Behavioral Health Care Issues in the Farming Community



Dr. Tina Christine Chasek Professor/Chair, UNO BHECN Director of Rural Development

Agricultural Health and Safety Course 7-10-24

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Where I'm from!



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BEHAVIORAL HEALTH EDUCATION CENTER





The Only Reason to Move to the City!



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What I do!

Behavioral Health Education Center of Nebraska Legislative Report FY 2016 & 2017

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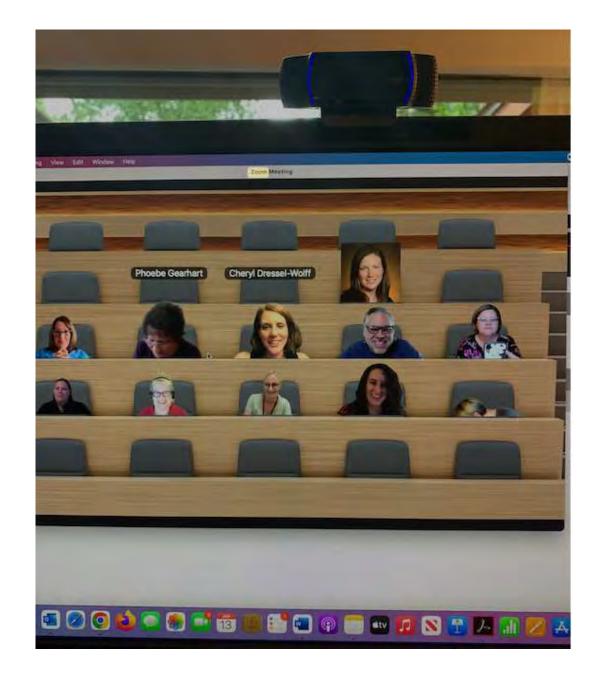




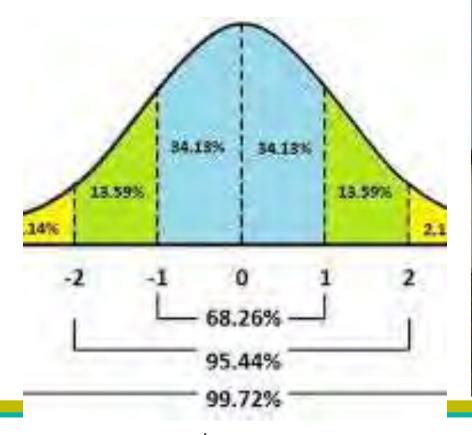
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Zoom

Clever!



Research





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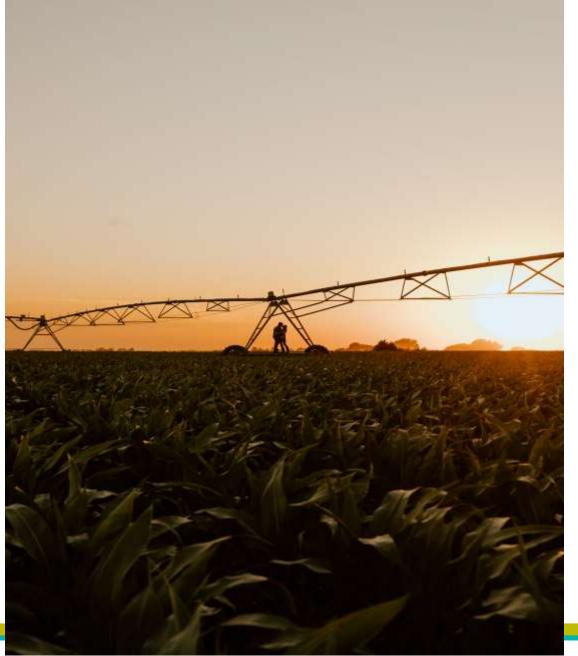












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Where are we headed?

- Define Agricultural Behavioral Health
- Substance Use In Ag
- Aging and Behavioral Health



What is "Behavioral Health?"

Behavioral health =

mental health disorders + substance use disorders



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Suicide Rates Have Risen Sharply Across The U.S.

Percentage change in suicide rate in U.S. states from 1999 to 2016

-5 to 0	0 to 14.99	15 to 29.99	30 to 34.99	35 to 60
-3100	01014.55	15 (0 25.55	5010 54.55	55 10 00

Highest percentage increase (1999 to 2016)

North Dakota	57.6%	
Vermont	48.6%	A A A A A A A A A A A A A A A A A A A
New Hampshire	48.3%	
Utah	46.5%	
Kansas	45.0%	
South Dakota	44.5%	
Idaho	43.2%	VII I MANTIN
Minnesota	40.6%	
Wyoming	39.0%	
South Carolina	38.3%	





Live Well Nebraska

Nebraska has one of the nation's highest binge drinking rates

CHRIS DUNKER and MOLLY HUNTER Lee Enterprises Dec 29, 2020 Updated Nov 7, 2021 🔍 D











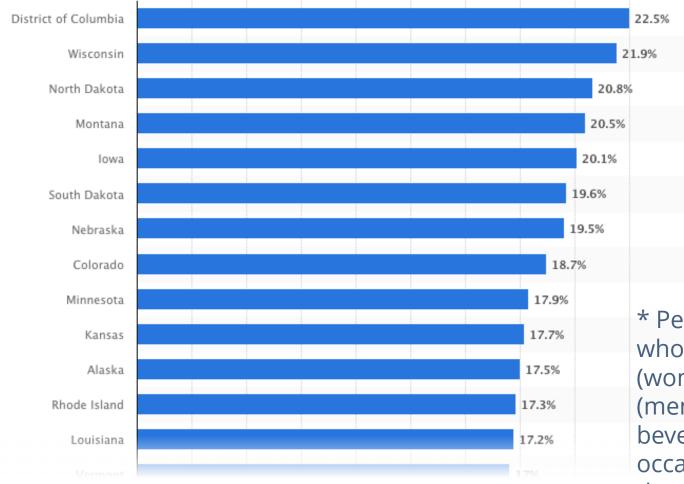


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Binge Drinking Rates By State *2023



* Percentage of adults who had 4 or more (women) or 5 or more (men) alcoholic beverages on a single occasion in the past 30 days.

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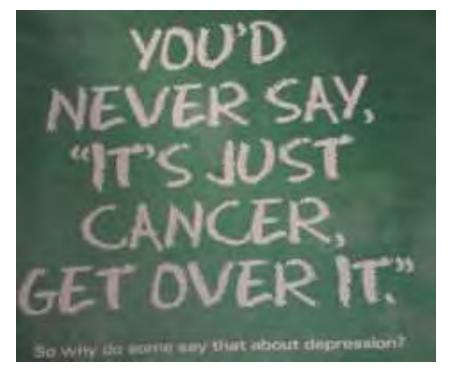






3 times

on game day.



Why don't we talk about Behavioral Health?

STIGMA

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Nebraska rural poll (2019)

- Most rural Nebraskans agree that the following items bring shame to a person
 - Going to AA or alcohol treatment: 45%
 - Seeking Mental Health Care: 46%
 - Going to Drug treatment: 46%



noun. a mark of disgrace or infamy; a stain or reproach, as on one's reputation.

• Nebraska Rural Health Poll, UNL (2019)

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Mental Health Model

Biological

- Age, Gender, Genetics
- Physiologic Reactions
- Tissue Health

Psychological

- Mental Health
- Emotional Health
- Beliefs & Expectations

Sociological

- Interpersonal Relationships
- Social Support Dynamics
- Socioeconomics

689 *

Agricultural Behavioral Health© –

- The Agrarian Imperative- Dr. Michael Rosmann (2010)
- The field of health involving the behavioral healthcare of the agricultural population.
- Agricultural behavioral health entails understanding the cultures of farmers, ranchers and others involved in the production of food and fiber.
- Agricultural behavioral health requires understanding the unique behavioral health issues of agricultural people and methods of restoring maladjusted behaviors to wellness.

**USDA-Agriwellness

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The Personal Nature of Agriculture

-Characteristics of Agricultural Communities and Culture

-Strong Core Values

-Behavioral Healthcare Issues Specific to Agricultural populations









Conditions Unique to Agriculture and Producers

UNIVERSAL ISSUES

Financial Pressure

Succession Planning

Overall Poor Health (inactive, overweight, irregular visits to the doctor)

Isolation, Loneliness, Stress

Disease Outbreak

Lack of Access to Services; Lack of Health Benefits

Weather, Government Policies, Poor Yields

Overworking; never being able to 'leave work'

Chemical Exposure (Cholinesterase-inhibiting pesticides such as organophosphates and carbamates have been linked to depression)

WOMEN SPECIFIC ISSUES

Worry about injury

Family Caregivers for Elderly Relatives

Women are the Family Counselors and Confidants

Multiple Roles; mother, wife, financial planner caregiver, employee,

"Third Shift" Workers: work outside the home, care for the family, and work on the farm

Lack of Recognition for work

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 Prevalence of mental health conditions is similar between rural and urban: 21% or 7.3 million

HOWEVER.....

- Depression rates have been found to be higher in rural areas as compared to urban areas
- Higher rates of suicide in rural areas especially among men
 - In the Midwest, Suicide is the 2nd leading cause of death for ages 15-34 and the 4th leading cause of death for ages 35-54
- Higher rates of Substance Use Disorders
 - Gale, Janis, Coburn, & Rochford 2019
 - National Survey on Drug Use and Health, SAMHSA, 2019





Research Findings

THE JOURNAL OF RURAL HEALTH



LITERATURE REVIEW 🔂 Free to Read

Substance use disorders in the farming population: Scoping review

Shinobu Watanabe-Galloway PhD 🔀, Christine Chasek PhD, Aaron M. Yoder PhD, Jesse E. Bell PhD

First published: 06 May 2021 | https://doi.org/10.1111/jrh.12575 | Citations: 3







Research Findings Close to Home

> J Rural Health. 2023 Feb 9. doi: 10.1111/jrh.12749. Online ahead of print.

A cross-sectional study of alcohol, opioid use, and anxiety in agriculturally based occupations

Christine Chasek ¹, Shinobu Watanabe-Galloway ², Rachel Rutt ², Ashley Olson ³, Aaron Yoder ² Affiliations + expand PMID: 36759592 DOI: 10.1111/jrh.12749

Abstract

Purpose: Although there are many studies that have examined substance use and mental health concerns in rural areas, there is a paucity of research related to the prevalence of substance use and mental well-being in agriculturally based occupations. This study aimed to determine the prevalence of alcohol and opioid misuse and anxiety among adults in agriculturally based occupations in the rural Midwest and to determine the risk factors for alcohol misuse.

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Background



Project Ag Aware

- The long-term objectives:
 - Increase knowledge of substance use and misuse through outreach, education, and prevention
 - Determine the risk level of opioid and alcohol misuse among adults in agricultural communities in Nebraska and surrounding rural states







Methods

- Population: males and females, aged 19-90 involved in the agricultural industry: NE, IA, KS
- Dillman Survey Method¹ used: 12,000 surveys mailed in April-May, September-October 2020, March-April 2021
- Options of online or paper survey
- Surveys included

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- Demographics
- The Alcohol Use Disorder Identification Test (AUDIT)
- The Generalized Anxiety Disorder Screener (GAD-2)
- The Drug Abuse Screening Test (DAST-1)







Results

- Received 2,421 surveys back (20% response rate)
- Majority of participants were male (78.5%)
- Majority of participants were older adults M=61
 - Ages 40-64 (47.%)
 - Ages 65 or older (43.3%)
- Married (80.5%)
- Caucasian (98.3%)
- Occupation:
 - 65% of respondents identified as direct agricultural workers (farmer/rancher, farm hand/ranch hand, agribusiness)
 - 34.5% of respondents identified as indirect agricultural workers (bookkeeper, farm manager, retired)



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Results

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- Most respondents did not use opioids, illegal drugs, or prescription pills for non-prescription purposes (97.4%)
- Most respondents were low-risk for anxiety disorders (84.1%)
- Most respondents were low-risk for alcohol abuse or disorders (90.6%)



Results: Alcohol, Other Drugs, and Anxiety

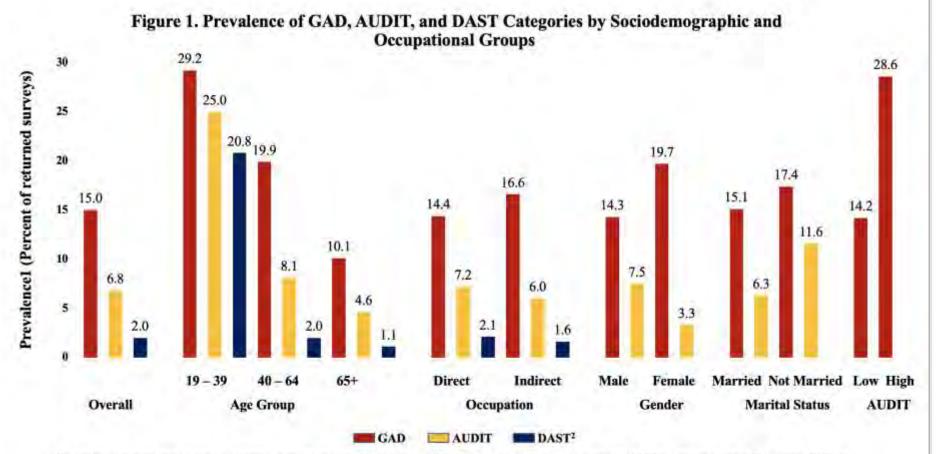
- The youngest respondents (aged 19-39) had the highest prevalence of high-risk alcohol use at 28.2%
- The youngest respondents (aged 19-39) had the highest prevalence of other drug use at 7.9%
- The youngest respondents (aged 19-39) had the highest prevalence of anxiety at 25.0%



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¹ Cut points for high risk were as follows: a score of 3 or higher on the GAD, a score of 8 or higher on the AUDIT, and a score of 1 on the DAST-1 ² DAST was not reported for marital status and gender due to low frequency/cell counts

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Implications

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- The youngest age group (ages 19 to 39), had the highest prevalence for all three outcomes:
 - GAD (25.0%)
 - AUDIT (28.2%)
 - DAST (7.9%)
 - Should we be concerned about older adults in Rural Agricultural Communities?

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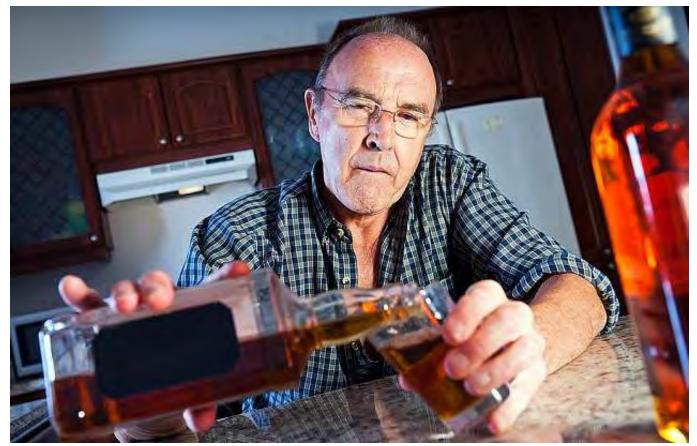


Baby Boomers at risk of becoming problem drinkers in their old age





What about Aging and Alcohol?



Baby boomers are 'drinking themselves into an early grave' because they're LONELY Baby Boomers

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- Hidden Epidemic-
 - Ageism and Stereotyping



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- According to the 2018 National Survey on Drug Use and Health, among adults 50 and older
- Binge alcohol use, defined as drinking more than 5 drinks for males and 4 drinks for females, was reported at 49.2% over the lifetime, with 17.1% reporting binge drinking in the past year, and 4.5% in the past month (SAMHSA, 2019).

Prevalence Nationally for Alcohol Use in Older Adults

- The most concerning use of substances in the older population is alcohol; almost 65% of people over the age of 65 reported high-risk drinking with more than a tenth of adults reporting binge drinking (SAMHSA, 2019).
- White et al. (2020) found that in recent years, increases in alcohol consumption for adults aged 50 and over has been significantly greater than younger aged adults.
- Similarly, Breslow et al. (2017) found that alcohol consumption trended upward in older adults, particularly among women.





Risk Factors

• Age-related changes in the neurotransmitter systems mediate the effects of drugs in the brain, even moderate drug use can present greater risks for the older adult.

• Physical changes in the aging body:

- Due to changes in body composition and decreased digestive and liver functions, ingesting alcohol can cause more damage to the central nervous system, vital organs, and other body functions in older adults.
- Reductions in body mass and water content (as well as decreased kidney functioning) increase the levels of drug serums in older adults who misuse substances, causing significant effects from even a moderate amount of drug use.
- Increased risk factors with falls; broken bones that take longer to heal.
- Prescription of medication for legitimate medical needs.
- *Grief and loss are not only risk factors for substance misuse, but they are also a result of substance misuse.*







NIAAA Guidelines for Alcohol Use Older Adults

- Men aged 65 or older consume no more than one standard drink daily (defined as 12 ounces of beer, 1 ounce of hard liquor, or 5 ounces of wine) and a maximum of two drinks on any occasion.
- These limits are even lower for women; one standard drink per day is considered at-risk drinking.
- No more than 7 standard drinks a week for men, 5 for women.
 - AS COMPARED TO
- Younger adults: no more than 14 drinks a week for **men** and 7 drinks per week for **women.**



What do we do?

Reduce Stigma Recognize the problem Take Action!

Trigger Warning

The next few slides and discussion contains images of past treatments of mental illness that may be disturbing to some. Please continue at your own discretion.



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Glore Psychiatric Museum St. Joseph Missouri



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Boxes

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The Wheel

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The Swing



The Chair



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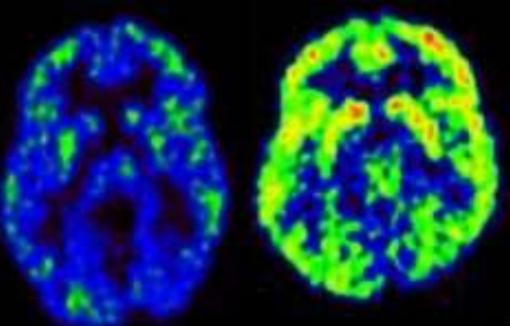


The Bath The Leeches





The Brain!



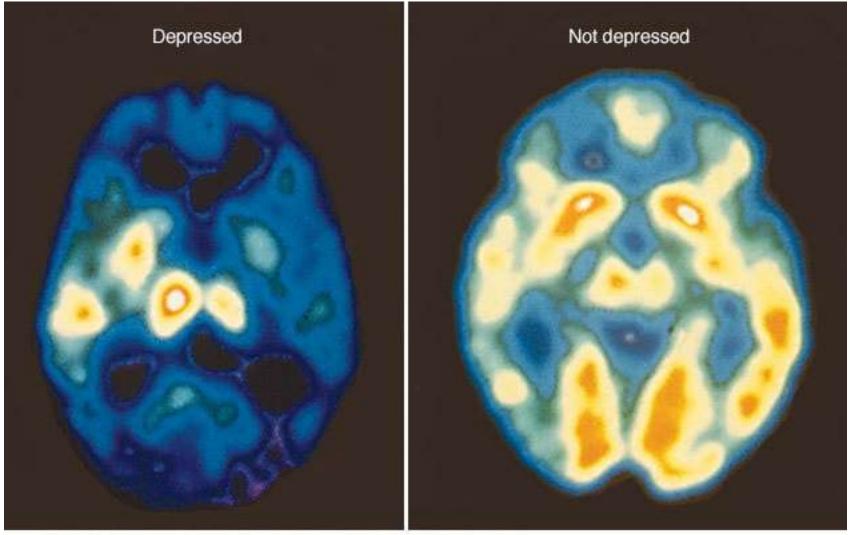
Alcoholic

Darker Colouring indicates depressed brain activity

Normal

Healthy levels of brain activity

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Strategies to Address Rural Behavioral Health Stigma



Assessment of Behavioral Health Issues

• Am I

-stressed,

-depressed, or

-over-blessed?







HOLMES AND RAHE STRESS SCALE

· YOU MAN FROM AND CONTAND IN THE THE DOLLARD OF THE WARDON'S CONTRACTORS ON THE

Holmes and Rahe found that a score of 150 gives you a 50-50 chance of developing an illness. A score of 300 + gives you a 90% chance of developing an illness, having an accident or "blowing up". Notice that "positive times" like Christmas, marriage and vocations are stressful.

multiply event by the number of times you have experienced it in the last year

	LIFE EVENT (STRESSOR)	VALUE WAR TOTAL
1.57	1 DEATH OF SPOUSE	100 X =
1.3	2 DIVORCE	73 X =
1.5	3 MARITAL SEPARATION	65 X _ =
	4 JAIL TERM	63 X =
1.0	5 DEATH OF CLOSE FAMILY MEMBER	63 X =
	6 MAJOR PERSONAL INJURY OR ILLNESS	53 X =
1.0	7 MARRIAGE	50 X =
	8 FIRED FROM WORK	47 X =
1.9	9 MARITAL RECONCILIATION	45 X =
	10 RETIREMENT	45 X =
	11 MAJOR CHANGE IN HEALTH OF FAMILY MEMBER	44 X =
	12 PREGNANCY	40 X =
1.6	13 SEX DIFFICULTIES	39 X =
	14 GAIN OF NEW FAMILY MEMBER	39 8 =
	15 MAJOR BUSINESS READJUSTMENT	39 X =
	15 MAJOR BUSINESS READJOSTMENT 16 MAJOR CHANGE IN FINANCIAL STATE	38 X =
1.2	17 DEATH OF CLOSE FRIEND	37 X =
	18 CHANGE TO DIFFERENT LINE OF WORK	36 X =
	19 MAJOR CHANGE IN NUMBER OF ARGUMENTS WITH SPOUSE -	35 X =
	20 MORTGAGE OVER STOD,000	31 X =
75	21 FORCLOSURE OF MORTAGE OR LOAN	30 X =
18	22 MAJOR CHANGE IN RESPONSIBILITIES AT WORK	29 X =
	23 SON OR DAUGHTER LEAVING HOME	29 X
	24 TROUBLE WITH IN-LAWS	29 X =
	25 OUTSTANDING PERSONAL ACHIEVEMENT	28 X =
1.2	26 SPOUSE BEGINS OR STOPS WORK	26 X =
16	27 BEGIN OR END SCHOOL	26 X =
	28 MAJOR CHANGE IN LIVING CONDITIONS	25 X =
	29 REVISION OF PERSONAL HABITS	24 X =
1.6		23 X =
	31 MAJOR CHANGE IN WORK HOURS OR CONDITIONS	20 X =
	32 CHANGE IN RESIDENCE OR SCHOOLS	20 X =
	33 MAJOR CHANGE IN RECREATION	19 X =
124	34 MAJOR CHANGE IN CHURCH ACTIVITIES	19 X =
	35 MAJOR CHANGE IN SOCIAL ACTIVITIES	16 X =
1.6	36 MORTGAGE OR LOAN LESS THAN \$10,000	17 X =
	37 MAJOR CHANGE IN SLEEPING HABITS	16 X =
	38 MAJOR CHANGE IN NUMBER OF FAMILY GET-TOGETHERS	15 X =
	39 MAJOR CHANGE IN EATING HABITS	15 X =
	40 VACATIONS, CHRISTMAS	13 X =
	41 MINOR VIOLATIONS OF THE LAW	p × =
		YOUR TOTAL





OWINCHS AND FEELINGS ARE FREQUENTLY A PERSONAL TRUMPH OVER GOOD THINKING YOU DELINE REALTY BY WHAT YOU KNOW, WHAT YOU BELIEVE AND WHAT YOU DO AGOLIT IT.

Zung Depression Screening

Zung Self-Rating Depression Scale

Patient's Initials:

Date of Assessment:

Please read each statement and decide how much of the time the statement describes how you have been feeling during the past several days.

Make check mark (✓) in appropriate column.	A little of the time	Some of the time	Good part of the time	Most of the time
1. I feel down-hearted and blue				
2. Morning is when I feel the best				
3. I have crying spells or feel like it	1			
4. I have trouble sleeping at night				
5. I eat as much as I used to	1			-
6. 1 still enjoy sex				
7. I notice that I am losing weight				
8. I have trouble with constipation				-
9. My heart beats faster than usual				· · · · · · · · · · · · · · · · · · ·
10. I get tired for no reason		-		
11. My mind is as clear as it used to be				
12. I find it easy to do the things I used to				
13. I am restless and can't keep still			1	
14. I feel hopeful about the future				
15. I am more irritable than usual				
16. I find it easy to make decisions				
17. I feel that I am useful and needed				
18. My life is pretty full				
19. I feel that others would be better off if I were dead				
20. I still enjoy the things I used to do				

Over the last 2 weeks, how often have you been bothered by the following problems? (Use """ to indicate your answer)	Not at all	Several days	More than half the days	Nearly every da
1. Feeling nervous, anxious or on edge	0	1	2	3
2. Not being able to stop or control worrying	0	1	2	3
 Worrying too much about different things 	0	1	2	3
4. Trouble relaxing	0	1	2	3
5. Being so restless that it is hard to sit still	0	1	2	3
6. Becoming easily annoyed or irritable	0	1	2	3
 Feeling afraid as if something awful might happen 	0	1	2	3

Alcohol screening questionnaire (AUDIT) Drinking alcohol can affect your health and some medications you may take. Please help us provide you with the best medical care by answering the questions below.

	liquor (one sl	
nthly less month	2 - 3 times a week	4 or more times a week
or 4 5 or 6	7 - 9	10 or more
than hthly Monthly	Weekly	Daily or almost daily
than nthly Monthly	Weekly	Daily or almost daily
than hthly Monthly	Weekly	Daily or almost daily
than hthly Monthly	Weekly	Daily or almost daily
than hthly Monthly	Weekly	Daily or almost daily
than nthly Monthly	Weekly	Daily or almost daily
Yes, but not in the last year	2	Yes, in the last year
100000000000000000000000000000000000000	2	Yes, in the last year
-	Yes, but not in the last year	Yes, but not in the

II III IV I

0-3 4-9 10-13 14+



Screeners and Assessments for Older Adults

- Addiction Severity Index (ASI)
- CAGE questionnaire (Cut down, Annoyed, Guilty, Eye-opener)
- Michigan Alcoholism Screening Test-Geriatric Version (MAST-G)
- The MAST-G contains 24 yes/no questions specifically developed to screen for alcohol problems in the older adult population. One affirmative answer to any of the 24 questions indicates a need for further evaluation, and a cutoff of five positive answers indicates an alcohol use disorder is present (Blow et al., 1992).

Michigan Alcoholism Screening Test-Geriatric Version

Table 13.1: Sample Questions from the Michigan Alcoholism Screening Test-Geriatric Version (MAST-G)

Does alcohol make you sleepy so that you often fall asleep in your chair?	
Do you hide your alcohol bottles from family members?	
Did you find that your drinking increased after someone close to you died?	-1)
Has a doctor or nurse ever said they were worried or concerned about your drinking?	
When you feel lonely does having a drink help?	

Source: CounsellingResource Research Staff, from "Michigan Alcoholism Screening Test-Geriatric." Copyright © 2012 by CounsellingResource.





Practical Things to Do

Get Medical Care

- Social Support
- ✤Eat Right
- **∻**Sleep
- Exercise
- Communicate
- Practice Gratitude
- Spirituality/Faith
- Self Growth

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Live in a rural area!

Active Balance Balance Commitment Insight Exercise Spirituality Aware edetables Persistence ess Preventive Health Fitness Social









Guess What??









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Get information into the industry

Talk about it on the radio Put articles in the paper

Work with doctors and medical providers Advocate for support groups Develop school programs Work with church groups to offer support



Share your story Be visible in the community Normalize it!

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Formal Supports



Rural Response Hotline 1-800-464-0258



COMHT (Counseling, Outreach, and Mental Health Therapy) Program



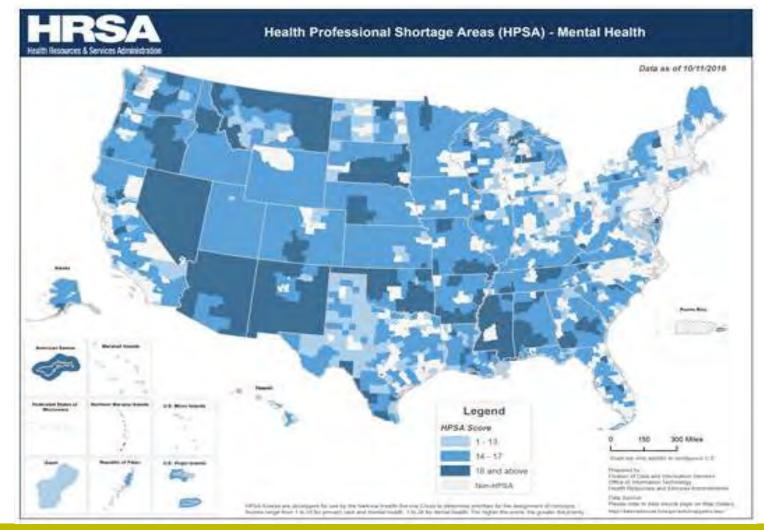
No-cost vouchers and information on confidential mental health issues for persons affected by the rural crisis are available. Funding for the COMHT Program is provided in part, through the Nebraska Department of Health & Human Services, Office of Rural Health, and Community Service Block Grant.







National shortage of BH providers



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