



Michigan Consortium of Advanced Networks

Michigan Broadband Roadmap

Find the report and executive summary at
www.miinfrastructurecommission.com

21st Century Infrastructure Commission Background

- ▶ Began in March 2016
- ▶ Comprised of 27 appointed members:
 - Infrastructure experts
 - Government representatives
 - Academic scholars
 - Business representatives
- ▶ Provided a long-term, comprehensive set of infrastructure recommendations by November 30, 2016
 - Healthy systems ensure a better quality of life, spur economic activity and job growth
- ▶ For the next 30-50 years across all sectors
- ▶ Recommended the creation of the Michigan Consortium of Advanced Networks



Michigan Consortium of Advanced Networks

- ▶ Announced January 2018
- ▶ Seven appointed members representing business, agriculture, education, and others. Six state agency appointees
- ▶ Convened two subgroups of experts
- ▶ Held five listening tour events across Michigan
- ▶ **Create the “Michigan Broadband Roadmap” to provide recommendations and actions for improving broadband access and adoption**



What is Broadband?

Broadband Access

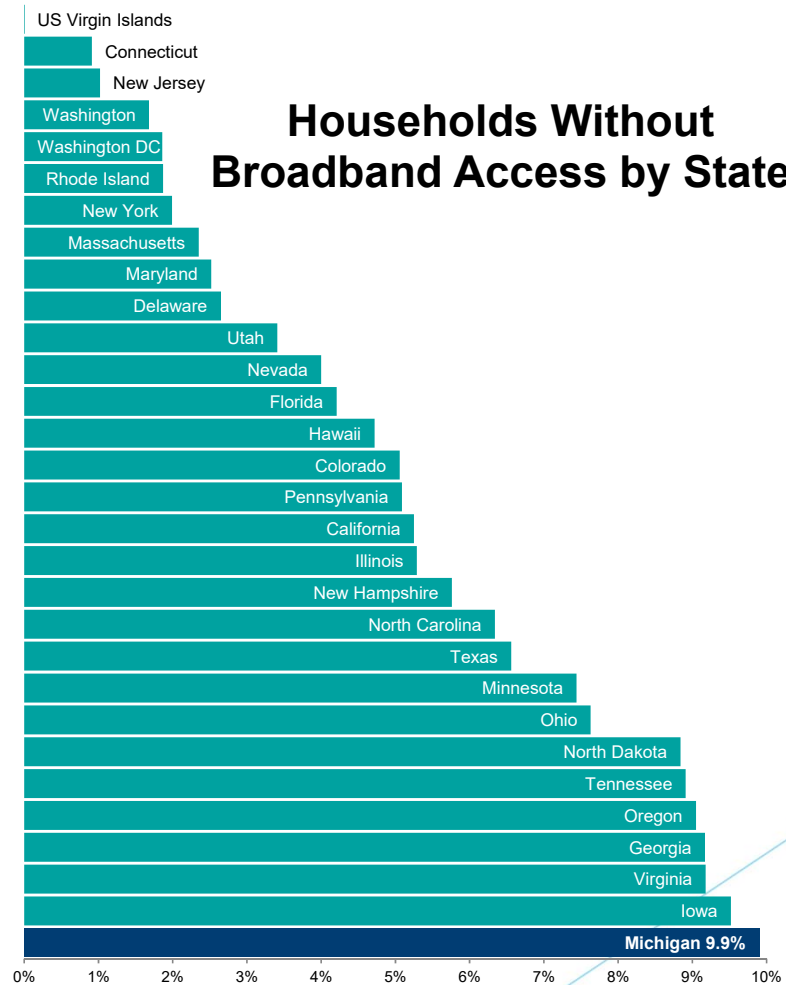
- ▶ The physical connection to high-speed internet that is “always on”
- ▶ Fixed, terrestrial broadband: Service designed for permanent, stationary use at a home, business, or institution
- ▶ Mobile broadband: Wireless internet service designed for continuous use on a portable device

Broadband Adoption

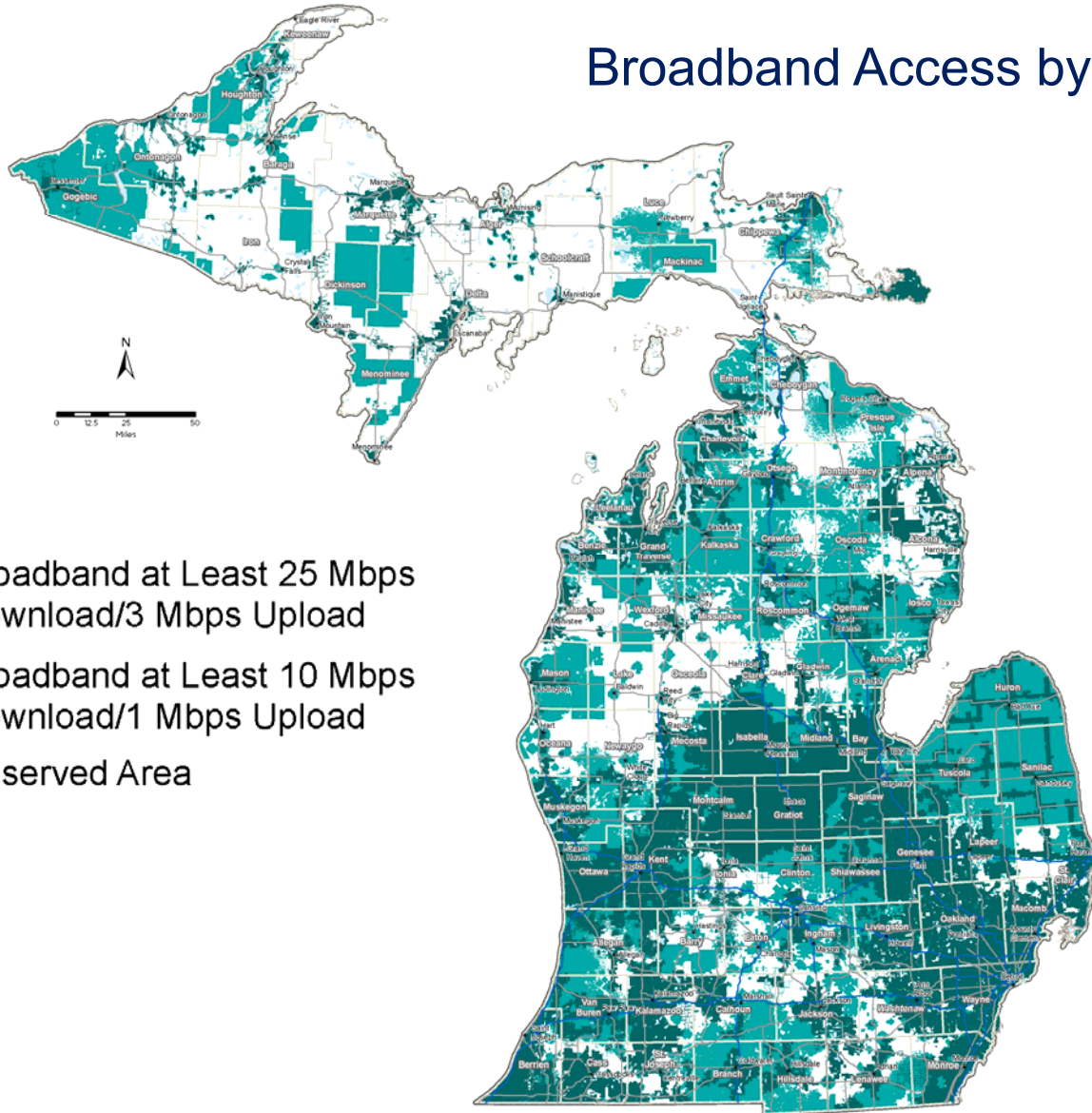
- ▶ Recognizing the value of broadband and subscribing either at home, work, or via public institutions
- ▶ Adoption issues include affordability, digital literacy, awareness of broadband’s impacts, and others

Michigan's Broadband Access

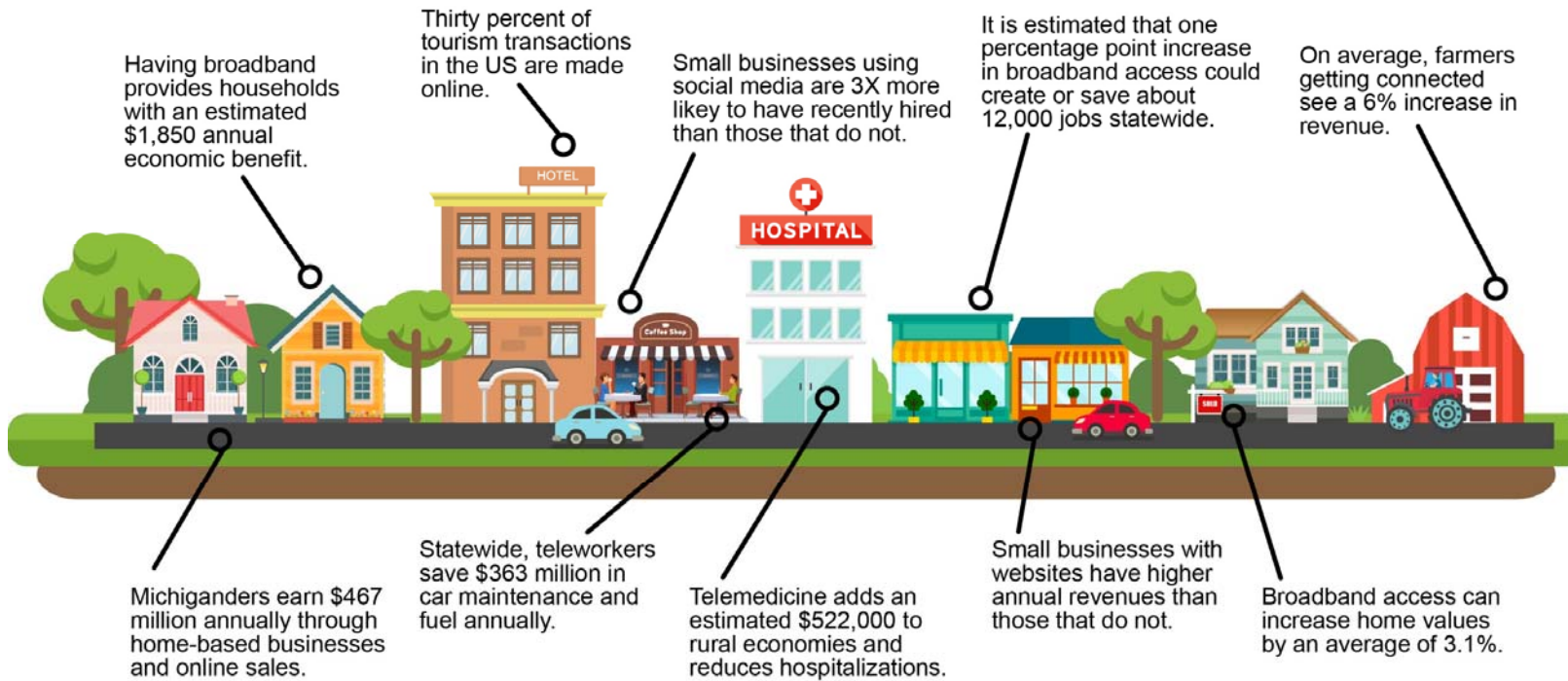
- ▶ Michigan ranks 30th among other states and territories for broadband availability.
- ▶ An estimated 368,000 of Michigan's rural households do not have access to broadband.
- ▶ Nearly 2 million households (48%) have access to only one fixed, terrestrial internet service provider.
- ▶ Just over \$2.5 billion in potential economic benefit is left unrealized among disconnected households.
- ▶ One-third of households without the internet say the cost of service is too expensive.



Broadband Access by Speed



Why Does Broadband Matter?



MCAN Roadmap Goals

- ▶ Accomplish speeds of 1 Gigabit per second to all residents and businesses by 2026.
- ▶ Achieve fixed, or comparable, affordable broadband service to all residents and businesses at a speed of at least 25 Megabits per second download and 3 Megabits per second upload by 2022.
- ▶ Priority and state funding will be focused on areas currently unserved by broadband at 10 Megabits per second download and 1 Megabit per second upload.
- ▶ Attain fixed, or comparable, household broadband adoption of 95% by 2024.

Estimated time to download a 2 GB file:



MCAN Roadmap Guiding Principles

- ▶ Work to remove barriers to residential, business, and institutional broadband adoption in coordination with infrastructure investments.
- ▶ Encourage connectivity for Community Anchor Institutions (CAI). CAIs include schools, libraries, hospitals and other medical providers, public safety entities, institutions of higher education, community/region support organizations, and local government.
- ▶ Promote coordination, cooperation, and communication between private and public infrastructure owners, communities, schools, libraries, project partners, and local, regional, state, tribal, and federal governments, among others.
- ▶ Utilize existing and emerging funding sources and investments more effectively by targeting investments where needed most and leveraging a variety of public and private financing resources.
- ▶ Focus on embracing all technologies, visionary planning principles, and innovative approaches to ensure high levels of broadband service for Michigan's residents, businesses, institutions, and communities.

MCAN Recommendation Areas

1. Access to Unserved Areas

Connect unserved communities, leverage partnerships, and improve data.

2. Increase Broadband Adoption

Improve affordability; increase digital literacy; close the homework gap; and bolster the quality-of-life benefits of technology to create a more digitally equitable state.

3. Progress Michigan's Broadband Ecosystem

Coordinate and invest in broadband to improve access and adoption; support and empower communities, regions, and stakeholders; and remove barriers to expedite deployment.

1. Access to Unserved Areas

- ▶ Facilitate the creation of successful partnerships for broadband expansion.
- ▶ Connect communities and institutions.
- ▶ Improve broadband coverage data collection and validation.
- ▶ Increase backhaul capacity in rural areas.
- ▶ Improve the workforce pool for the telecommunications industry.



2. Increase Broadband Adoption

- ▶ Promote and build awareness for low-cost broadband subscription programs.
- ▶ Support residents to become more digitally literate through coordinated training.
- ▶ Create partnerships to promote innovative uses of technology.



3. Progress Michigan's Broadband Ecosystem

- ▶ Invest in broadband and technology to improve community and economic development.
- ▶ Create a single point of contact within state government to support communities.
- ▶ Provide comprehensive broadband technical assistance, best practices, and guidance to communities and other local stakeholders.
- ▶ Encourage “dig once” best practices to reduce construction costs.
- ▶ Improve the pole-attachment process for internet service providers.
- ▶ Streamline access to the right-of-way for all technology types and right-of-way owners.
- ▶ Leverage the robust experience of infrastructure deployment from telecommunications providers, cable networks, electric service providers, and others to shape a better policy and regulatory ecosystem to connect unserved areas.
- ▶ Create a permanent long-term broadband commission to advise future governors and the legislature.



The Path Forward

- ▶ Create a Community Broadband Playbook to provide local stakeholders with tools, resources, best practices, and case examples
- ▶ Develop an accountability strategy and assigning state agency support for roadmap implementation
- ▶ Work with the legislature to create a permanent broadband commission and administer state broadband investment
- ▶ Begin to implement key short-term action items



Questions?



Find the report and executive summary at
www.miinfrastructurecommission.com



Addressing Farmer Stress in Michigan: MSU Extension's Approach

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August 22, 2018

Presentation to Michigan Commission on Agriculture and Rural Development



Overview

- What is Michigan State University Extension?
- How does MSU Extension consider farm stress?
- What is MSU Extension offering related to farm stress?
- How effective are MSU Extension's efforts?



What is Michigan State University (MSU) Extension?

- “MSU Extension helps people improve their lives by bringing the vast knowledge resources of MSU directly to individuals, communities, and businesses.”
- Presence in all 83 Michigan counties
- Offer programming and information in areas of agriculture, agribusiness, child and youth development including 4-H, health and nutrition, community food systems, natural resources, government and public policy, and community prosperity

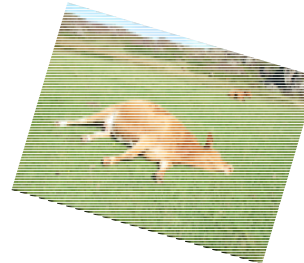


What is farm stress?

- Stress: A state of physical, mental, or emotional strain or tension
- Farm stress: A state of strain or tension experienced by a farmer or agricultural worker, especially as related to farming and agricultural work



Common Stressors in Farm Families



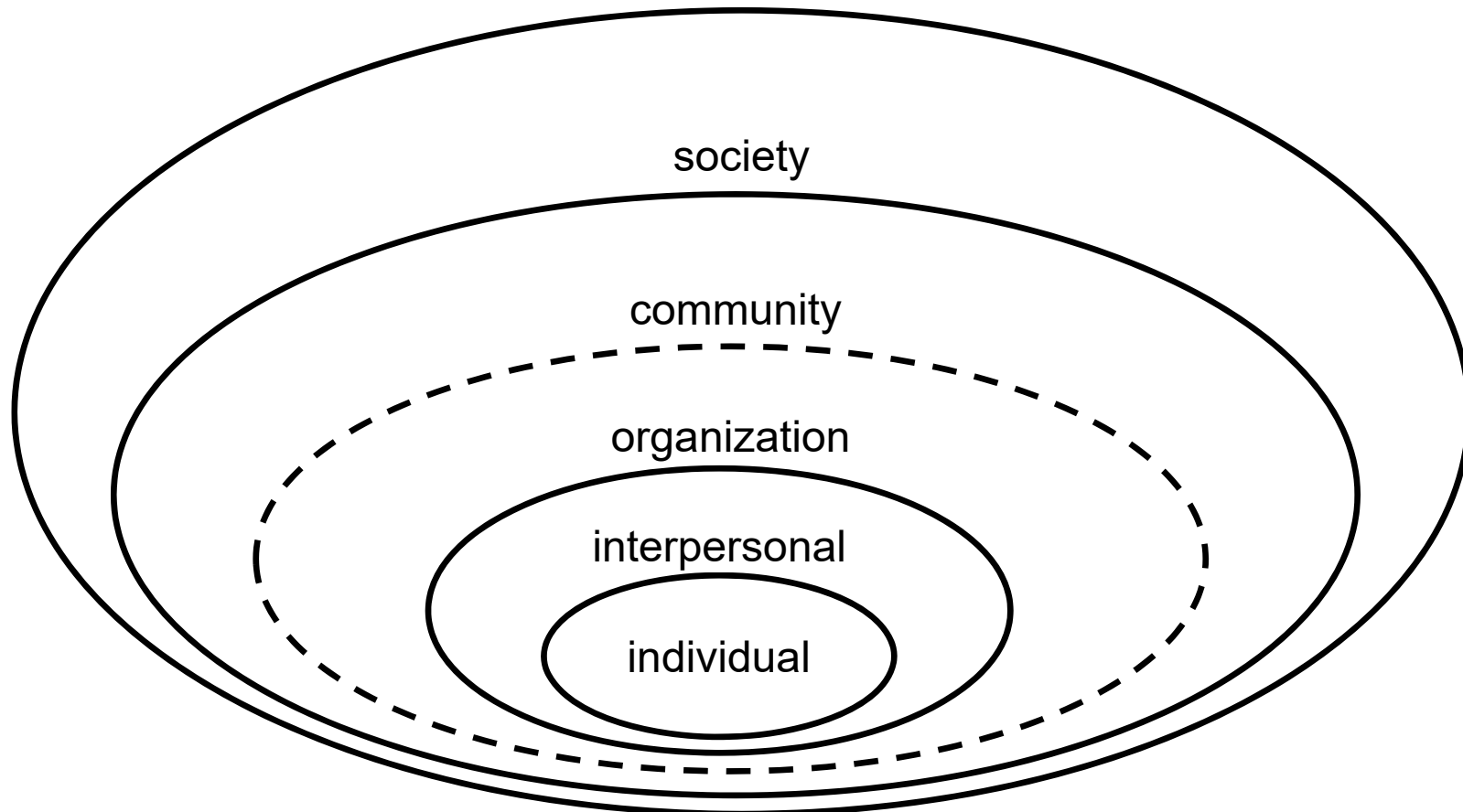


What is the impact of farm stress?

- Compared to general population, farmers have...
 - Higher levels of psychological distress (Roy et al. 2013)
 - Higher levels of depression (Roy et al. 2013)
 - Highest suicide rate of any occupation (McIntosh 2016)
 - Lower levels of help-seeking for mental health (Roy et al. 2013)
- Depression is associated with farm injury (Xiao et al. 2013).
- Poor mental health associated with lower adoption of new technology, products, and policies (Hounsoume et al. 2006).



How does MSU Extension consider farm stress?





What is MSU Extension offering related to farm stress?

- Developed and offered two workshops:
 - For farmers: Weathering the Storm: How to Cultivate a Productive Mindset
 - For people who work with and/or support farmers: Communicating with Farmers under Stress



Weathering the Storm: How to Cultivate a Productive Mindset

Purpose:

This workshop is designed to help farmers and their families understand the signs and symptoms of chronic stress. This workshop includes resources about how to handle your stress for a more productive mindset on the farm.

Objectives:

By the end of class, participants will be able to:

1. Identify stress signs and symptoms
2. Practice three everyday strategies for managing stress
3. Know where to go for more help and resources
4. Make an action plan for managing stress



Communicating with Farmers Under Stress

Purpose:

This workshop is designed to help people who work with and support farmers to identify and deal with stress and be able to have important conversations with farmers about mental health and stress.

Objectives:

By the end of class, participants will be able to:

1. Build awareness around potentially stressful conditions affecting some farmers
2. Learn stress triggers, how to identify signs of stress and review helpful techniques for responding
3. Learn techniques for identifying, approaching and working with farmers who may not be coping with stress effectively
4. Learn where to go for additional help



What are signs of stress?

Physical	Psychological	Behavioral



What are signs of stress?

Physical	Psychological	Behavioral
<ul style="list-style-type: none">- Headaches- Exhaustion/fatigue- Ulcers- Back aches- Eating problems- Sleeping problems- Getting sick a lot/more often		



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What are signs of chronic, prolonged stress?

- Change in routines
- Increase in illness
- Increase in farm accidents
- Decline in livestock care
- Decline in appearance of farmstead
- Children show signs of stress



What mindset is helpful?

- Do you have empathy?
- Do you know all of the answers?
- What decisions need to be made?
 - Can you help farmers think, discover, and live with possible outcomes of decisions to be made?



Additional topics in workshops

- Commodity price trends
- Identifying stress in yourself and others
- Effective coping strategies
- Skills for approaching a person under chronic stress
 - Preparing for discussion
 - Active listening skills
 - Preparing an action plan
- Warning signs of suicide
- Helpful resources



What is MSU Extension offering related to farm stress?

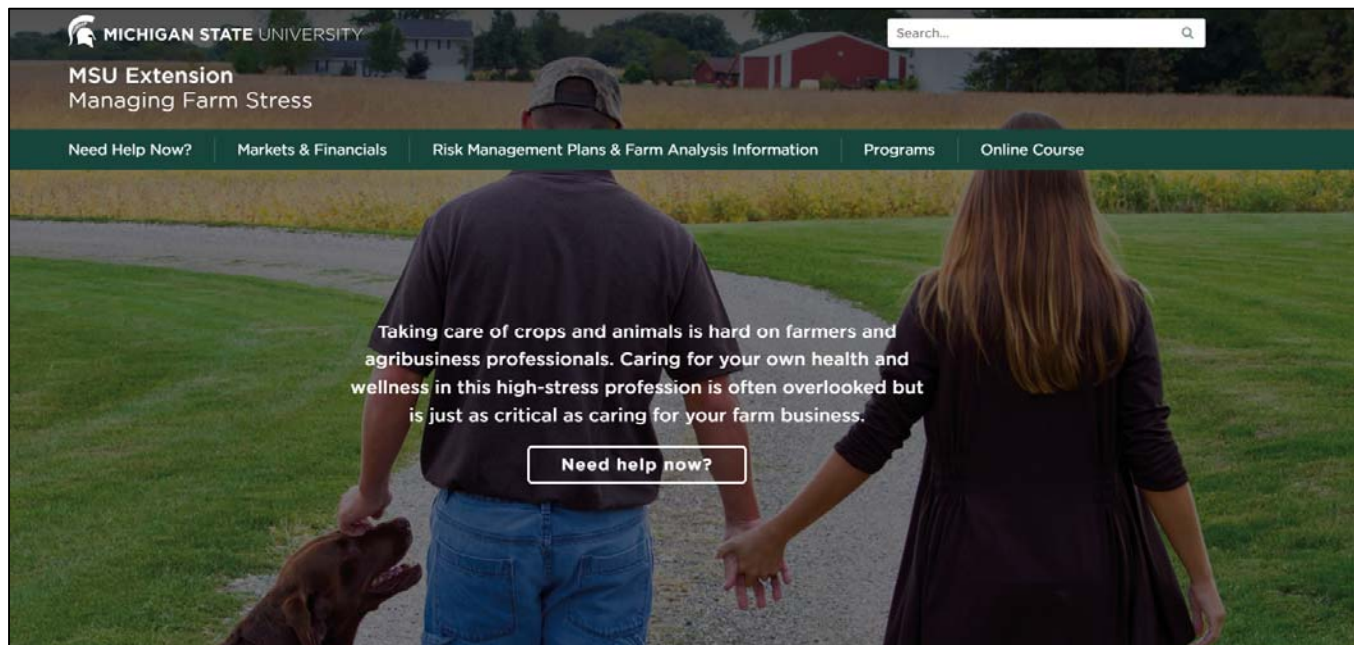
- Mental Health First Aid
 - 8-hour evidence-based program to increase knowledge of signs and symptoms of mental health and substance use issues
 - Rural supplement





What is MSU Extension offering related to farm stress?

- Hosting a website of resources at www.canr.msu.edu/managing_farm_stress





What is MSU Extension offering related to farm stress?

- Creating and distributing fact sheets

HOW TO CULTIVATE A PRODUCTIVE MINDSET

There are many factors in agriculture that farmers have no control over. Beyond the uncertainty of the weather, destructive crises such as disease outbreaks and short-term incidents such as machinery breaking down or accidents can and do occur. One powerful factor that we always have the opportunity to control, however, is our mindset.

Farmers and those within the agricultural industry have a tendency to be eternal optimists, but with all of the variability in agriculture there are times when we can become overwhelmed and stressed more than normal. Having the right mindset can help increase productivity and resiliency, so we are better prepared when times are tough, and more able to manage our farms and take care of our families and ourselves.

Think of your mindset as a free tool you can use to save time and energy, and get the most out of what you do.

MINDSET TACTICS

USE SELF-TALK
The body hears what the mind thinks. So choose your thoughts with purpose. Tell yourself that you can overcome any challenge. You can adapt. You have come through rough times before. You can do it again. You can't always avoid difficult situations, but you can choose the thoughts you have when you experience them. Try choosing three words to tell yourself to help maintain the mindset you want – like calm, capable and controlled.

USE YOUR BREATH
When faced with a challenge, first use your breath. Deep breathing calms the mind and can help you focus. It can also reduce chronic pain and improve sleep. Try breathing deeply five times, releasing the air slowly. Combine deep breathing with self-talk to boost productivity and stay on task.

USE ACCEPTANCE
When things are beyond your control, the most productive step you can take is to accept it. Making acceptance a part of your mindset can save you time and energy by letting you focus on the solution instead of getting frustrated by the problem. Try making the word "accept" a part of your self-talk and using deep breathing as a time to pause, accept and begin problem solving.



FACTS

- The human mind has 70,000 thoughts each day. That's 70,000 opportunities.
- The typical brain is about 2 percent of your body weight but uses 20 percent of your energy.
- 80 percent of repetitive thoughts are negative. But they don't have to be.
- A brisk 10-minute walk reduces the amount of cortisol (stress hormone) in the brain by 50 to 70 percent.

To learn more visit msue.msu.edu/managingfarmstress

MICHIGAN STATE UNIVERSITY | Extension



How effective have MSU Extension's efforts been?

- 281 farmers have attended Weathering the Storm in 2018
 - 90% reported workshop increased knowledge of current agricultural financial situation
 - 84% reported workshop increased knowledge of effects of stress on the body
 - 90% improved in recognizing warning signs of mental illness and suicide
 - 93% increased knowledge of where to go if mental health help is needed



How effective have MSU Extension's efforts been?

- Approximately 1,000 people have taken Communicating with Farmers Under Stress
 - 80% report workshop improved their understanding of current financial situation in agriculture
 - 85% reported workshop increased their understanding of impact of stress on our bodies
 - 91% reported they were better able to recognize warning signs of depression, suicide, mental illness
 - 91% said workshop increased knowledge of where to send people for help



Thank you.

Questions?

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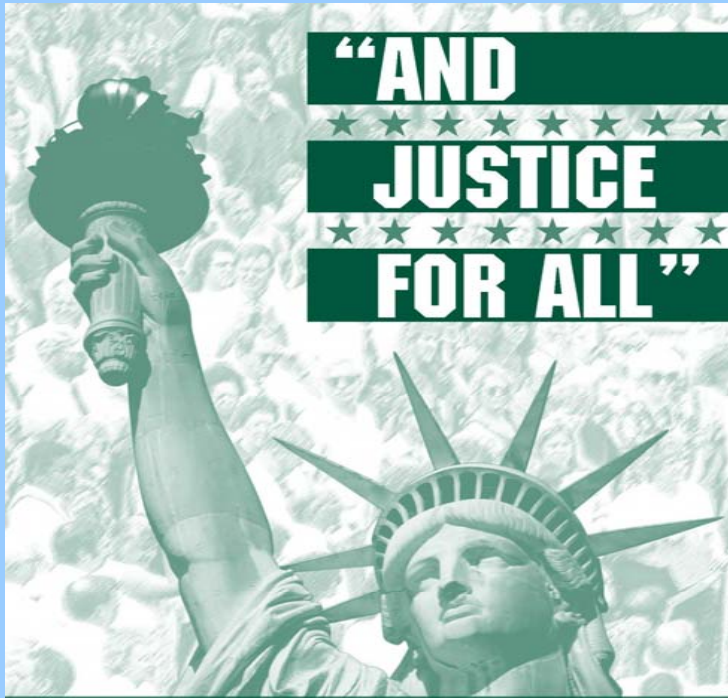


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RESOURCES

Further Reading

- “Stress Free For Good: 10 Scientifically Proven Life Skills for Health and Happiness” by Fred Luskin and Ken Pelletier
- “Full Catastrophe Living” by Jon Kabat-Zinn
- “Mindfulness: Finding Peace in a Frantic World” by Mark Williams and Danny Penmanship
- “The Book of Forgiving” by Desmond and Mpho Tutu
- “The Miracle of Mindfulness” by Thich Nhat Hanh

Suicide Prevention Resources

- National Suicide Prevention Lifeline: 1-800-273-TALK (8255)
- Crisis Text Line: Text “GO” to 741741
- Veterans Crisis Line: 1-800-273-8255
- Michigan Association for Suicide Prevention: 734-624-8328

Acknowledgements

- Developed by Suzanne Pish and Tom Cummins for MSU Extension.

MSU Extension Mindfulness and Stress Management Programs

Stress Less with Mindfulness

The “Stress Less with Mindfulness” series introduces participants to the experience and practice of mindfulness to reduce stress. Research has shown that practicing mindfulness is effective in reducing stress-related symptoms such as worry, depression and physical tension, and may be helpful in managing chronic conditions such as cardiac disease and diabetes.

To learn more about Stress Less with Mindfulness or register for a class visit msue.msu.edu/stressless

RELAX: Alternatives to Anger

How individuals handle their anger and stress affects a radius of people around them. The goal of “RELAX: Alternatives to Anger” is to help young people, parents and caregivers foster healthy relationships so they can live, learn and grow in a safe, affirming and fair environment free from violence, abuse, bullying and harassment. Youth, parents and caregivers will learn to better manage their anger and stress at home and in the workplace.

This multisession program can be provided in a variety of community educational settings. The “RELAX: Alternatives to Anger” series is also available online.

To learn more about RELAX: Alternatives to Anger or register for a class visit msue.msu.edu/relax

