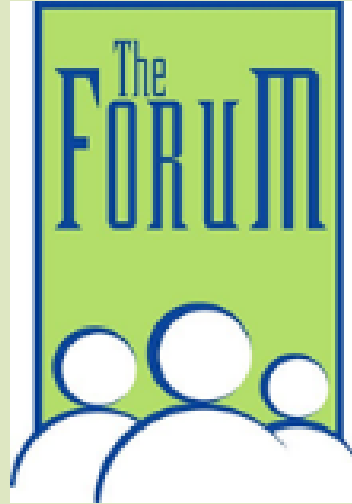




Suicide in Older Patients

W. Michael Johnson, MD

Scott A. Fields, PhD



Suicide in Older Patients



W. Michael Johnson, MD



Associate Director



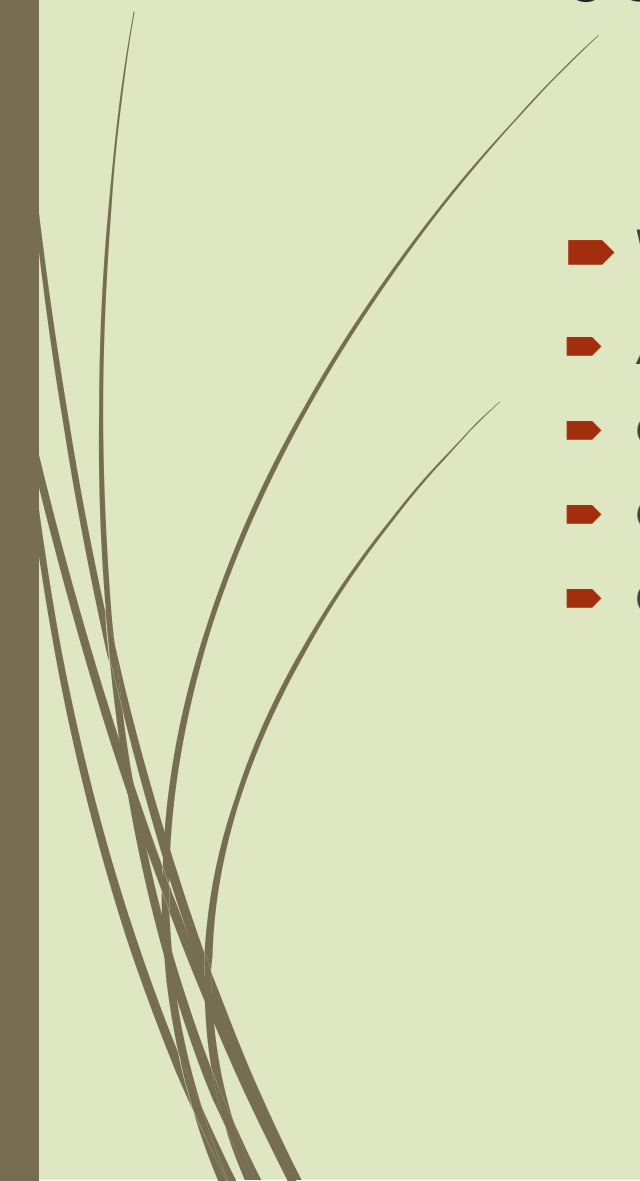
Grant Family Medicine Residency



Grant Medical Center



Columbus, OH





Suicide in Older Patients



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Disclosures

- ▶ The individuals presenting today have no conflicts of interest to disclose
- 



Objectives



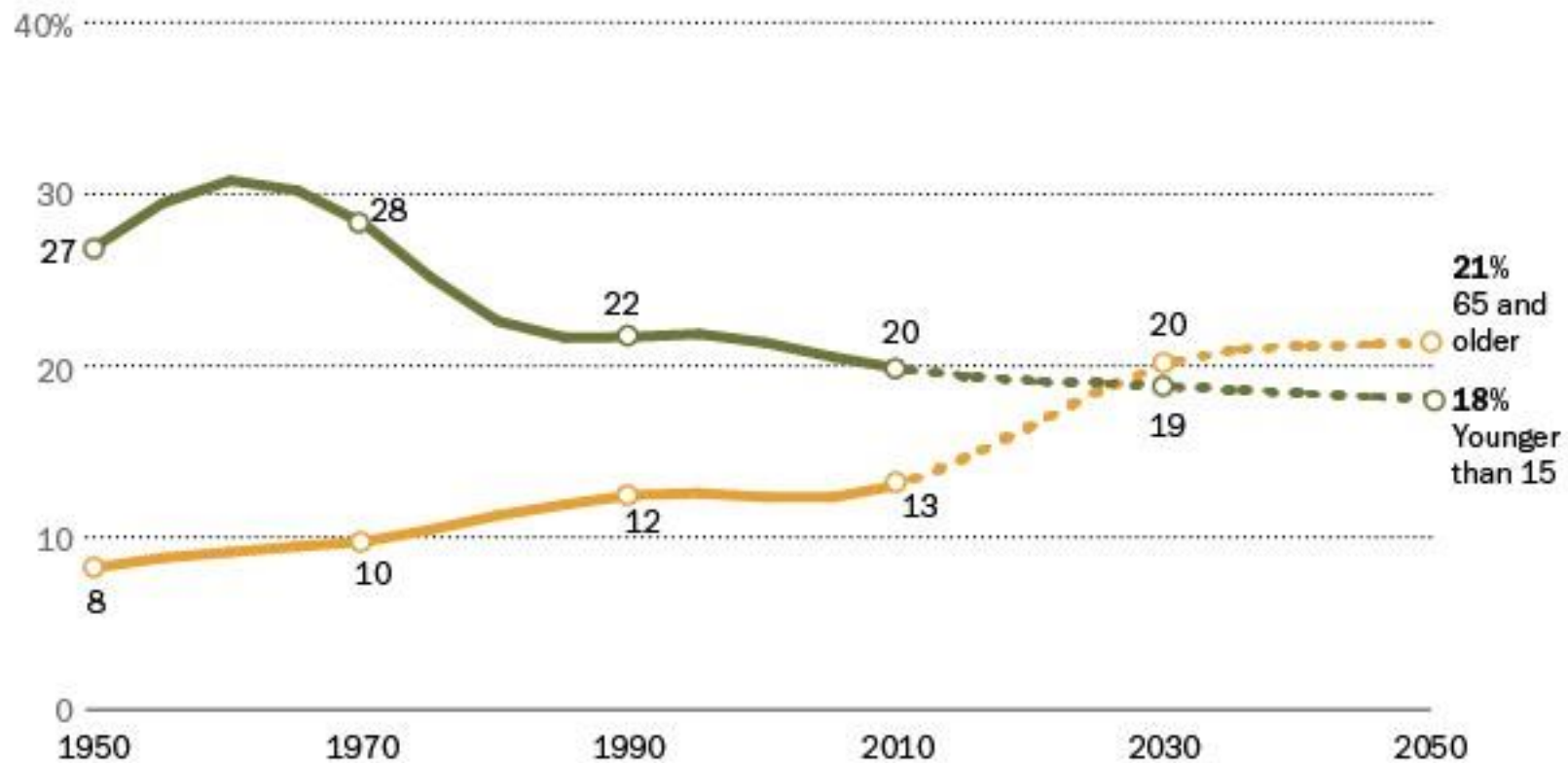
- ▶ Learn about the unique clinical problems that are often associated with suicidal ideation among patients 65 and older.
- ▶ Learn how to collaborate as physicians and behavioral health scientists in a primary care clinic to optimally screen and assess patients who might have suicidal ideation.
- ▶ Increase understanding about the treatment options, both outpatient and inpatient, for elderly patients with suicidal thoughts and/or suicidal plans

Total US Population – Steady Incline



US Population Trending Older

Percent of population younger than 15 and 65 and older in the U.S.



Source: United Nations, Department of Economic and Social Affairs, *World Population Prospects: 2012 Revision*, June 2013, <http://esa.un.org/unpd/wpp/index.htm>

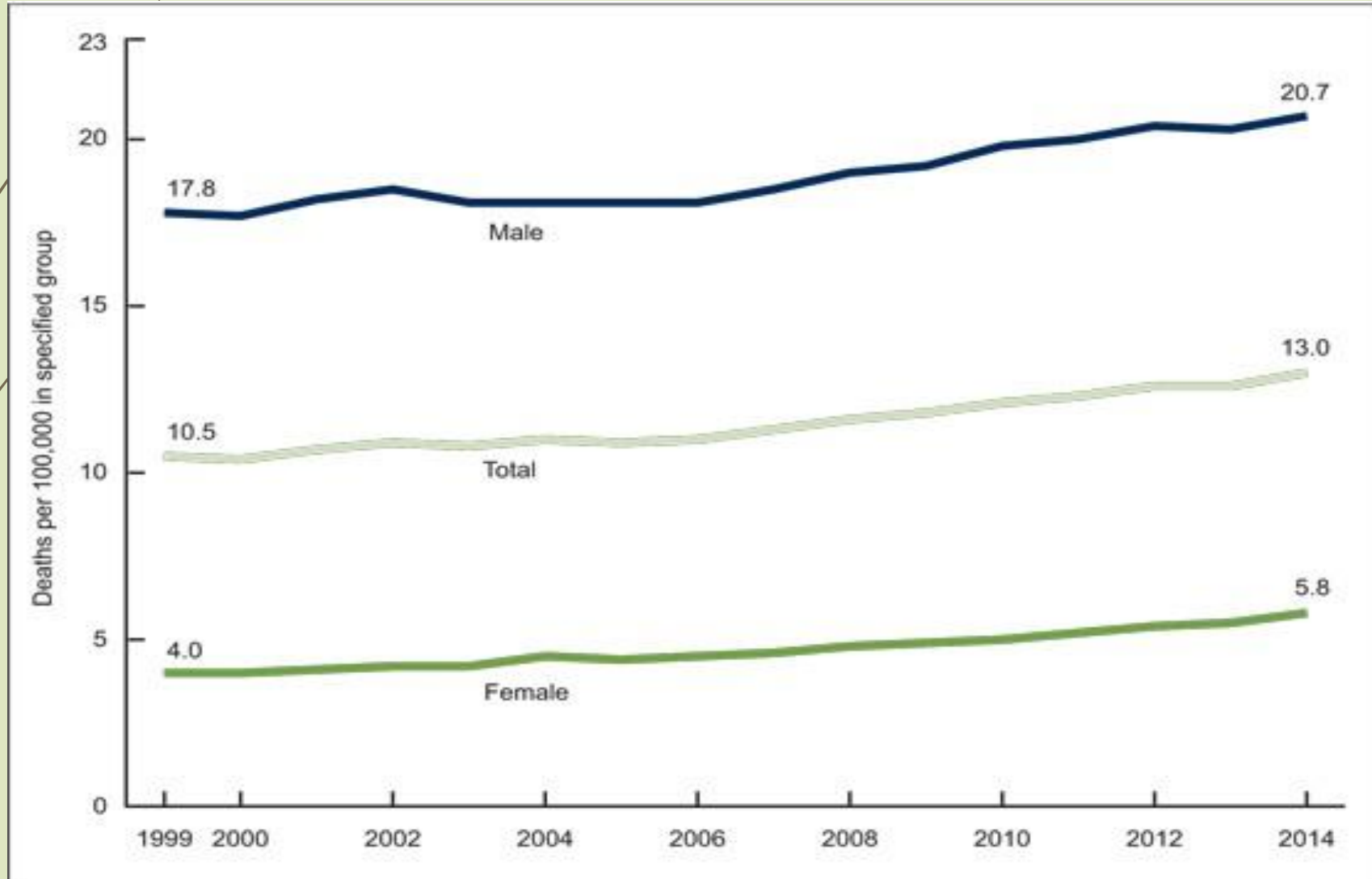
PEW RESEARCH CENTER



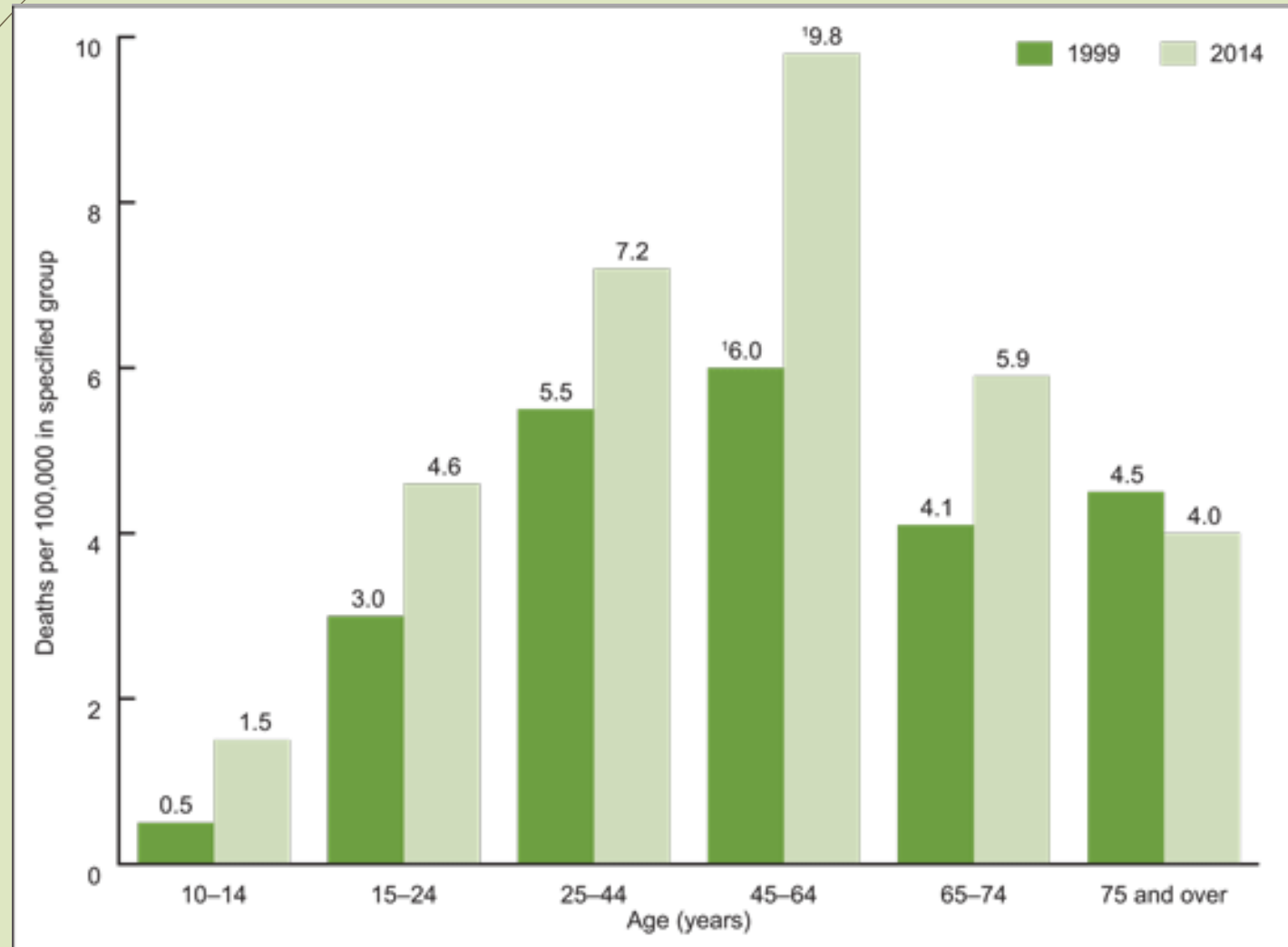
Suicide in the US

- Suicide is the 10th leading cause of death
- Suicide rates increased 24% from 1999-2014, sharply after 2006
- 44,000 per year
- 121 per day
- Half the suicides are by firearms
- Men at 3.5 times the rate of women

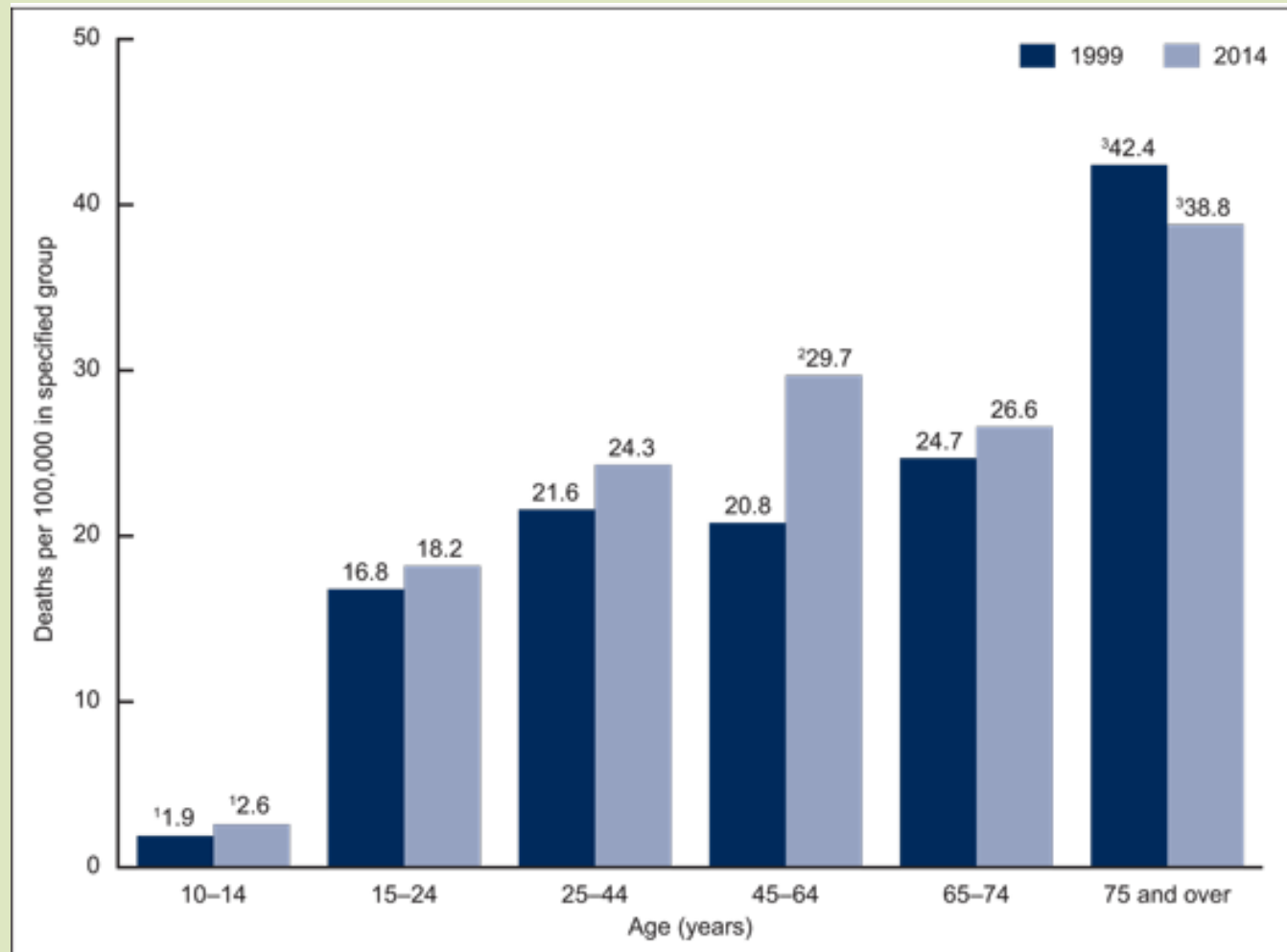
Suicide Rates per 100,000 (CDC)



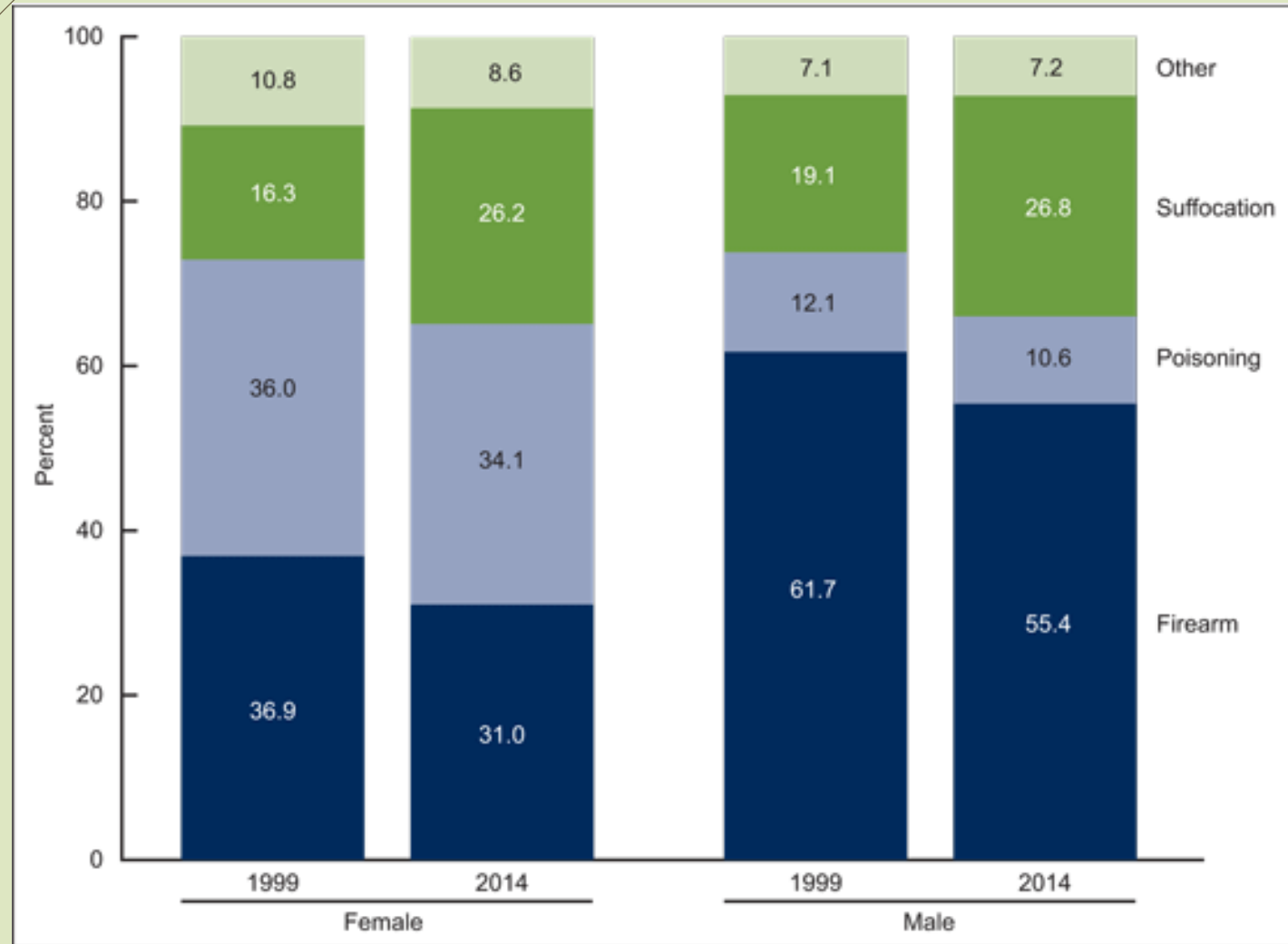
US Female Suicide Rates 1999-2014 (CDC)



US Male Suicide Rates 1999-2014 (CDC)



Methods of Suicide 1999-2014 (CDC)





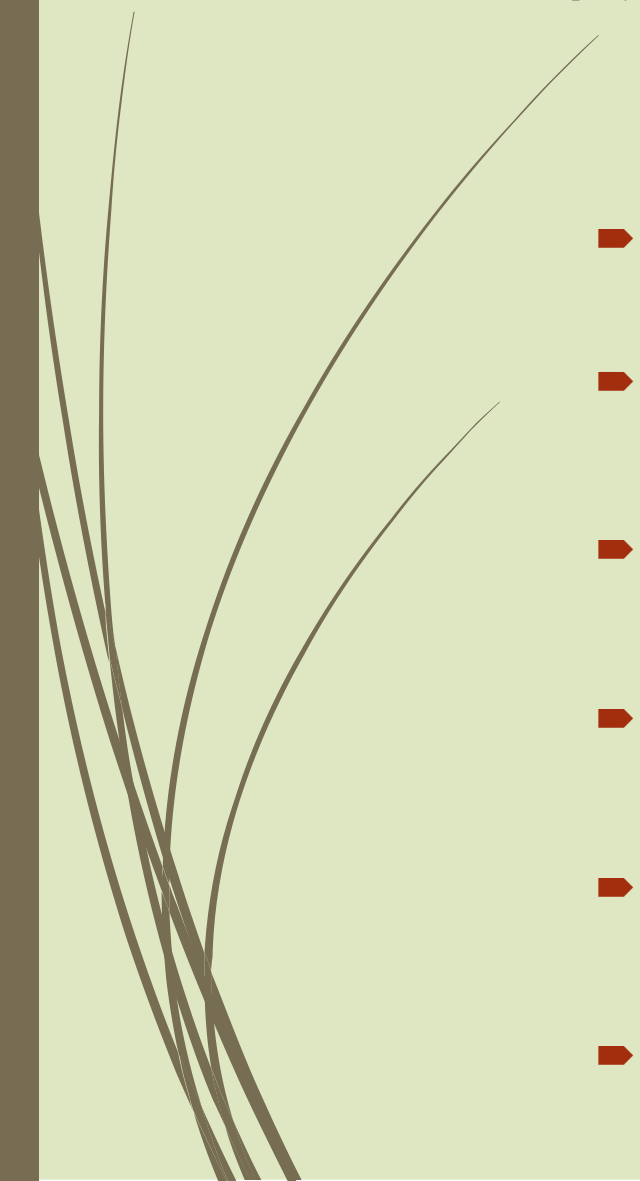
Summary



- Suicide rates increasing against a backdrop of declining mortality
- Suicide rates jumped after 2006
- Slight narrowing of suicide rates between females and males
- Suffocation methods increased
- Rates among American Indian/Alaska Natives are very high, although underreported (2.9% of deaths)
- Latino rates of suicide are slightly higher than whites (1.9% vs 1.6% of total deaths in 2014)



Nature of Suicide

- 
- **Teenagers and young adults**
 - Emotional and social stressors
 - Fantasizing and planning suicide
 - Inciting event
 - Access to lethal modes of harm
 - Impulsive actions



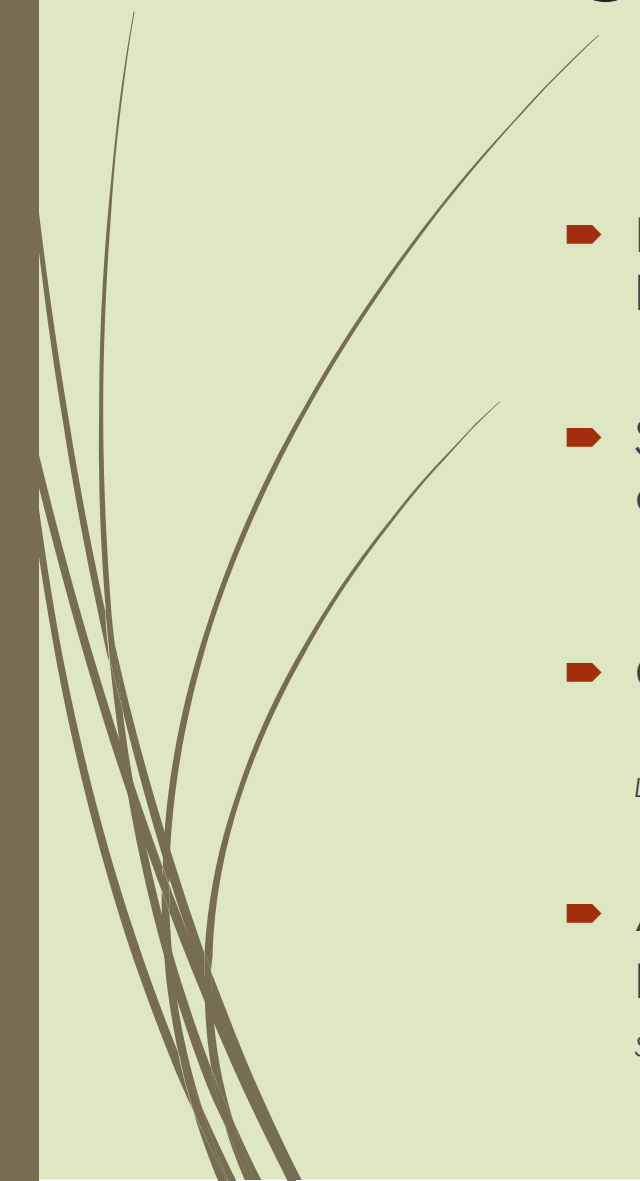
Nature of Suicide



- **Older adults**
- Compounding risk factors
- Passive death wishes
- Active thoughts of suicide
- Detailed plans
- Access to lethal modes of harm



Older Adults and Suicide



- ▶ Primary care physicians are most likely to see older adults with mental health problems
- ▶ Suicidal ideations are high among the elderly, especially those with depressive disorders (as high as 50%)
- ▶ Contemplation to completion

Luoma, Martin, & Pearson. (2002) Contact with mental health and primary care providers before suicide. Am J Psych. 159: 909-916

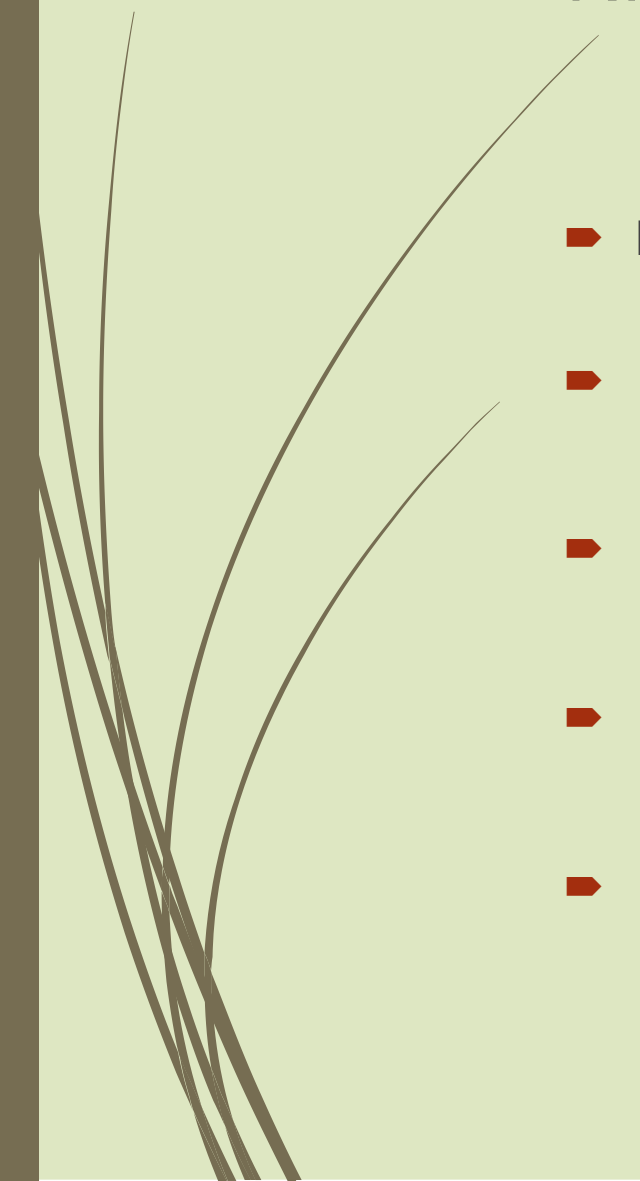
- ▶ Approximately 45% of elderly suicide completers see their primary care physician in the month prior

Skultety & Rodriguez (2008). Treating geriatric depression in primary care. Curr Psych Rep. 10: 44-50.





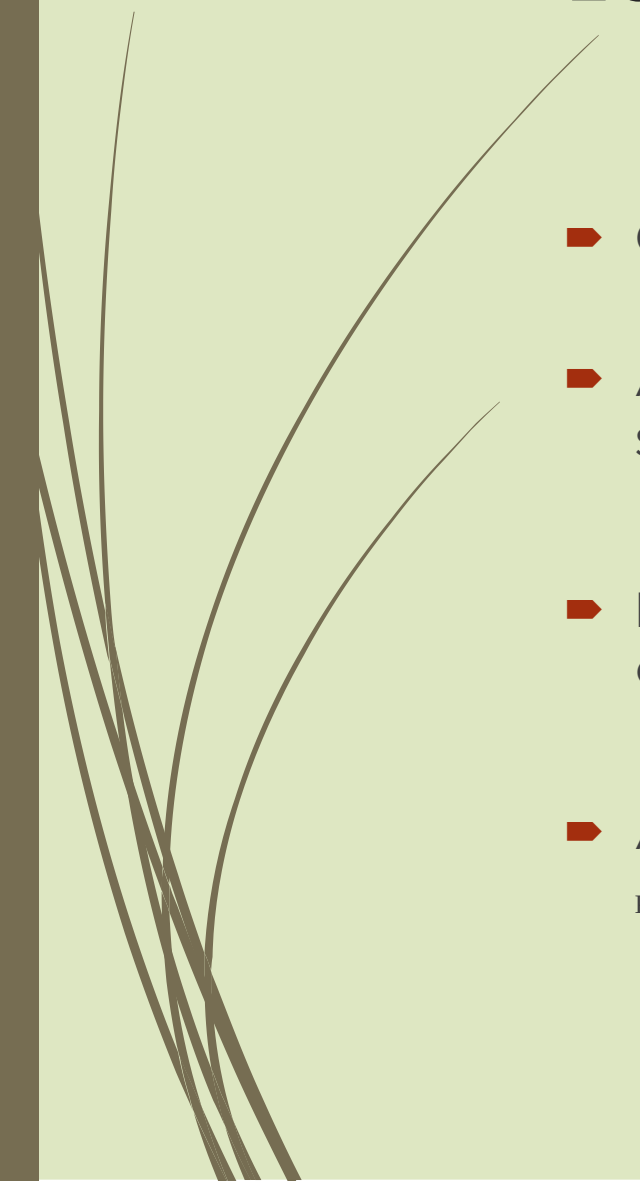
Risk Factors



- **Late life depression/mood disorders**
- Social disconnectedness
- Physical illness
- Functional impairment
- Cultural factors



Late Life Depression



- Often undetected
- As high as 10% of older adults seen in primary care office have clinically significant depression
- Highest in women, chronic medical issues, persistent insomnia, stressful life events, substance abuse, social isolation, cognitive impairment
- Associated with poor quality of life and increased mortality

Katon (2003). Clinical and health services relationships between major depression, depressive symptoms, and general medical illness. Biol Psychiatry. 54: 216-226



Late Life Depression

- Ongoing debate as to who we should screen for depression and how often in older adults
- US Preventative Task Force- must have adequate systems in place
- American Academy of Family Physicians- same requirement
- **AAFP** Grade B recommendation- high certainty of net benefit
 - *AAFP January 27, 2016*



Screening

- ▶ Patient Health Questionnaire 2 (PHQ2)
- ▶ Depressed mood and anhedonia in the previous 2 weeks
- ▶ Risk for Depression: Sensitivity of 100%
- ▶ Risk for Depression: Specificity of 77%

Li, et al (2007). Validity of the PHQ-2 in identifying major depression in older people. Am Geriatr Soc 55: 596-602

Over the past two weeks, how often have you been bothered by any of the following problems?

Little interest or pleasure in doing things.

- 0 Not at all
- 1 Several days
- 2 More than half the days
- 3 Nearly every day

Feeling down, depressed or hopeless.

- 0 Not at all
- 1 Several days
- 2 More than half the days
- 3 Nearly every day

Total point score:

Score interpretation:

Score	Prob of Major Depression %	Prob of any depressive disorder %
1	15.4	36.9
2	21.1	48.3
3	38.4	75.0
4	45.5	81.2
5	56.4	84.6
6	78.6	92.9



Assessment Instruments



TOOL	ITEMS	TIME	RESPONSE	SPEC_SENS	
Geriatric Depression Scale	30	15 minutes	Yes-No	92%	95%
Beck Depression Inventory	21	10 minutes	0-3	100%	96%
Patient Health Questionnaire 9	9	5 minutes	0-3	88%	88%



Evaluation

- History of bipolar disorder (MDQ)
- Presence of mania symptoms
- Mood disorder history- especially depression and suicide attempt
- Ongoing medical issues
- Functional impairment
- Current medications
- Substance abuse history



Risk Factor: Social Disconnectedness

- Social loneliness- lack of contact with others
- Emotional loneliness- lack of companionship and support

SOMETIMES THIS CAN BE PERCEIVED BY THE PATIENT AND OTHERS WILL NOT KNOW

Family members may say “He had so much support.”



Loneliness



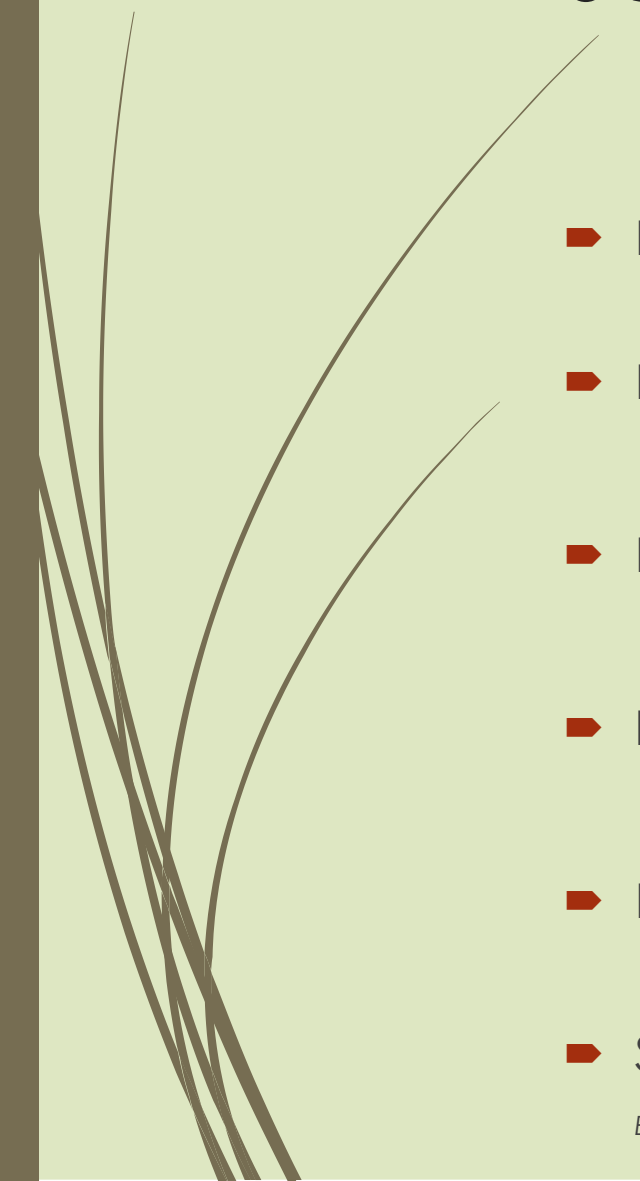
“So Lonely I Could Die” Julianne Holt-Lunstad, Ph.D.

APA Convention Presentation - August 5, 2017

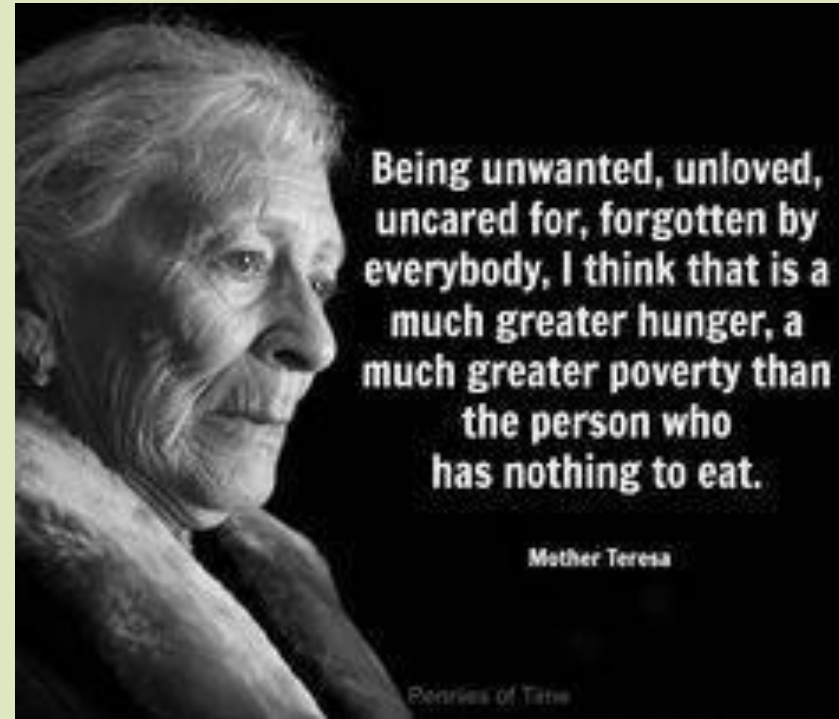
- Loneliness is deadly
- AARP figures from 2014
 - 42.6 million Americans over age 45 suffer chronic loneliness
 - 25% of population lives alone
 - 50% of population is unmarried
 - Shrinking American family
- Greater social contact is associated with 50% reduced risk of early death



Social Disconnectedness

- 
- Living alone
 - Loss of a spouse/partner
 - Loneliness
 - Interpersonal discord
 - Low social support- unemployment, low socio-economic status
 - Seen in increasing suicide rates among “Baby Boomers”

Bergland (2013, May 24th) Untreated depression linked to telomeres, aging, and disease. [Psychology Today](#).





Social Disconnectedness

- Person
- Telephone
- Email or written
- 11,000 participants 50 and older for 2 years
- Depressive symptoms by contact type
- In person every couple of months 11.5%
- In person 1-2 times per month 8.1%
- In person 1-2 times per week 7.3%

Taylor, et al (2015). Social isolation, depression and psychological distress among older adults J Am Geriatr Soc. 63: 2014-2022



Risk Factor: Physical Illness

- Cancers, seizure disorders, CHF, dementia, COPD

- 3 illnesses had a 3 fold risk

- 5 illness had 5 fold risk

Fiske, O'Reilly & Widoe (2008). Physical health and suicide in late life: An evaluative review. Clin Geront. 31: 31-50

- Studies have found 82% of elderly suicides were complicated by existing chronic medical issues

Duberstein, et al. (2006). Suicide at 50 years of age and older: Perceived physical illness, family discord, and financial strain. Psychol Med. 36: 1265-1274



Physical Illness



- Risk of suicide is highest early in the course of treatment for serious medical illnesses

Mitchell (2010). Short screening tools for cancer related distress. Br J Cancer. 18: 341-350

- Patients suffering chronic pain have 2-3 times the risk of suicide
- Type, intensity, duration, co-existing insomnia
- Especially in men

Tang & Crane (2010). Suicidality in chronic pain: A review of the prevalence, risk factors and psychologic links Psychol Med. 36: 575-586



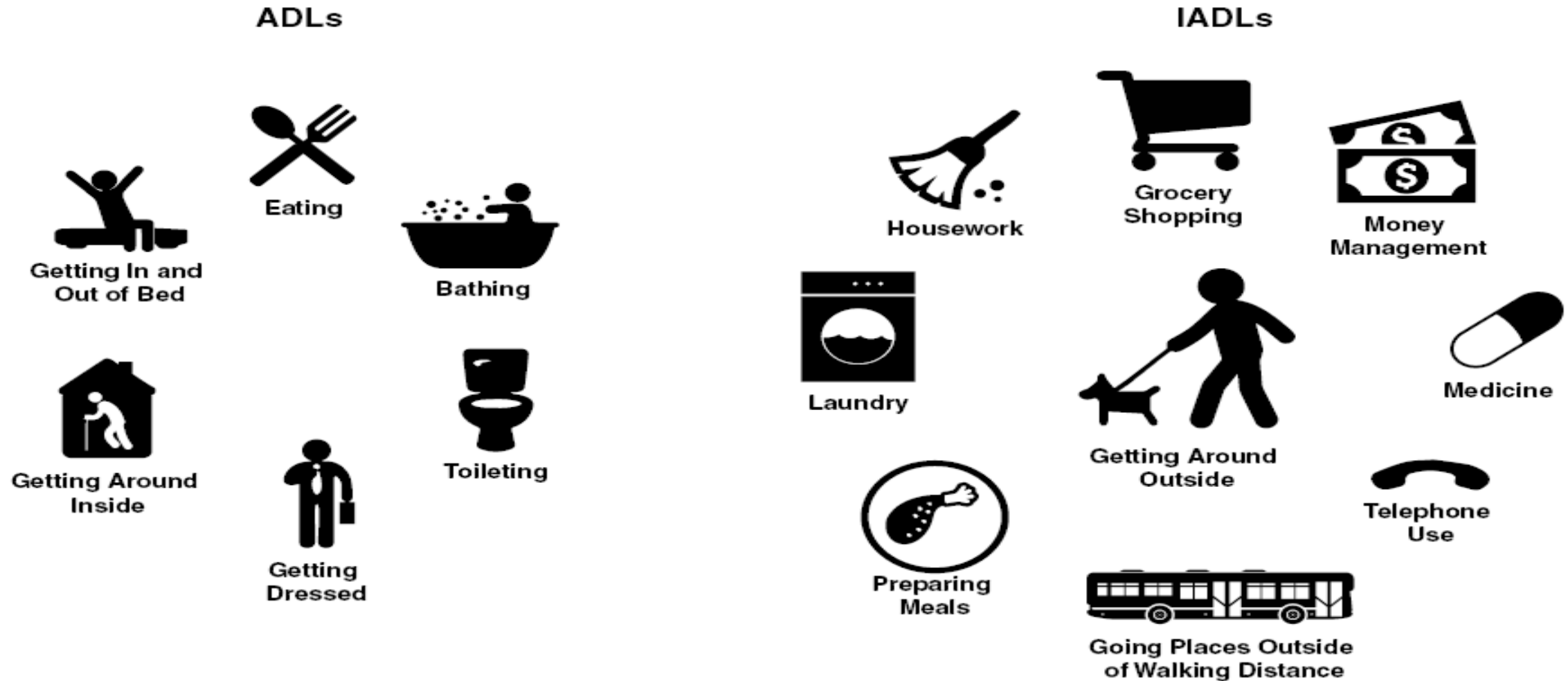
Risk Factor: Functional Impairment

- Deficits in instrumental activities of daily living elevated suicide risk higher than psychiatric disorders
- Hospitalizations, home health nurses- perceived lack of autonomy
- Preserved autonomy and social connectedness can act as buffers to functional decline

Lund, Nilsson & Avlund. (2010). Can the higher risk of disability onset among older people who live alone be alleviated by strong social relations? A longitudinal study of non-disabled men and women. Age Aging. 39: 319-326

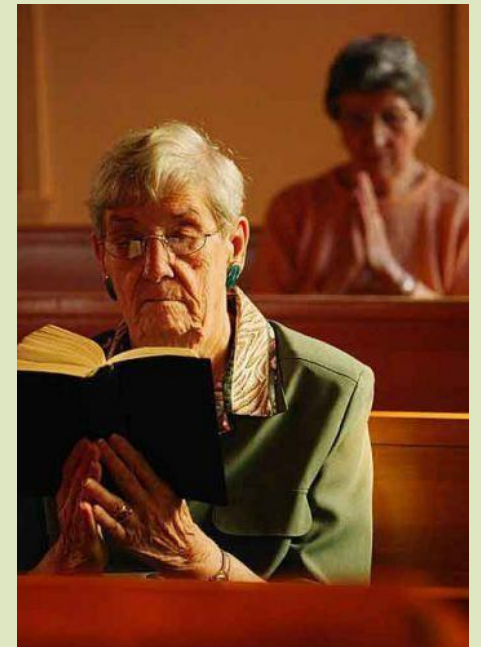
Figure 1

Activities of Daily Living (ADLs) and Instrumental Activities of Daily Living (IADLs)



Risk Factor: Cultural

Cohen, et al (2010). Social inequalities in the occurrence of suicidal ideation among older primary care patients. Am J Geriatr Psych. 18: 1146-1154



Cultural Risk Factor: Rural America

- Isolation – farther from resources, mental health care, medical care
- Higher rates of drug/ETOH use
- Increased access to lethal firearms
- Population in rural areas older
- Stigma of mental health treatment in rural areas

➤ Solutions:

Integrated Primary Care

Telehealth (ECHO Project)

Community Based Initiatives

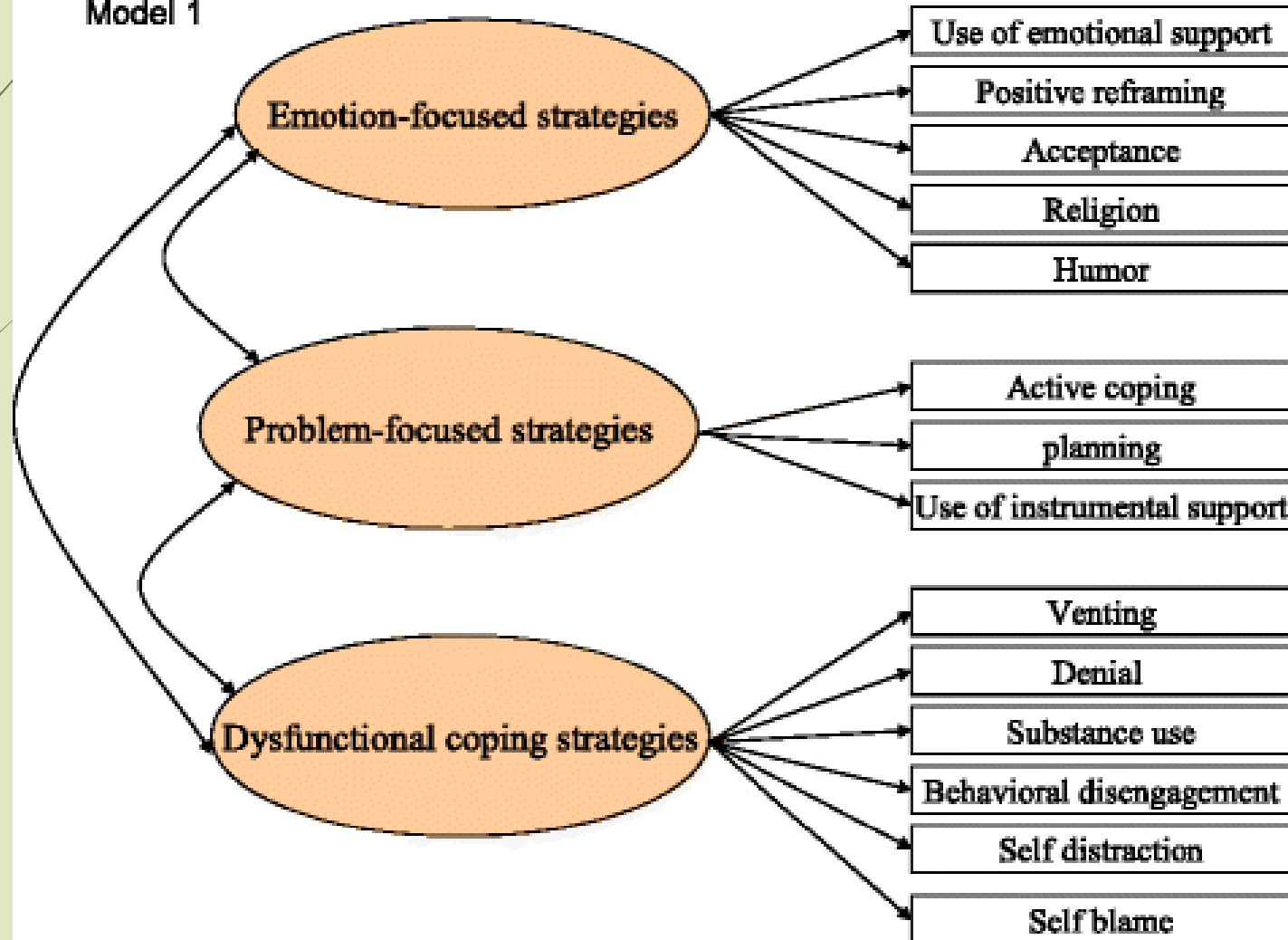
Counseling on Access to Lethal Means (CALM)

Clay (2014). *Reducing rural suicide* APA Monitor, 45 (4) 36.



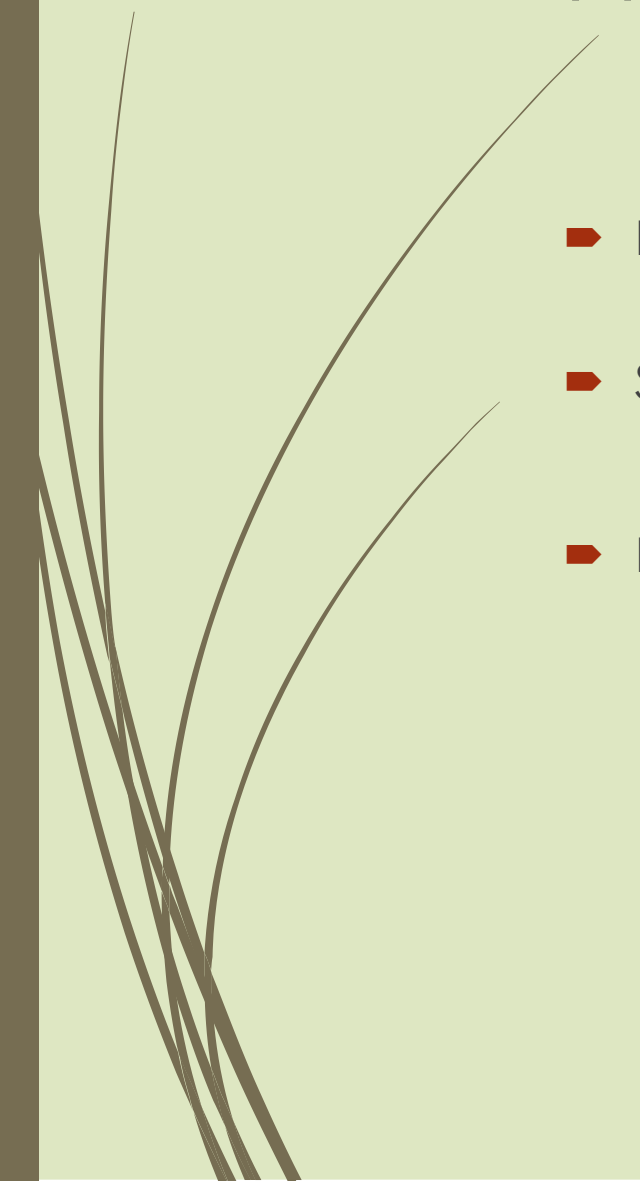
COPE

Model 1





Prevention

- Physician education
 - Screening
 - Response
- 



Physician Education

- ▶ Focus on physician recognition and management of late life depression
- ▶ 28 primary care physicians
- ▶ 73000 patients - Southwest Hungary – very high suicide rate 59/100,000
- ▶ Significant reductions in fatal and non-fatal suicide activities

Szanto, et al (2007). A suicide prevention program in a region with a very high suicide rate. Arch Gen Psychiatry. 64: 914-920

Screening

Thoughts that you would
be better off dead or of
hurting yourself in some
way 0 1 2 3

- ▶ Patient Centered Medical Home
- ▶ All 65 and older screened with PHQ-2 yearly
- ▶ PHQ-2 can identify those patients suffering depression
- ▶ Question #9 from PHQ-9 will identify those patients with suicidal ideation
- ▶ Lower the cutoff number, lower the age, add Question #9

Inigaki, et al (2013) Validity of PHQ-9 and PHQ-2 in general internal medicine primary care at a Japanese rural hospital: A cross sectional study. Gen Hosp Psychiatry. 35: 592-597

Screening

- Geriatric Depression Scale 5-item
- Looks at hopelessness, emptiness

Heisel, et al (2010). Screening for suicide ideation among older primary care patients. J Am Board Fam Med. 23:260-269

Table 5. Five-Item Geriatric Depression Scale

1. Are you basically satisfied with your life?	Yes/No
2. Do you often get bored?	Yes/No
3. Do you often feel helpless?	Yes/No
4. Do you prefer to stay at home rather than going out and doing new things?	Yes/No
5. Do you feel pretty worthless the way you are now?	Yes/No

NOTE: A "no" response to question 1, or a "yes" response to questions 2 through 5 each counts as one point. A score of two or more points is considered a positive screen.

Information from reference 26.



Response

- **No Suicidal Ideation**
 - Periodic screening
- **Passive Ideation**
 - Further evaluation/treatment
- **Active Ideation**
 - Treatment/consultation
- **Detailed Intent and Plans**
 - Admit to I/P Psychiatry



Treatment Goals

- Improved emotional, social, and physical functioning
- Improved quality of life
- Improved self-care
- Reduced mortality

Gallo, et al. (2007). The effect of a primary care practice-based depression intervention on mortality in older adults. Ann Intern Med. 146: 689-698



Treatment

- Pharmacotherapy
- Individualize to the patient
- Treatment trial of up to 12 weeks
- Expect response rate of 40-65%
- Continue for 6-12 months due to high rates of recurrence after early discontinuation
- No increased rates of suicide in elderly started on medications (as opposed to previous warning with young adults)

Dew, et al. (2007). Recovery from major depression in older adults receiving augmentation of anti-depressant pharmacotherapy. *Am J Psychiatry*. 164: 892-899.

Pharmacotherapy Overview

Medscape® www.medscape.com			
SSRIs	Initial Dose (mg/day)	Usual Dose Ranges (mg/day)	Special Considerations
Citalopram	10	20–30	Few drug interactions
Fluoxetine	5	5–60	Long half-life, may cause agitation and insomnia
Fluvoxamine	25	100–300	GI side effects common, weight gain
Paroxetine	5–10	10–40	Discontinuation effects, sexual side effects, increased anticholinergic effects
Sertraline	25	25–200	Few drug interactions, may be agitating
Escitalopram	5	10–20	Newer agent, similar to citalopram
Other Agents			
Venlafaxine	37.5	75–225	Effects on blood pressure, discontinuation effects, wide effective dose range
Bupropion SR	100	100–150 b.i.d.	Agitation, insomnia, lowered seizure threshold, less sexual dysfunction
Mirtazapine	15	30–45	Weight gain, sedation
Desipramine	10–25	50–150	Anticholinergic and cardiovascular side effects; needs therapeutic drug monitoring
Nortriptyline	10–25	75–150	Anticholinergic and cardiovascular side effects; needs therapeutic drug monitoring

* modified from www.geriatricsatyourfingertips.org (website of American Geriatric Society)



Treatment

- **Psychotherapy**
- Cognitive behavioral therapy
- Interpersonal psychotherapy
- Problem-solving therapy
- 6-12 sessions
- 45-70% improvement in depression and 50% reduction in symptoms

Pinquart, Duberstein & Lyness. (2006). Treatments for later life depressive conditions: A meta-analytic comparison of pharmacotherapy and psychotherapy. Am J Psychiatry. 163: 1493-1501



Other Treatments

- **Group exercise therapy-** data is positive; use as adjunct
- **Electro-convulsive therapy-** data is positive; use as last resort when others have failed
- **Magnetic pulse therapy-** data lacking at this time

Wilkinson (2007). Psychological treatments in the management of severe late-life depression: at least as important as ECT. *Int Psychogeriatr.* 19:10-24



Suicide in the Elderly

- 
- A problem that is on course to worsen-
men, chronic diseases, population, rural trends
 - Currently focused on depression- a part of the puzzle
 - The health centers need improvement
depression screening, palliative care
 - PHQ-2 vs. PHQ-3 (?) vs. GDS-5
 - A robust plan of action in place for clinics

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