how occupational stress interacts with occupational health and safety will shape conditions and cultures for workers. The Upper Midwest Agricultural Safety and Health Center (UMASH) recognized a need to better understand occupational stressors and mental health outcomes in agriculture, and identify barriers to mental health care along with interventions to improve this system. UMASH hosted a one-day working forum that framed agricultural stress and poor mental health, and potential for interventions, for Minnesota farmers, agricultural workers, and their families. *Building Resilient Agricultural Communities* engaged a spectrum of stakeholders in agricultural work including: representatives of agricultural workers, farmers, health care, policy makers, and more. The forum further defined stressors and systemic barriers to health care for agricultural workers through presentations, panel discussion, that facilitated discussions and recommendations for intervention. Priority areas to focus outreach and engagement efforts, research, and screening are shared out, with reference to the continued outcomes and impact of this forum.

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## KEYWORDS

Agriculture; mental health; stress; resilience

## Introduction

Personal stories have exemplified the impact of chronic stress and poor mental health (2019 blog from NAMI Minnesota; unreferenced, see “Notes”) on those working in agriculture.<sup>1–3</sup> For farmers, occupational stressors are often out of their control and intertwined with personal stressors, as many farms are both homes and workplaces. These include economic factors, such as marketing and cost of inputs<sup>4</sup> weather events, future planning, politics, and personal life.<sup>5</sup> Literature indicates that farm stressors may negatively impact mental and physical health in farmers, farm workers, and their families.<sup>6,7</sup> Chronic stress is associated with immune system effects that presents as illness, including cardiovascular disease, diabetes, autoimmune disease, and mental illnesses, including depression and anxiety.<sup>8</sup> The leading cause of disability globally is depression,<sup>9</sup> and it is increasingly understood that occupational stress is associated with reductions in brain tissue volumes.<sup>10</sup> The phenomena of “cognitive

tunneling” explains the effect of attentional narrowing under stress,<sup>11</sup> which can be accompanied by a breakdown in ability to take in information and multitask.<sup>12</sup> Additionally, risk factors in agriculture like high-hazard work<sup>13</sup> and distance to health care<sup>14</sup> necessitate a more robust understanding of stressors, barriers and challenges to care, and opportunities for intervention.

In response, UMASH hosted *Building Resilient Agricultural Communities*, a one-day working forum on June 18, 2018, in Saint Paul, MN. Sixty-nine attendees included farmers, farmworker representatives, policy-makers, health-care administrators, agribusiness representatives, and additional agricultural stakeholders. The forum hosted presentations to better understand and frame agricultural stress and its impacts while generating intervention and partnership ideas. Attendees were actively recruited to register for the free forum, as planners targeted key stakeholders from multiple disciplines and diverse perspectives.

The following synopsis highlights the objective and layout of the forum, as well as key discussion points.

### ***Building resilient agricultural communities***

The overarching objective of this forum was to bring together diverse perspectives to explore mental health support gaps, challenges, and opportunities in the agricultural workforce.

The forum began with remarks from then-UMASH director, Dr. Bruce Alexander, an environmental and occupational epidemiologist. Alexander, along with Meg Moynihan, dairy farmer and representative from the Minnesota Department of Agriculture (MDA), shared perspectives of the prevalence and persistence of stress in farmers. Remarks from panelists followed, to expand insight and perspective around stress in farming.

- Doris Mold (Farmer and Minnesota Agri-Women) discussed the stressors and perspectives of dairy farming working in agribusiness while amplifying the unique needs of women in agriculture.
- Cynthia Christensen (Registered Nurse and Licensed Counselor) shared barriers to interventions, including telehealth, broadband internet, and insurance coverage.
- Gene Hugoson (Farmer and former Commissioner of MDA) shared sociocultural factors that impact agricultural mental health, like isolation and independence, and how communities may cope.
- Paul Force-Emery Mackie (Mankato State University and Past President of National Association of Rural Mental Health) highlighted distinct attributes and health needs of rural communities and health systems.
- Gloria Contreras (Board President Manos Latinas) discussed the immigrant agricultural workforce, distinct stressors and prevalence of stress, and how these may be enhanced by factors like social pressures and limited access to support.

These presentations established a foundation to facilitate group discussions. Facilitator-led discussion, led by UMASH students, staff, and faculty,

identified gaps in agriculturalists' support system while brainstorming solutions and interventions. This work confirmed and further identified systemic barriers to successful mental health intervention strategies.

### **Discussion**

Barriers for successful mental health intervention strategies included a lack of: health infrastructure, health screening, insurance coverage, awareness around stress and poor mental health, and cultural competence. Prevalent through the discussion was a gap in community resources. For example, suicide resources were readily available, but there is a need for earlier intervention strategies.

The final task of the forum was to identify stakeholders, resources, and next steps to address challenges and opportunities in improving agricultural mental health. Priorities and action steps fell into four broad categories:

- Outreach and awareness campaigns to normalize the prevalence stress and poor mental health through platforms like blogs and podcasts
- Policy changes to improve affordability and accessibility of health care
- Develop, evaluate, and implement screening tools and intervention programs and disseminate these through agricultural networks
- Train community members and professionals to recognize early signs of stress and refer to support or other interventions

Following this forum, in August 2018, a request for proposals sought projects to understand the needs of agricultural communities and implement ideas generated. Three Partner Projects were funded to:

- (I) Normalize stress and poor mental health with a goal to equip community members with awareness and the skills to respond to those in mental health crisis (National Alliance on Mental Illness (NAMI) Minnesota).

- (II) Understand the prevalence of agricultural stress and unique stressors of women in agriculture (University of Minnesota Extension and American AgriWomen)
- (III) Create educational resources for young adults in agriculture enabling initiation of conversations around stress and mental health (Ag Health and Safety Alliance).

Details on project objectives, scope, and outcomes have been documented online [<http://umash.umn.edu/stress/>].

## Conclusion

*Building Resilient Agricultural Communities* brought together diverse stakeholders with a concern over stress and poor mental health in agriculture. This forum provided mechanisms for networking, framing issues, identifying gaps in the support system, and proposing ideas for improving these systems. These attendees and presenters:

- articulated stressors;
- described and discussed the landscape of health care in agricultural communities. This included chronic and systemic barriers like lack of health care/specialty care, insurance, broadband access for telehealth, and culturally appropriate care;
- identified specific approaches and action steps for understanding the issues and providing potential interventions.

These findings were broadly communicated, including state and federal representatives. These findings and experiences should be leveraged to support policymakers to address systemic challenges for mental health and resiliency in the workplace. Specific needs identified include accessible and affordable health care and insurance, infrastructure development (i.e. broadband access), policy and regulations that facilitate telehealth opportunities, and rural economic development.

## Author notes

NAMI Minnesota (2019). *It's Not Stigma, It's Discrimination*. NAMI Blog. <https://www.nami.org/Blogs/NAMI-Blog/March-2019/It-s-Not-Stigma-It-s-Discrimination>

Throughout this paper, the authors use the language “normalize. poor mental health.” This is in line with partnership work with a state chapter of the National Alliance on Mental Illness, where discrimination is feared for people with mental illness.

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