### ASPPH Presents Webinar Series

# New Undergraduate Curriculum Introduces Students to Alzheimer's and Dementia, a Rapidly Growing Public Health Issue

Thursday, December 1, 2016 2:00 pm-3:00 pm Eastern

### ASPPH.ORG

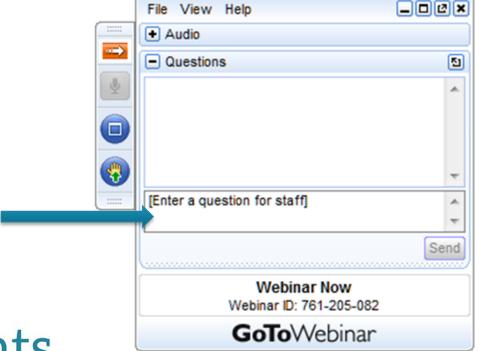
1900 M Street NW, Suite 710 Washington, DC 20036 Tel: (202) 296-1099 Fax: (202) 296-1252



### **Method for Submitting Questions**

### Join the Conversation...

- You can ask questions in writing anytime during the webinar.
- Simply type them in the "Questions" field on the right side of your screen.







### **Today's Presenters**



Molly French, MS
Alzheimer's Association



Tara Redd, MEd, MCHES Emory University



Jean Marie Place, PhD
Ball State University



Cheryl Dye, PhD Clemson University



# AN ALZHEIMER'S CURRICULUM for UNDERGRADUATE PUBLIC HEALTH STUDENTS

### A PUBLIC HEALTH APPROACH TO ALZHEIMER'S AND OTHER DEMENTIAS









Emory Centers for Training and Technical Assistance

alzheimer's 95 association



Emory Centers for Training and Technical Assistance

# Molly French

Director, Public Health

Alzheimer's Association



# **Objectives**

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

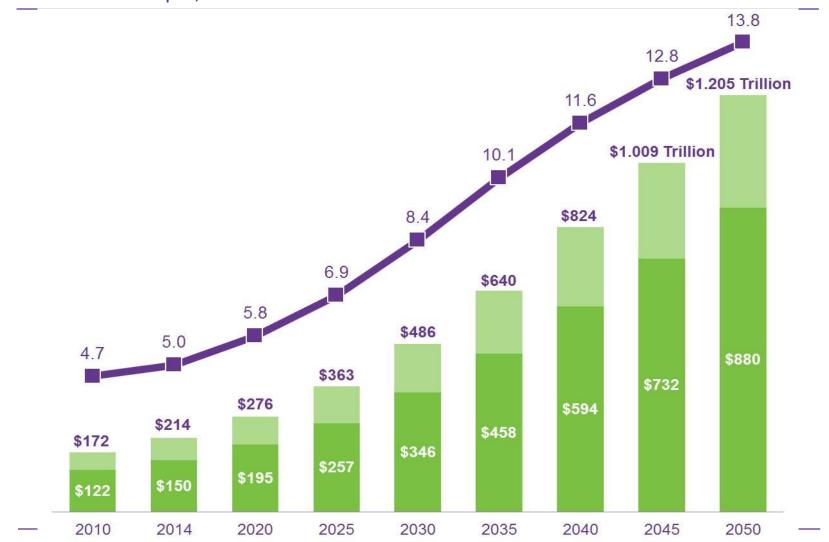
- Recall two facts about the growing burden and impact of Alzheimer's disease
- Describe two features of the Alzheimer's curriculum

 Give at least one example of how the teaching faculty used the curriculum with undergraduate students

# Why Alzheimer's

### **Alzheimer's Prevalence and Costs**

In Millions of People; In Billions of 2014 Dollars



# Why Alzheimer's

- Opportunities exist to reduce risk and promote early detection and diagnosis, but...
- Few public health and health care professionals have needed expertise to mitigate the impact of disease at population and individual levels.
- The public is not prepared....neither are your students.

# Background

### The Healthy Brain *Initiative*

### **Origins**

Began in 2005 by CDC and the Alzheimer's Association to:

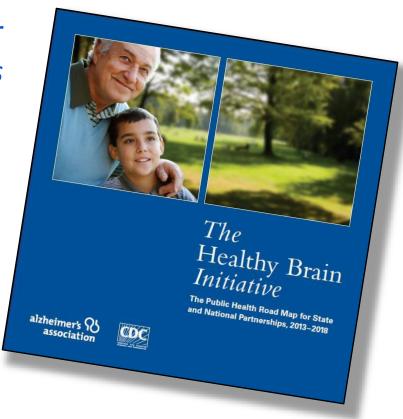
- Mobilize a population-based response to growing burden of Alzheimer's, other dementias.
- Foster a multi-faceted approach.
- Generate public-private partnerships to alter outcomes.

# Public Health Road Map

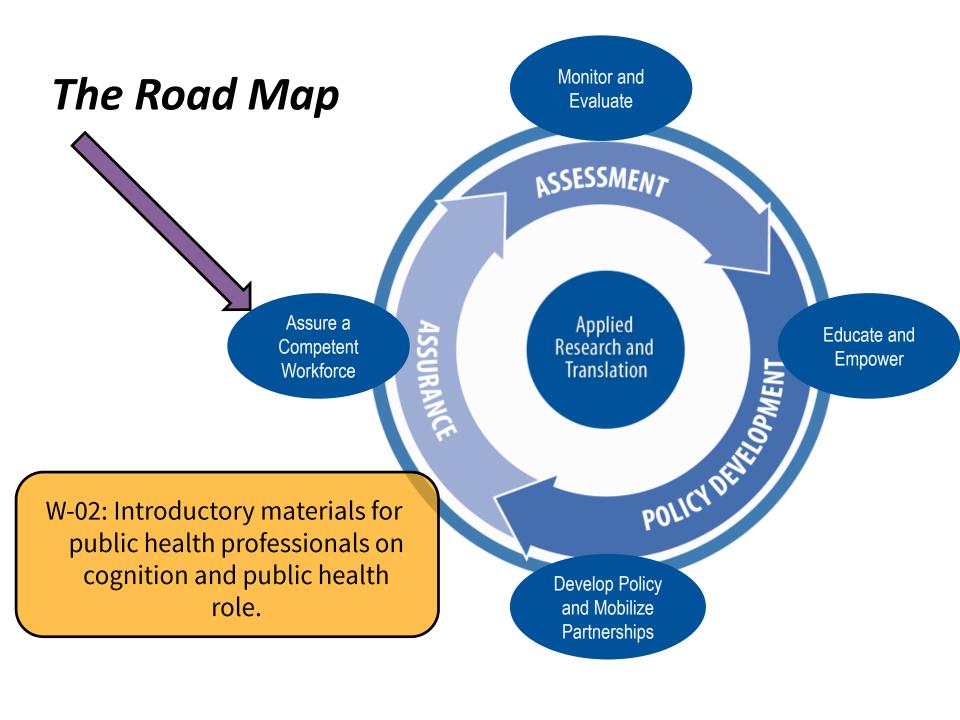
The Public Health Road Map for State and National Partnerships 2013-2018

35 action items for public health officials to:

- Promote cognitive functioning
- Address cognitive impairment and Alzheimer's disease
- Meet the needs of caregivers



Jointly developed by the Centers for Disease Control and Prevention (CDC) and the Alzheimer's Association in 2013.



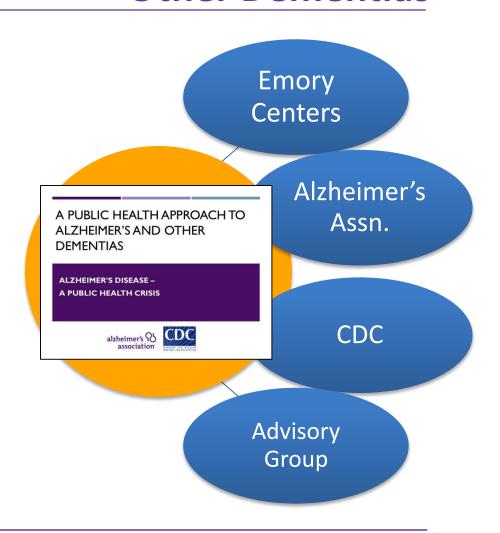
### A Public Health Approach to Alzheimer's and Other Dementias

### **Purpose**

 Increase understanding of Alzheimer's disease and other dementias as a growing public health issue

### Use

- Undergraduate public health courses
- Linked to competencies





### Tara Redd

Emory Centers for Training and Technical Assistance

Emory University



### The Curriculum

### Goal of the Curriculum

- Increase knowledge of:
  - Alzheimer's disease and dementia as a public health issue
  - The role of public health in addressing
     Alzheimer's and dementia
- Increase interest in these topics among the future public health workforce

# Curriculum Design Assumptions

### • Audience:

- Undergraduate PH students
- Faculty in schools and programs of PH
- Introductory content for PH undergraduates
- 4 Modules stand alone or together
- Ease of use for faculty
- Easy integration into existing courses
- Adaptable time and content
- Competency-based



## Competency Resources

- Association of Schools and Programs of Public Health (2011) Undergraduate Learning Outcomes Model
- Association for Gerontology in Higher Education (2014) Gerontology Competencies for Undergraduate and Graduate Education
- The Council on Linkages Between Academia and Public Health Practice (2014) Core Competencies for Public Health Professionals
- National Association of Chronic Disease Directors

  NACDD Domains and Competencies
- National Commission for Health Education Credentialing, Inc (2010) Areas of Responsibilities, Competencies, and Sub-competencies for the Health Education Specialists 2010



### **Module Content**

### **Module 1: Alzheimer's Disease – A Public Health Crisis**

 Frames Alzheimer's disease and dementia as a public health epidemic with a large and rapidly growing burden and impact on nation.

### **Module 2: Alzheimer's and Other Dementias – The Basics**

 Describes Alzheimer's disease and other dementias including symptoms, stages, risk factors, and diagnosis/management.

### **Module Content**

# Module 3: Alzheimer's Disease – What is the Role of Public Health?

 Discusses 3 public health tools that play a significant role in mitigating the Alzheimer's disease epidemic: surveillance, primary prevention, and early detection and diagnosis.

### Module 4: Public Health and Dementia Capable Systems

 Describes concept of "dementia capable" systems and explores support of such systems by research translation, support services, workforce training, and creation of dementia-friendly communities.



# Design Components & Aids

- Faculty guide
- Talking points
- Learning activities
- Sample test questions by module
- Competency list by module

- PowerPoint slides
- Discussion questions
- Video resources
- Case studies



## The Curriculum Pilot

# Background

 In March-July 2016, the curriculum was piloted in 15 schools and universities with undergraduate public health programs

### Purpose:

- Assess the content in each module, usefulness, and design of the curriculum
- Feedback to inform enhancements to the curriculum
- Examine avenues for disseminating the curriculum to faculty teaching undergraduate public health courses at schools and programs of public health
- Revisions to curriculum implemented for final release in Fall 2016



# **Pilot Components**

- Faculty received pilot materials and instructions
- Faculty delivered one or more modules in class
- Students completed paper pre-test/post-test immediately following the curriculum delivery
- Faculty completed online Faculty Evaluation survey
- Faculty participated in 30-minute indepth interview



# **Pilot Participants**

### Who piloted the curriculum?

- 25 Faculty
- 1,077 Students
- 15 Universities
- 11 States

Course Name (n=number of teaching faculty)			
Standalone Course (n=6)			
Introduction to Public Health (n=5)			
Senior Capstone Seminar (n=2)			
Health Aspects of Aging (n=2)			
Worksite Health Promotion			
Applied Research			
Adult Development & Aging			
Health Promotion of the Aged			
Epidemiology and Human Disease			
Community Assessment			
Community Health			
Physical Activity and Aging			
Introduction to Global Health			



Name	Institution/School	Title/Position
Kayleigh Allen, MS, PAPHS	University of Indianapolis	Project Coordinator
Linda Altmeyer	Alzheimer's Association, Greater Indiana	Director of Programs
Christy Bazan, MPH	Illinois State University	Instructional Assistant Professor
Lisa Borrero, PhD	University of Indianapolis	Assistant Professor of Gerontology
Ellen Burton, MPH	University of Indianapolis	Senior Project Director Center for Aging & Community
Beth Canfield-Simbro, PhD, MPH	University of Mount Union	Associate Professor
Sara Corwin, MPH, PhD	Arnold School of Public Health, University of South Carolina	Assistant Dean, UG Student Services
Jamie Cromley, MPH	Georgia Southern University, Jiann-Ping Hsu College of Public Health	Lecturer
Cheryl Dye, PhD	Clemson University	Professor of Public Health Sciences, Director CU Institute for Engaged Aging
Debra Fetherman, PhD	The University of Scranton	Program Director Community Health Education
Charlotte Galloway, PhD, MSPH	University of South Carolina - Arnold School of Public Health	Instructor/Academic Advisor
Jolynn Gardner PhD, CHES	American University	Director, Public Health Program
Joyce Gossard, MS	University of South Carolina	Instructor/Advisor
Aline Heffernan, MPH	SUNY Albany	Teaching Assistant
Robert Jecklin, MPH, PhD	University of Wisconsin - La Crosse	Assistant Professor
Ritwik Nath, M.S.	HDFS, Oregon State University	Doctoral Candidate
Mumbi Okundaye, MPH	University of Georgia	Associate Academic Professional
Jean Marie Place, PhD	Ball State University	Assistant Professor
Kirsten Rodgers, EdD, MSPH, MCHES	Georgia College and State University	Assistant Professor
Denise Saxman, LCSW	Alzheimer's Association, Greater Indiana	Associate Director of Family Services
Juliet Sekandi, DrPH	University of Georgia	Instructor/ Post-doc Research & Teaching Fellow
William Staples, PT, DHSc, DPT, GCS	University of Indianapolis	Associate Professor
Cate Teuten Bohn, MPH	University of Albany School of Public Health	Instructor
Jennifer Tripken, EdD	Marymount University	Assistant Professor
Amie Wojtyna, PhD, MSBS, MPH	University of Indianapolis	Assistant Professor
Tamara Wolske, PhDc	University of Indianapolis Center for Aging & Community	Academic Program Director



# **Teaching Faculty**

- 25 teaching faculty (faculty, staff, teaching assistants) participated in the pilot
- 65% had personal experience with AD and/or other dementias
- 44% rated themselves as having some knowledge of AD and related dementias
- 100% reported being extremely satisfied or somewhat satisfied with their experience teaching the curriculum
- 70% plan to teach the curriculum again

# **Faculty Response**

Question	N	Strongly disagree	Somewhat disagree	Neutral	Somewhat agree	Strongly agree
I was able to incorporate the curriculum with my existing course content	23	0 (0%)	0 (0%)	3 (13%)	9 (39%)	11 (48%)
The content was well received by my students	23	0 (0%)	0 (0%)	2 (9%)	11 (48%)	10 (43%)
I was able to adapt the curriculum to work with my class size	23	0 (0%)	1 (4%)	2 (9%)	3 (13%)	17 (74%)
It is important that Alzheimer's and other dementias are included in undergraduate public health courses	23	0 (0%)	0 (0%)	0 (0%)	4 (17%)	19 (82%)

## **Students**

1,077 students completed a student evaluation

Majority of students were undergraduate public health students

 59% responded having family/friends impacted by AD or dementia

### Students' Reaction to Curriculum

Question (n=1,077)	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Blank
The content is appropriate for undergraduate public health students.	2	6	16	242	764	47
	(0%)	(1%)	(2%)	(22%)	(71%)	(4%)
The connection between public health and Alzheimer's and other dementias was made clear.	2	6	44	337	641	47
	(0%)	(1%)	(4%)	(31%)	(60%)	(4%)
As a result of the content presented, I am interested in learning more about Alzheimer's and other dementias.	8	35	184	409	394	47
	(0%)	(3%)	(17%)	(38%)	(37%)	(4%)
As a result of the content presented, I am more knowledgeable about Alzheimer's and dementias as a public health issue.	2	13	64	381	573	48
	(0%)	(1%)	(6%)	(35%)	(53%)	(5%)
It is important that Alzheimer's and dementias are included in undergraduate public health courses.	2	4	64	337	622	48
	(0%)	(0%)	(6%)	(31%)	(58%)	(5%)

### Value of Curriculum

Group	Themes
Students	<ul><li>AD as a public health issue</li><li>Good intro to topic</li></ul>
Faculty	<ul><li>Important public health topic</li><li>Easy to use/implement</li><li>Good resource</li></ul>
Administration	<ul> <li>Public health focus</li> <li>Comprehensive resource</li> <li>CDC/Alz Assoc approved</li> </ul>

\*Source: Faculty Evaluation



### The Enhanced Curriculum

# Redesigned Cover

### A PUBLIC HEALTH APPROACH TO ALZHEIMER'S AND OTHER DEMENTIAS









### PowerPoint Slides with Notes

### WHAT IS ALZHEIMER'S DISEASE? Most common type of dementia Accounts for 60% - 80% of cases Irreversible, progressive brain disorder Slowly destroys memory, thinking skills, and ability to carry out basic functions Alzheimer's Association. What is Dementia? Accessed June 8, 2015 from website: http://www.alz.org/what-is-dementia.asp#causes National Institute on Aging. (2015) Alzheimer's Disease Fact Sheet.

Certain brain diseases and conditions cause dementia. Alzheimer's disease is the most common type of dementia. It accounts for an estimated 60% to 80% of cases.

Alzheimer's disease is an irreversible, progressive brain disorder that slowly destroys memory and thinking skills, and eventually the ability to carry out basic functions.

There are currently no known ways to **prevent**, **cure**, or **slow** the progression of Alzheimer's disease.

\*Note: The image on the slide shows a healthy brain (left side) as compared to a severe Alzheimer's brain (right side). The Alzheimer's brain is significantly smaller than the healthy brain.

Video supplement: "What is Alzheimer's disease?" TedEd. Link: https://www.youtube.com/watch?v=yJXTXN4xrl8

# Talking Points

### SLIDE 6:

### What is Alzheimer's Disease?3

- · Most common type of dementia
- Accounts for 60% 80% of cases
- · Irreversible, progressive brain disorder
- Slowly destroys memory, thinking skills, and ability to carry out basic functions

### TALKING POINTS:

Certain brain diseases and conditions cause dementia.

Alzheimer's disease is the most common type of dementia. It accounts for an estimated 60% to 80% of cases.

Alzheimer's disease is an irreversible, progressive brain disorder that slowly destroys memory and thinking skills, and eventually the ability to carry out basic functions.

There are currently no known ways to **prevent**, **cure**, or **slow** the progression of Alzheimer's disease.

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National Institute on Aging. (2015) Alzheimer's Disease Fact Sheet.

Image source: National Institute on Aging

<sup>&</sup>lt;sup>3</sup> Alzheimer's Association. What is Dementia? Accessed June 8, 2015 from website: http://www.alz.org/what-is-dementia.asp#causes

# Student Engagement Options

#### STUDENT ENGAGEMENT OPTIONS

In addition to the PowerPoint slide deck and guide, there are additional resources included in this guide. These resources are designed to increase student engagement and enhance understanding of the concepts covered in this module. Following the slide guide, there is a series of case studies and a list of video resources. It is recommended that the presenter review these resources to determine if these additional materials would be useful in illustrating the concepts covered in the module.

#### DISCUSSION QUESTIONS

The following discussion questions are included in the slide deck:

- What are Medicare and Medicaid? (Slide 15)
- What might be the roles and responsibilities of a caregiver for someone with Alzheimer's disease? (Slide 22)

#### LEARNING ACTIVITIES

The following learning activities may be used or adapted to enhance student learning:

- Compare the Alzheimer's epidemic to at least one other chronic disease (e.g., cancer, HIV, heart disease, diabetes). How many people are affected? What are the costs associated with the disease? How does the epidemic compare to Alzheimer's disease?
- Research aging trends within the population. What is happening in the U.S. and internationally? In developing vs. developed countries? What challenges does an aging population present to public health?
- How does caregiving for Alzheimer's and dementia differ from other types of caregiving? What resources are available for caregivers in general? What resources are available for caregiving specific to Alzheimer's and other dementias?

#### ADDITIONAL READING

- Alzheimer's Association. 2015. Changing the Trajectory of Alzheimer's Disease: How a Treatment by 2025 Saves Lives and Dollars. Chicago, IL: Alzheimer's Association. <a href="https://www.alz.org/documents-custom/trajectory.pdf">https://www.alz.org/documents-custom/trajectory.pdf</a>
- Alzheimer's Association. 2016. Alzheimer's Disease Facts and Figures. Chicago, IL: Alzheimer's Association. <a href="http://www.alz.org/facts">http://www.alz.org/facts</a>

# Sample Test Questions

## SAMPLE TEST QUESTIONS

- 1- Dementia is a decline in mental ability that is a normal part of aging.
  - a. True
  - b. False

#### Answer: B

- 2- The number one risk factor for Alzheimer's disease is:
  - a. Getting older
  - b. High blood pressure
  - c. High cholesterol
  - d. Heredity/genetics
  - e. Lack of mental stimulation

#### Answer: A

- 3- The more years of education a person has may decrease his/her risk for getting Alzheimer's disease.
  - a. True
  - b. False

### Answer: A

- 4- The lifespan for someone after being diagnosed with Alzheimer's can be up to 20 years.
  - a. True
  - b. False

### Answer: A

- 5- Which of the following statements is true about Alzheimer's disease:
  - a. Can be diagnosed through a blood test
  - b. Is a progressive disease
  - c. Is reversible with proper medication
  - d. All of the above
  - e. None of the above

### Answer: B

## Case Studies

## Case Studies

- 1- "Alzheimer's Disease Underdiagnosed in Indian Country," NPR (2015).
  - Audio/Transcript Link:

http://www.npr.org/templates/transcript/transcript.php?storyId=458041798

- Run Time: 3:46 minutes (audio)
- Key Terms: cultural context, Native Americans, diagnosis, community outreach, family relationships, tradition, stigma, caregiver burden, long term care
- Modules: 1, 3, 4

#### Description:

Mrs. Williams is an older woman who has been having severe memory problems for the past seven years. Mrs. Williams lived on a Native American reservation in Arizona before moving in with her daughter, Delma, in Los Angeles. In many tribal communities, an Alzheimer's diagnosis is rare; in fact, many tribal communities do not even have a word for dementia. Native American cultures typically consider aging and signs of Alzheimer's (memory issues, forgetfulness, getting lost) as part of the cycle of life: people begin life as children and leave as children. Mrs. Williams' daughter did not even know what Alzheimer's disease is because no one ever talked about it.

Once in Los Angeles, Mrs. Williams' memory problems grew increasingly worse. Mrs. Williams began wandering and becoming lost. During moments of lucidity, Mrs. Williams begged her daughter to return her to her home on the reservation. Eventually Delma and her family moved back to the reservation. Mrs. Williams has thirteen other children who lived in that area, but Delma is the only one who cares for their mother. Delma is not sure why her siblings do not visit their mother and their absence upsets her. Delma also feels guilty for doubting her mother when she first mentioned having memory issues.

#### Discussion Questions:

- Why is cultural respect important in public health?
- In this story, what are cultural barriers to diagnosing and understanding Alzheimer's disease?
  - Lack of word for dementia.
  - Seen as a part of the lifecycle and natural
  - Stigma- no one talks about it and Mrs. Williams' other children do not visit
- How can public health address Alzheimer's disease misinformation and stigma in a culturally sensitive and relevant way?
- · What is the role of family and care in an Alzheimer's disease diagnosis?

# Video Resources

## Alzheimer's Disease Video Resources

The following videos are listed as suggested accompaniments to the curriculum modules.

These could be shown in class or as suggested viewing outside of class.

- 1- "Inside the Brain: An Interactive Tour," Alzheimer's Association (n.d.).
  - Tour Link: http://www.alz.org/alzheimers disease 4719.asp
  - Run Time: N/A
  - Key Terms: Alzheimer's disease, brain activity, neurotransmitters, amyloid plaques, tangles
  - Modules: 1, 2

### Description:

This interactive tour helps explain the basic components of the brain and how Alzheimer's disease affects it. The tour teaches the participant the different parts of the brain, how Alzheimer's disease damages the brain and brain activity, and the different stages of the disease.

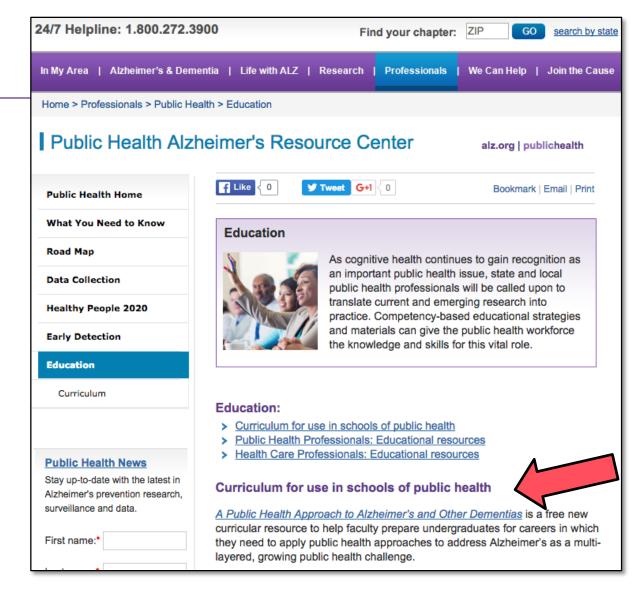
- 2- "What is Alzheimer's disease?," TedEd (n.d.).
  - Video Link: <a href="https://www.youtube.com/watch?v=yJXTXN4xrl8">https://www.youtube.com/watch?v=yJXTXN4xrl8</a>
  - Run Time: 3:49 minutes
  - Key Terms: stages of Alzheimer's, pathology of Alzheimer's
  - Modules: 1, 2

## Description:

Alzheimer's disease is the most common cause of dementia, affecting over 40 million people worldwide. Though it was discovered over a century ago, scientists are still searching for a cure. Ivan Seah Yu Jun describes how Alzheimer's affects the brain, shedding light on the different phases of this complicated, destructive disease.

- 3- "Alzheimer's Long and Costly Goodbye-Heartache and Hope: America's Alzheimer's Epidemic (Episode 1)," University of California Television (2012).
  - Video Link: http://myuctv.tv/2012/09/18/alzheimers-the-long-and-costly-goodbye/
  - Run Time: 12:30 minutes
  - Key Terms: stigma, loss of identity, increasing prevalence, increasing aging population, caregiver's burden, family relationships, financial burden
  - Modules: 1, 2, 3, 4

alz.org/publichealth/education



# Where to Find Curriculum



# On Using the Curriculum

## Jean Marie Place, PhD

**Assistant Professor** 

Department of Nutrition and Health Science

**Ball State University** 



## Cheryl J. Dye, PhD

Professor,

Department of Public

Health Sciences

Director, Institute for Engaged Aging

Clemson University

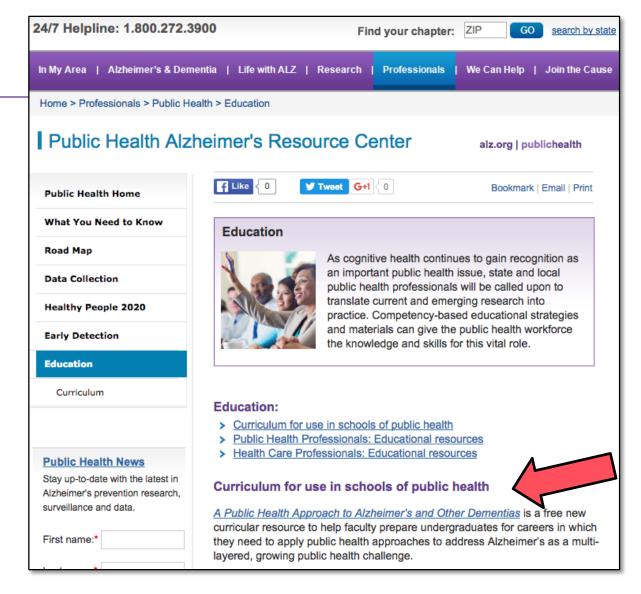




# Spreading the Word

 Download the curriculum or request a flash drive to see how you can use the curriculum in part or whole with your classes

Share with colleagues within your department/school and beyond



# Where to Find Curriculum



## **Thank You!**



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Development of these materials are supported in part by Cooperative Agreement #NU58DP006115-01 from the Centers for Disease Control and Prevention (CDC). Its contents are solely the responsibility of the Alzheimer's Association and do not necessarily represent the official views of the CDC.



## Thank you to today's Presenters



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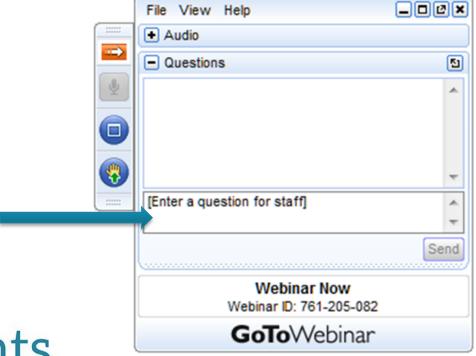
Cheryl Dye, PhD Clemson University



## **Questions or Comments?**

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## **Today's Presenters**

## Now taking questions.



Molly French, MS
Alzheimer's Association



Tara Redd, MEd, MCHES Emory University



Jean Marie Place, PhD
Ball State University



Cheryl Dye, PhD Clemson University



## Thank You!

See the webinar event page on the ASPPH website for a link to the **archived webinar**:

http://www.aspph.org/event/aspph-presents-new-undergraduatecurriculum-introduces-students-to-alzheimers-and-dementia-a-rapidlygrowing-public-health-issue/

Contact: webinars@aspph.org





## Coming Attractions...

# ASPPH Presents • WEBINAR

## ASPPH Presents: ASPPH Fellowships: Opportunities for Recent Graduates of ASPPH Member Institutions

Tuesday, December 6, 2:00 – 3:00 p.m. Eastern

## **ASPPH Presents: An Overview of SBP CEPH Accreditation**

Thursday, December 8, 1:00 p.m. – 2:00 p.m. Eastern

For more information about and to register for upcoming webinars, visit the ASPPH Events page:

http://www.aspph.org/events/category/webinar/



## **Coming Attractions...**





Registration opening the week of December 12



# Thank you!