This document represents the progress to create the next version of the Healthy Brain Initiative Road Map as of September 1, 2022. The document will be periodically updated throughout the development process. Please reach out to publichealth@alz.org with any questions or comments.

In Spring 2022, the Alzheimer’s Association and the Centers for Disease Control and Prevention (CDC) initiated the development of the next Healthy Brain Initiative (HBI) Road Map for State and Local Public Health. This will be the fourth edition of the HBI Road Map Series for State and Local Public Health and will serve as an expert guidebook for state and local public health practitioners to advance the vision of the HBI: fully integrate cognitive health and caregiving into public health practice.

INTRODUCTION

In 2005, the Alzheimer’s Association and the CDC began the Healthy Brain Initiative — a collaborative effort to advance public health awareness of and action on Alzheimer’s disease and related dementias as a public health issue. HBI partners work together to implement public health strategies that promote brain health, address dementia, and help support dementia caregivers.

The HBI Road Map series guides this effort. There have been three iterations of the HBI Road Maps for State and Local Public Health and one additional Road Map for Indian Country to meet the specific needs of tribal health organizations. The actions in the HBI Road Maps center around four essential elements of public health:

1. Educate & Empower
2. Develop Policies & Mobilize Partnerships
3. Assure a Competent Workforce
4. Monitor & Evaluate

The most current HBI Road Map covers the time period of 2018-2023. As 2023 approaches, planning is underway for a new iteration. The Road Map for Indian Country will undergo a separate revision process.
BROAD ENGAGEMENT

Participation from multiple sectors remains a key feature of the development process to identify priorities, inform strategy, and support sustainable implementation and impact of the HBI Road Maps. Four methods are being used to engage, elicit input, and foster collaboration.

1. Leadership Committee Convenings. In June 2022, the Alzheimer’s Association and CDC convened a committee of national leaders from across the care continuum to guide the development of the fourth HBI Road Map for State and Local Public Health (see Leadership Committee Members below). The meeting launched with experts providing briefings on the latest brain health facts and figures, current federal and state policies and programs, and findings from an analysis of state and local health department usage of the third HBI Road Map.

Throughout the meeting, the committee members discussed a broad spectrum of significant dementia concerns and reviewed the possible role that public health plays in addressing the topics. In-depth topics discussed included risk reduction strategies, systems thinking, stigmatization of cognitive impairment, social and structural determinants of brain health, referrals and access to care, dementia caregiving, and workforce needs.

The Leadership Committee will provide guidance and direction throughout the development process. Formal meetings of the Leadership Committee occur in September and November 2022.

LEADERSHIP COMMITTEE MEMBERS

- Co-Chair: Lisa McGuire, PhD, Lead of the Alzheimer’s Disease Program, Centers for Disease Control and Prevention
- Co-Chair: Kristen Clifford, MBA, Chief Program Officer, Alzheimer’s Association
- James Appleby, ScD (Hon), MPH, BSPharm, Chief Executive Officer, The Gerontological Society of America
- Barak Gaster, MD, Director of Cognition in Primary Care and Professor of Medicine, University of Washington
- J. Nadine Gracia, MD, MPH, President and Chief Executive Officer, Trust for America’s Health
- David Hoffman, DPS, CCE, Associate Professor of Ethics and Health Policy, Maria College; Clinical Professor, State University at Albany School of Public Health; Adjunct Assistant Professor, Albany Medical College
- Peter Holtgrave, MA, MPH, Senior Director of Public Health Infrastructure and Systems, National Association of County and City Health Officials
- Ian Kremer, JD, Executive Director, Leaders Engaged on Alzheimer’s Disease
- Ocean Le, MS, Senior Program Coordinator, Diverse Elders Coalition
- Sarah Lenz Lock, JD, Executive Director of Global Council on Brain Health and Senior Vice President of Policy and Brain Health, AARP
- Marti Macchi, MEd, MPH, Chief Program Strategy Officer, National Association of Chronic Disease Directors
- Sandy Markwood, MS, Chief Executive Officer, USAGing
- David Marquez, PhD, MA, Professor of Kinesiology and Nutrition and Director of Exercise Psychology Laboratory, University of Illinois Chicago
- Kristi Meyer, MBA, Executive Director of Strategy and Planning, Aetna, a CVS Health Company
- Marcus Plescia, MD, MPH, Chief Medical Officer, Association of State and Territorial Health Officials
- Martha Roherty, MPP, Executive Director, ADVancing States
- Eduardo Sanchez, MD, MPH, FAAFP, Chief Medical Officer for Prevention, American Heart Association
- Diane Ty, MBA, Director of the Alliance to Improve Dementia Care, Milken Institute Center for the Future of Aging
- Mike Wittke, MPA, Vice President for Research and Advocacy, National Alliance for Caregiving
- Kristine Yaffe, MD, Director of the Center for Population Brain Health and Professor of Psychiatry, Neurology, and Epidemiology, University of California San Francisco
2. **State and Local Health Department Listening Sessions.** The Association of State and Territorial Health Officials (ASTHO) and the Alzheimer’s Association hosted two 75-minute virtual listening sessions on April 27 and May 2, 2022, for state and local health departments to provide input on their use, implementation, and experience with the current HBI Road Map. A total of 22 health department staff participated in the listening sessions; 75% of participants represented state and 25% represented local health agencies. Twenty-three health agency staff (including many who could not attend) completed an optional survey.

Listening session participants reinforced the value of the HBI Road Map as a guiding public health document, particularly in the areas of education, collaboration, strategy, quality improvement and advocacy. They identified several implementation challenges (resources and capacity limitations, barriers to collaboration, and COVID-19), as well as opportunities to enhance implementation (stronger emphasis on equity, additional detail and focus on caregivers, better engagement by partners across public health, more tools to support implementation and evaluation, examples and case studies of HBI Road Map action implementation, and strategies to enhance capacity building).

3. **Expert Workgroups.** The Leadership Committee agreed on the formation of five, topic-specific expert workgroups. The groups focused on the following key areas for public health action to promote cognitive health and meet the needs of dementia caregivers:

1. Risk Reduction of Cognitive Decline
2. Timely Detection, Diagnosis and Management of Cognitive Impairment
3. Dementia Caregiving
4. Health Equity
5. Community Linkages

Leadership Committee members chaired each workgroup and additional subject matter experts served throughout the two-month long workgroup process. The workgroups developed overarching and topic-specific recommended actions for governmental public health agencies and their partners to take based on the four elements of the HBI Road Map (see below) and a series of cross cutting themes (see below). In total, 68 experts contributed to the workgroup process, brainstorming over 180 recommended actions. The Leadership Committee will refine and consolidate these recommendations into the next HBI Road Map.

4. **Open Input.** In July and August 2022, an open public input period was held for state and local public health departments, and other interested organizations and individuals, to provide input on the HBI Road Map’s proposed content (found throughout this document). In total, 47 submissions were received. Analysis of the input will be presented to the Leadership Committee alongside the expert workgroup recommendations for their consideration as they prepare their final recommendations for the direction and content of the next HBI Road Map in Fall 2022.

**ESSENTIAL ELEMENTS OF THE HBI ROAD MAP**

The Leadership Committee determined that risk reduction of cognitive decline, early detection and diagnosis of cognitive impairment, and dementia caregiving are essential public health areas that must be addressed in the next HBI Road Map. Further, the committee decided that the next HBI Road Map needed stronger emphasis on and integration of health equity and a cross-sector systems approach. This discussion resulted in the creation of the five workgroups listed above.
As currently envisioned, the HBI Road Map will cover a time span of four years, 2023 – 2027, to align with funding periods for CDC’s BOLD Public Health Program awards that are specifically designed to promote implementation of the HBI Road Map series. It will focus on actions that can be implemented by local and state health departments across the same four essential elements of public health in the current HBI Road Map:

1. Educate & Empower
2. Develop Policies & Mobilize Partnerships
3. Assure a Competent Workforce
4. Monitor & Evaluate

Actions will consider primary, secondary, and tertiary prevention strategies based on definitions used by CDC:

- **Primary Prevention**: Intervening before health effects occur, through measures such as altering risky behaviors (e.g., poor eating habits, tobacco use) and banning substances known to be associated with a disease or health condition.
- **Secondary Prevention**: Detecting diseases in the earliest stages, before the onset of more severe symptoms.
- **Tertiary Prevention**: Managing disease post diagnosis to minimize negative health and quality of life effects.

In addition, the actions will reflect several cross-cutting themes (see Cross-Cutting Themes) and recognize the range of resources available to health departments. Some actions may require little to no funding or staff; others may be more complex or ambitious actions for departments with greater resources.

The next HBI Road Map will also include:

- Supplementary resources to assist with planning and implementation (see Supplementary Resources)
- A glossary of relevant terms (see Glossary)

**CROSS-CUTTING THEMES**

HBI Road Map actions will consider the implications and impact of the following cross-cutting themes:

- Recognizing stigma associated with mild cognitive impairment and dementia
- Respecting cultural considerations
- Considering social determinants of health
- Relying on data for planning, design, monitoring, and evaluation
- Anticipating “what if” factors that may change the landscape (e.g., scientific advances in biomarkers or treatment, long COVID’s effect on brain health)
- Adopting a systems approach for sustainability
- Being inclusive of all cognitive impairment, including Alzheimer’s disease and related dementias
SUPPLEMENTARY RESOURCES

As with the current HBI Road Map, examples of ways to implement actions will be included in the next edition and case studies will be shared as references and resources. These case studies will be short summaries that highlight real-world examples of how state and local public health agencies are taking action in their own communities. Some will be included in the HBI Road Map, with links to further resources collected by the Healthy Brain Resource Center.

GLOSSARY

The HBI Road Map will define key terms critical to understanding and engaging in public health action to address cognitive health, dementia, and caregiving.

Alzheimer’s dementia: dementia that is caused by, or believed to be caused by, the brain changes of Alzheimer’s disease.

Alzheimer’s disease: an irreversible, progressive brain disorder and the most common cause of dementia. Early symptoms include difficulty with memory and thinking. As the disease progresses, symptoms include impaired communication and judgment, confusion, behavior changes, and challenges with basic bodily functions. Symptoms usually progress over time, becoming severe enough to interfere with daily tasks.

Alzheimer’s disease and related dementias (ADRD): includes Alzheimer’s disease as well as frontotemporal degeneration (FTD), Lewy body dementia (LBD), vascular contributions to cognitive impairment and dementia (VCID), and mixed etiology dementias (MED).

Brain health: a concept that involves making the most of the brain’s capacity and helping to reduce some risks that occur with aging. Brain health refers to the ability to draw on the strengths of the brain to remember, learn, play, concentrate, and maintain a clear, active mind.

Caregivers: spouses, partners, adult children, other relatives, and friends providing unpaid support to persons living with dementia. Caregivers often assist with activities of daily living such as personal care, household management, medication and health care management, and coordination of financial matters.

Cognition: the mental functions involved in attention, thinking, understanding, learning, remembering, solving problems, and making decisions. Cognition is a fundamental aspect of an individual’s ability to engage in activities, accomplish goals, and successfully negotiate the world. It can be viewed along a continuum — from optimal functioning to mild cognitive impairment to dementia.

Cognitive impairment: trouble remembering, learning new things, concentrating, or making decisions that affect everyday life.

Dementia: an umbrella term for a particular group of symptoms, including difficulties with memory, language, problem-solving, and other thinking skills that are severe enough to interfere with daily life. Alzheimer’s is the most common cause of dementia. Other causes include vascular dementia, dementia with Lewy bodies, and frontotemporal dementia. Often, dementia can be caused by multiple types and is referred to as mixed dementia.

Health equity: achieved when every person has the opportunity to attain his or her full health potential and no one is disadvantaged from achieving this potential because of social position or other socially determined circumstances. Health inequities are reflected in differences in length of life; quality of life; rates of disease, disability, and death; severity of disease; and access to treatment.
Mild cognitive impairment: a subtle but measurable decline in cognitive abilities that includes memory and thinking. A person with mild cognitive impairment is at an increased risk of developing Alzheimer’s or another dementia.

Social determinants of health: conditions in the places where people live, learn, work, and play that affect a wide range of health and quality-of-life risks and outcomes.

Subjective cognitive decline: self-reported thinking or memory problems that are happening more often or are getting worse.