



2020 Surgeon General's Report

Oral Health in America: Advances and Challenges

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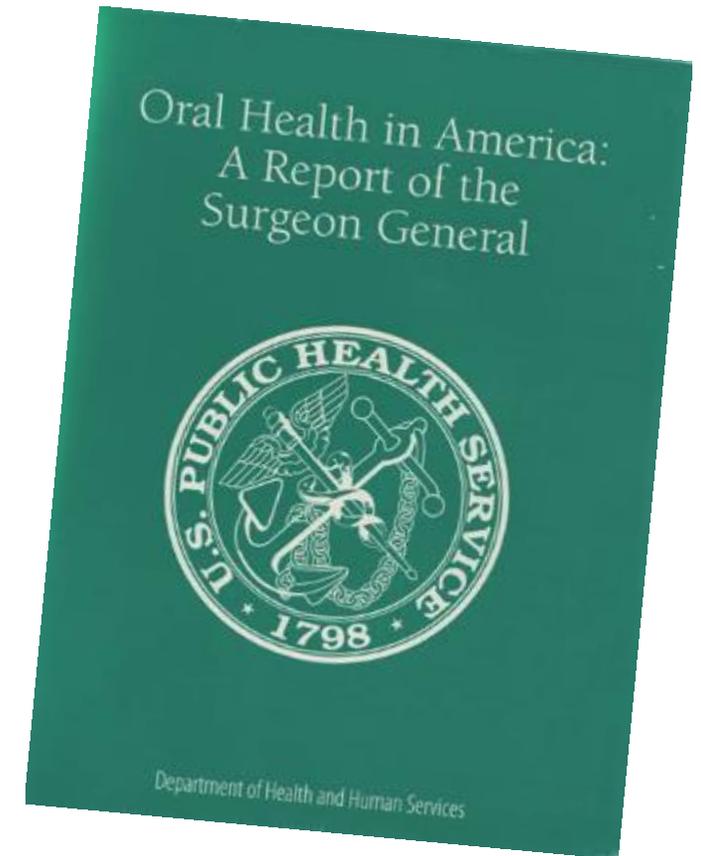
*November 4, 2019
American Public Health Association Annual Meeting & Expo
Philadelphia, PA*



First Surgeon General's Report on Oral Health

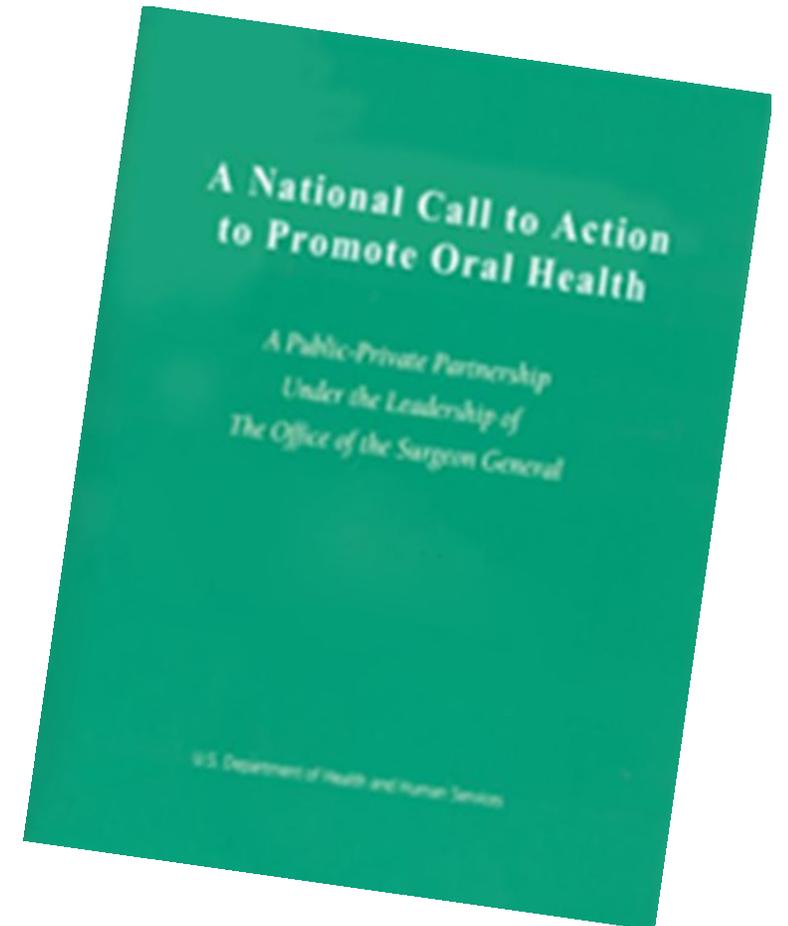
Major Message of 2000: Oral Health is more than healthy teeth and is integral to the general health and well-being of all Americans.

- Safe and effective measures exist to improve oral health and prevent disease.
- Health risk factors, such as tobacco use and poor dietary practices, affect oral and craniofacial health.



The 2003 Call to Action urged that we:

- Change perceptions of oral health
- Replicate effective programs
- Build the science base and accelerate science transfer
- Increase oral health workforce diversity, capacity, and flexibility
- Increase collaborations



U.S. Surgeon General's Priorities

- Opioids and Addiction
- Tobacco
- Community Health and Economic Prosperity
- Health and National Security
- Emerging Public Health Threats
- **Oral Health**



JEROME M. ADAMS, M.D., M.P.H.
Vice Admiral, U.S. Public Health Service
Surgeon General

Message from the U.S. Surgeon General

<https://youtu.be/snOxqakR2zk>

A Changing World for Oral Health



How has the World Changed in 20 Years?



– Digitization of everything

- Communication
- Information/data management
- Technology

– Delivery of services

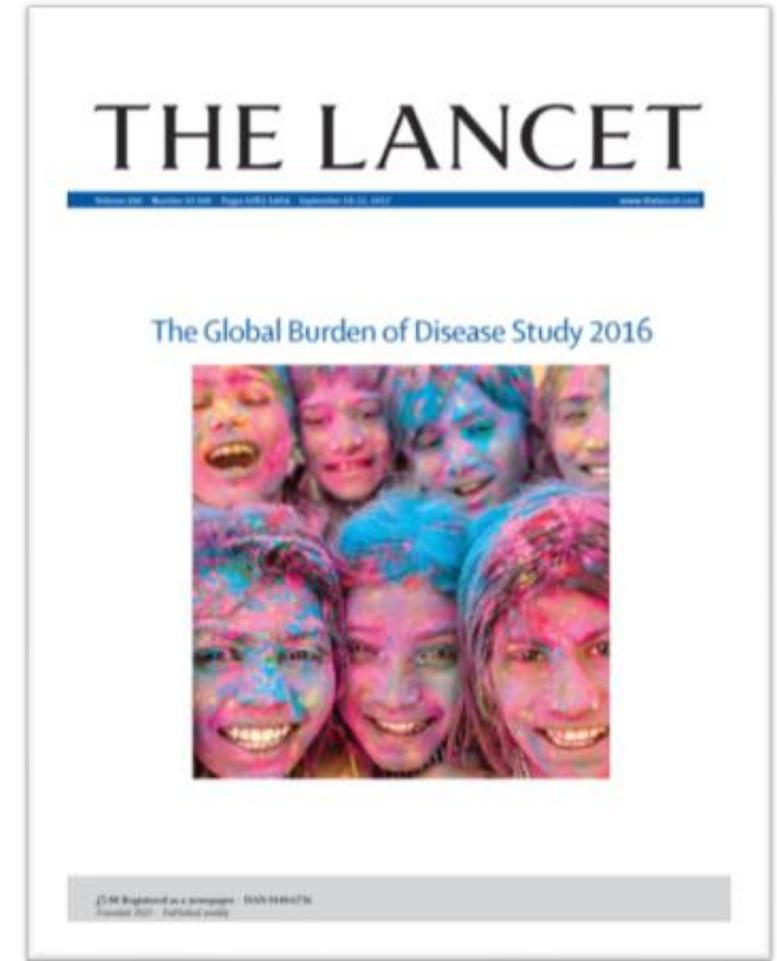
- Consolidation
- Economic efficiencies

– Demographic changes

- 1.5 billion more of us
- More diverse, more urban, older

Global Impact of Oral Disorders

- **Oral Disorders are highly prevalent worldwide**
 - Untreated Dental Caries in permanent teeth – 1st
 - Severe Periodontitis – 11th
- **3.5 billion affected**



Sociodemographic Influences on Oral Health

Sociodemographic factors are significant risk indicators for poor oral health

– Sex

- Men have 3 times more oropharyngeal cancer than women

– Race/ethnicity

- Significant untreated dental caries disparities exist by race/ethnicity among children and working-age adults

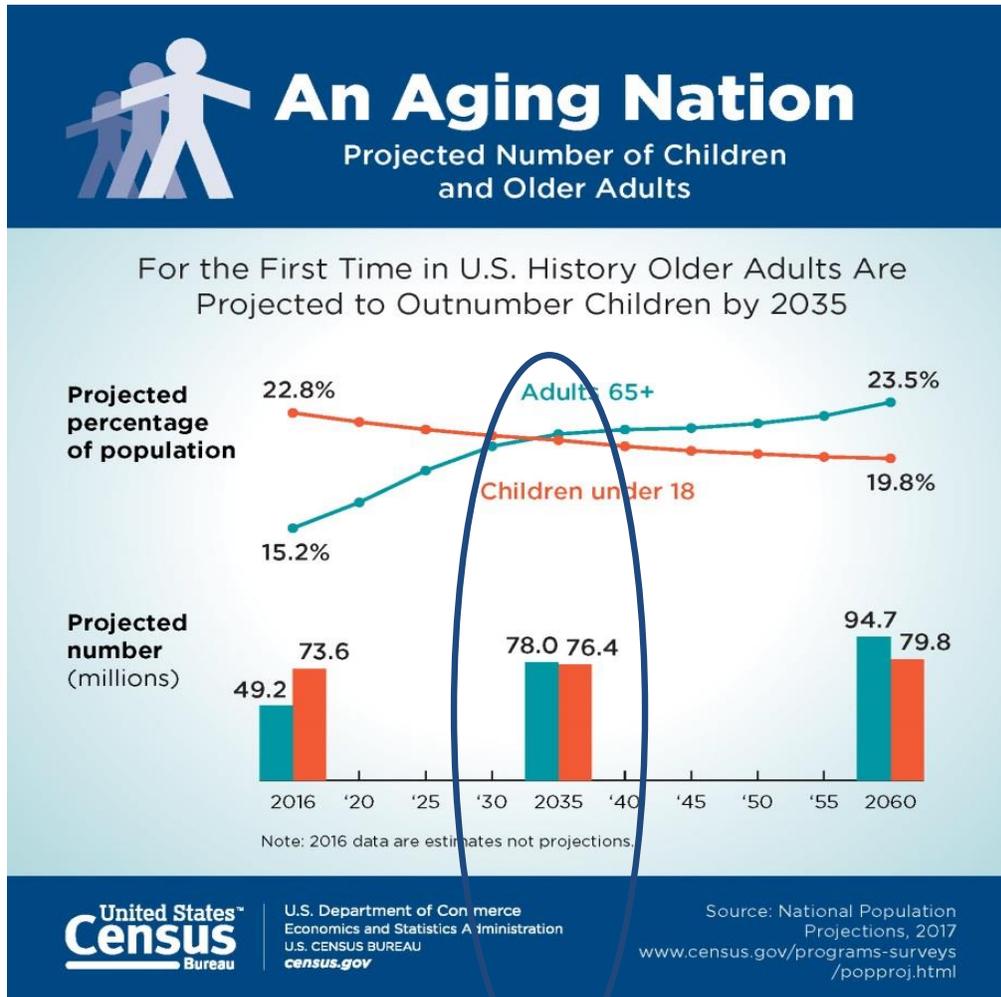
– Poverty

- Being poor increases the likelihood of increased tooth loss

– Age

- Periodontitis in older adults (65+ years) is twice that of younger adults (30–44 years)

Aging of America is Critical for Oral Health

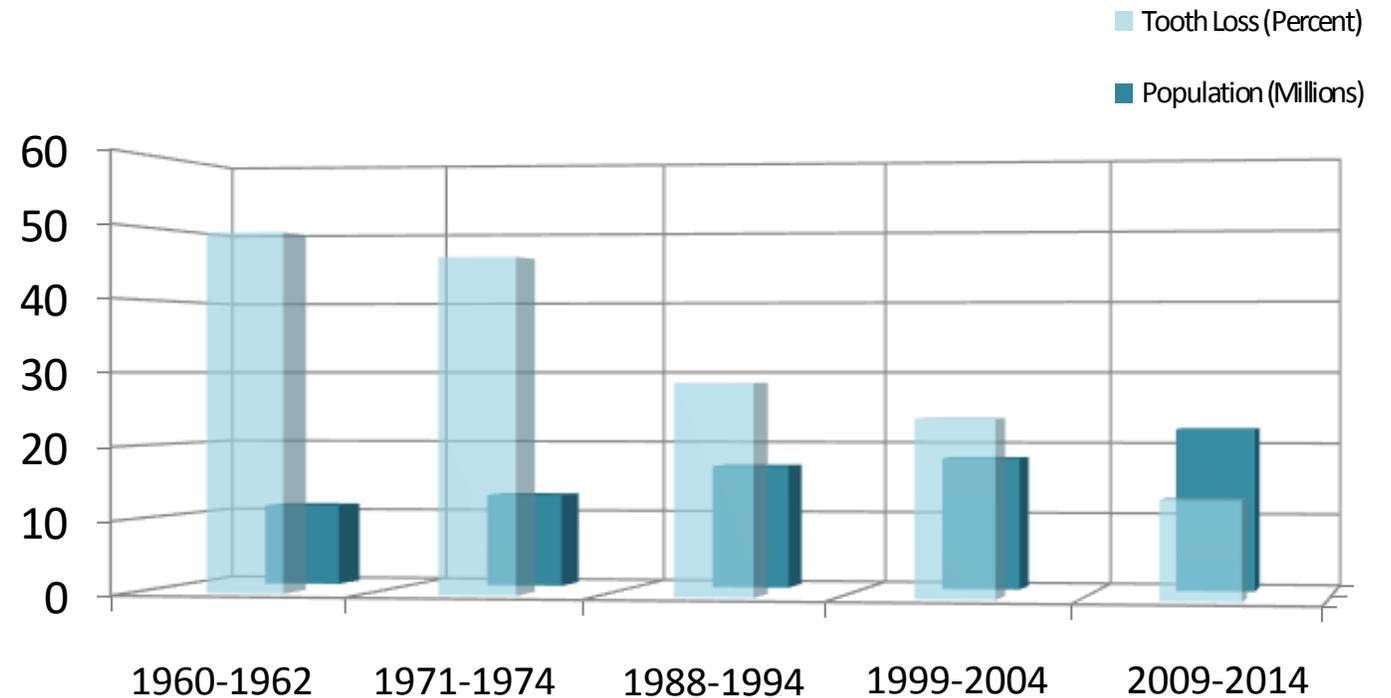


By 2035, there will be more older adults than youth in the U.S.

Greying America is Becoming More Dentate

Total population and prevalence of edentulism in U.S. adults, 65–74 years

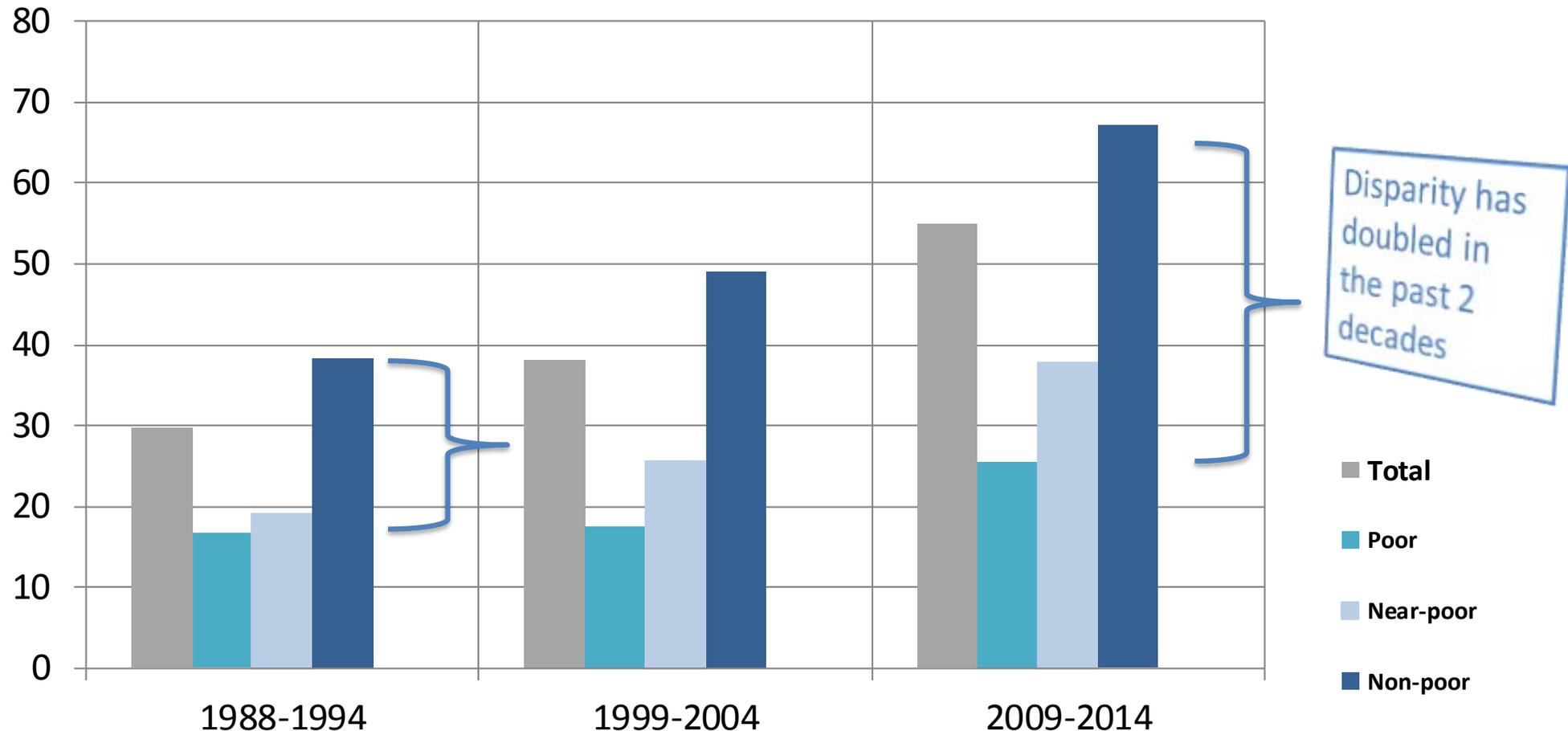
The aging population in the United States, as in many countries, is experiencing less edentulism



Source: Dye, BA, Weatherspoon DJ, Lopez Mitnik G. Tooth loss among older adults according to poverty status in the United States from 1999 through 2004 and 2009 through 2014. *J Am Dent Assoc.* 2019 Jan;150(1):9-23.

Disparities Persist Despite some OH Improvements

Changes in functional dentition (≥ 21 teeth) of U.S. adults aged 65+ years

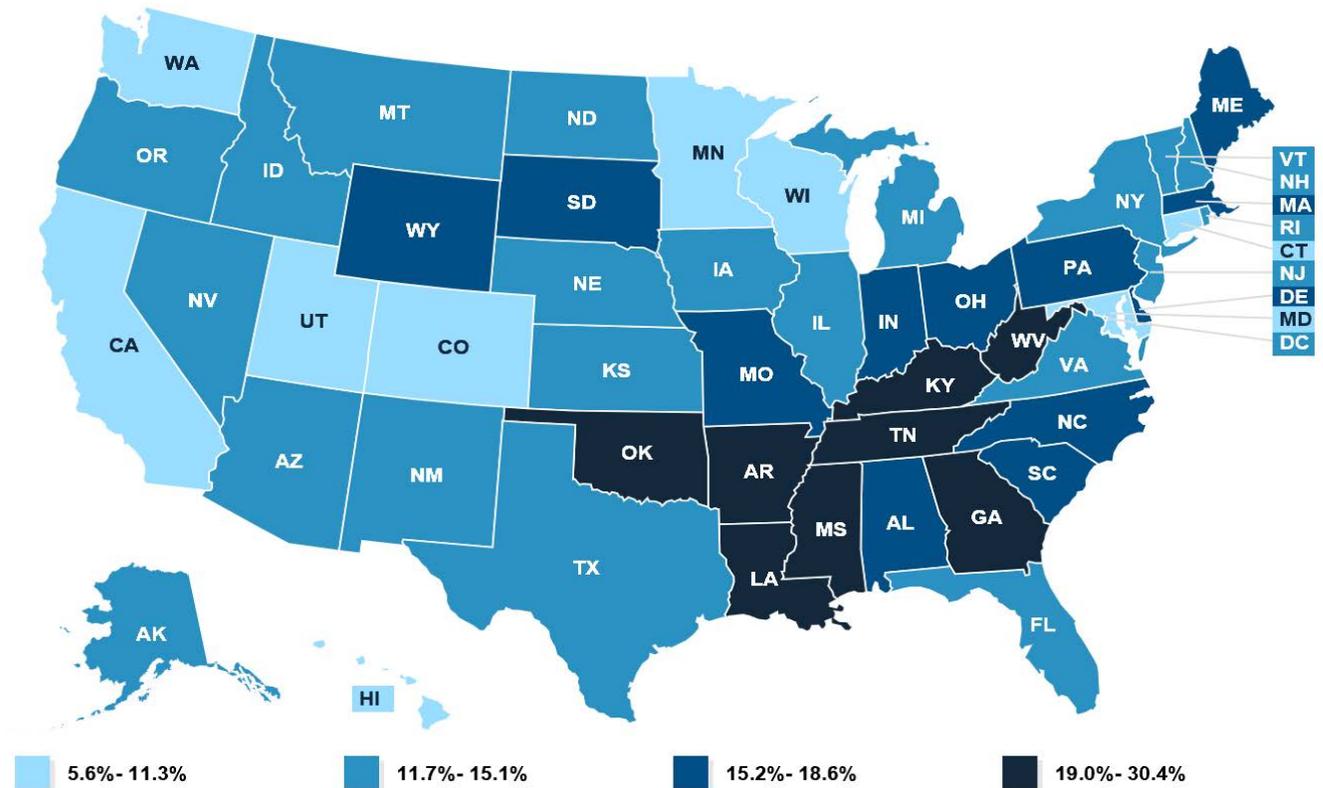


Geography Influences Oral Health

Percentage of adults aged 65+ years with no natural teeth (2016)

Declining Edentulism (**18%**), but disparities remain among lower income adults (**34%**)

This disproportionately affects some adults based on *where* they live



Source: Kaiser Family Foundation analysis of the Center for Disease Control and Prevention (CDC)'s Behavioral Risk Factor Surveillance System (BRFSS) 2016 Survey Results. Accessed April 10, 2019.

Oral Health Sex Disparities

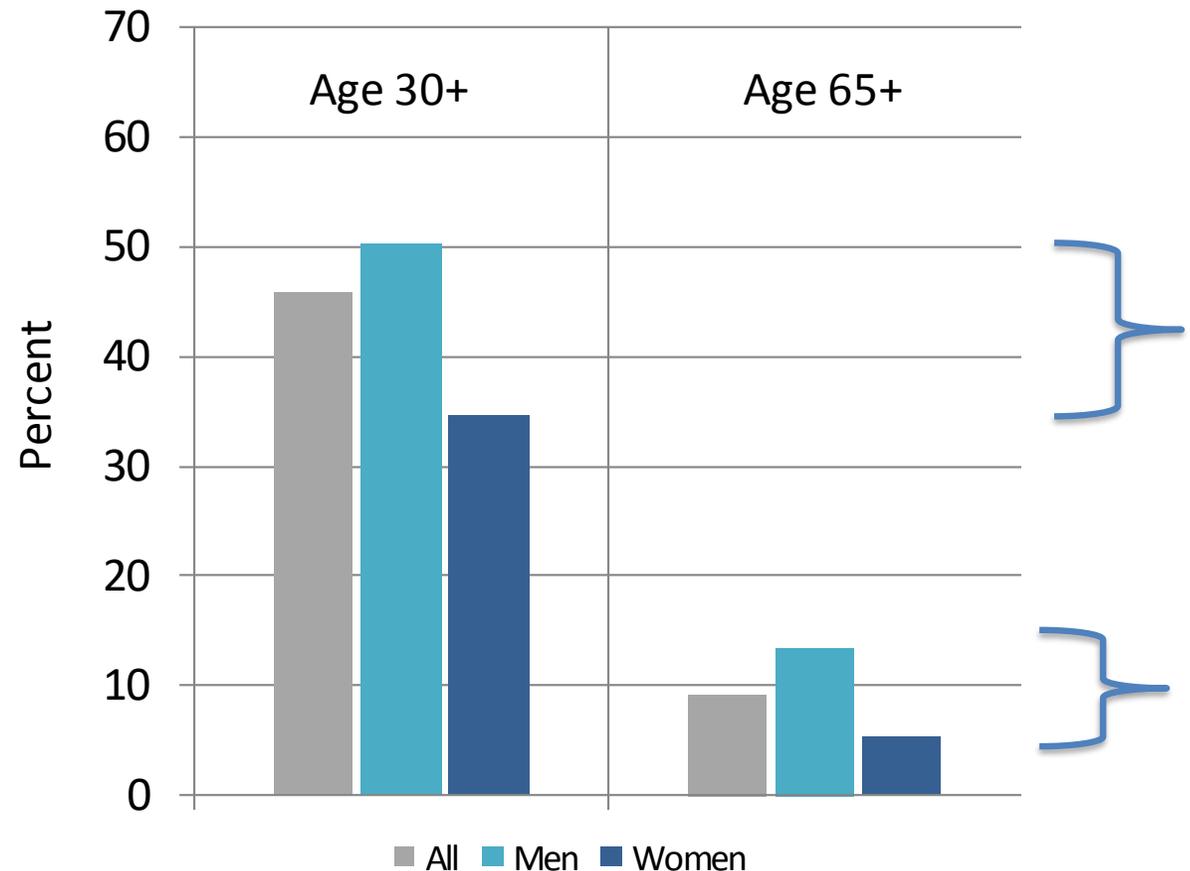
Total and Severe Periodontitis in the U.S. by Sex, 2009–2014

Total periodontitis (42%) for adults age 30 and older:

- 50% (men)
- 35% (women)

Severe periodontitis (9%) for adults age 65 and older:

- 13% (men)
- 5% (women)



Source: Eke PI, Thornton-Evans GO, Wei L, Borgnakke WS, Dye BA, Genco RJ. Periodontitis in US Adults: National Health and Nutrition Examination Survey 2009–2014. *J Am Dent Assoc* 2018; 149(7): 576-588.

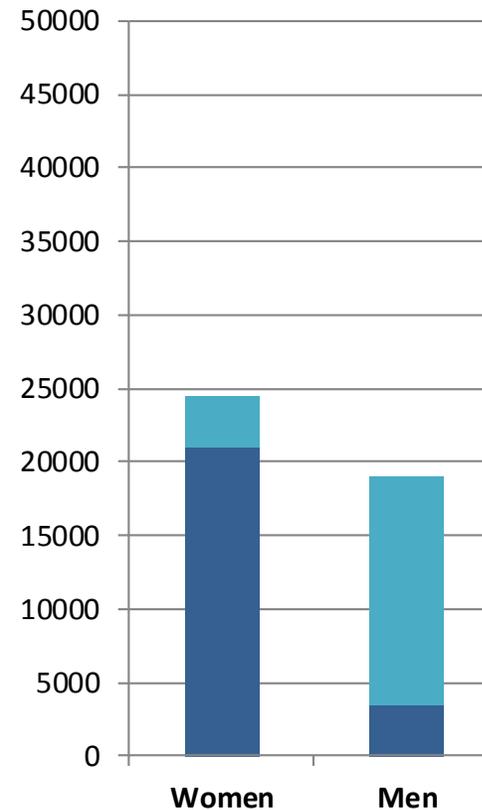
Sex Disparities in Oropharyngeal Cancer

Oropharyngeal cancer is now the most common HPV-associated cancer

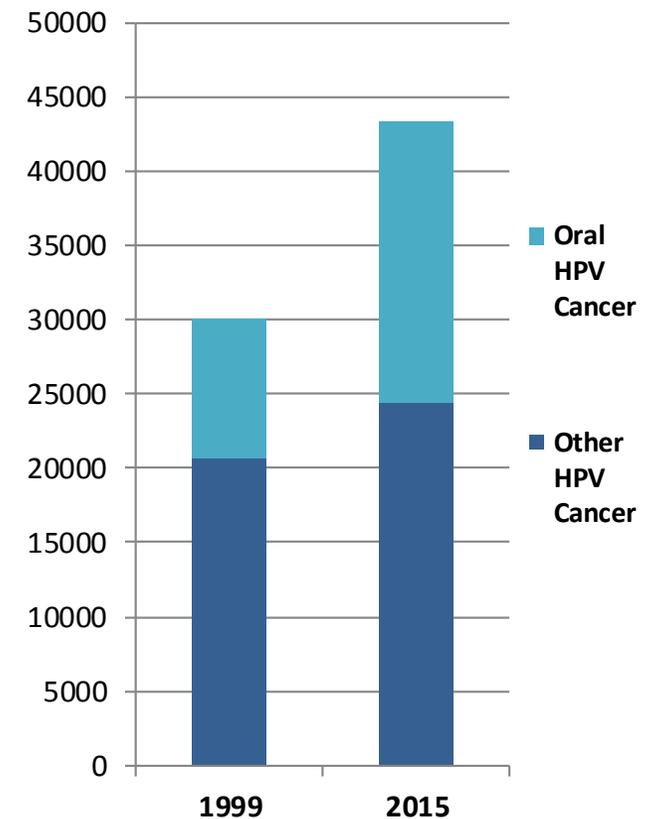
Oral oncogenic HPV prevalence is 6.6% for men and 1.5% for women

Men have 3½ times more oropharyngeal cancer than women

No. of HPV – Cancers (2015)



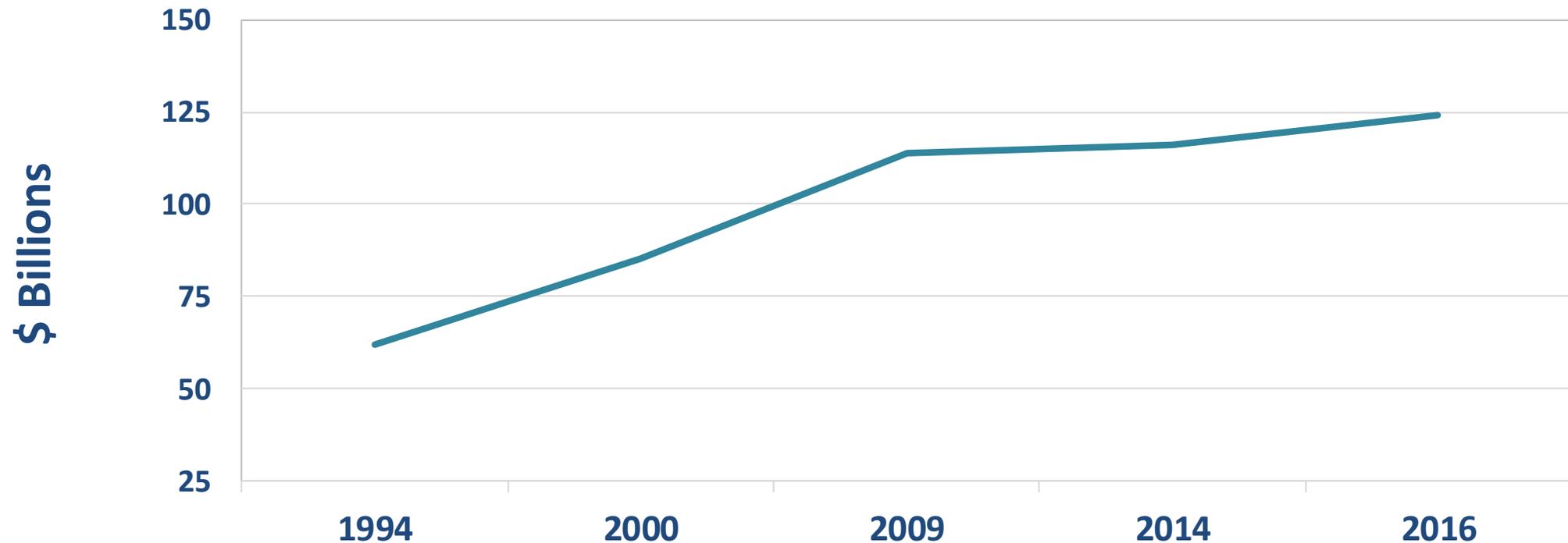
Number of HPV - Cancers



Notes: Chaturvedi et al. NHANES 2009-2012 findings: association of sexual behaviors with higher prevalence of oral oncogenic human papillomavirus infections in U.S. men. *Cancer Res* 2015; 75: 2468-2477. Van Dyne EA, Henley SJ, Saraiya M, Thomas CC, Markowitz LE, Benard VB. Trends in Human Papillomavirus–Associated Cancers — United States, 1999–2015. *MMWR Morb Mortal Wkly Rep* 2018;67:918–924.

Dental Care Expenditures: United States

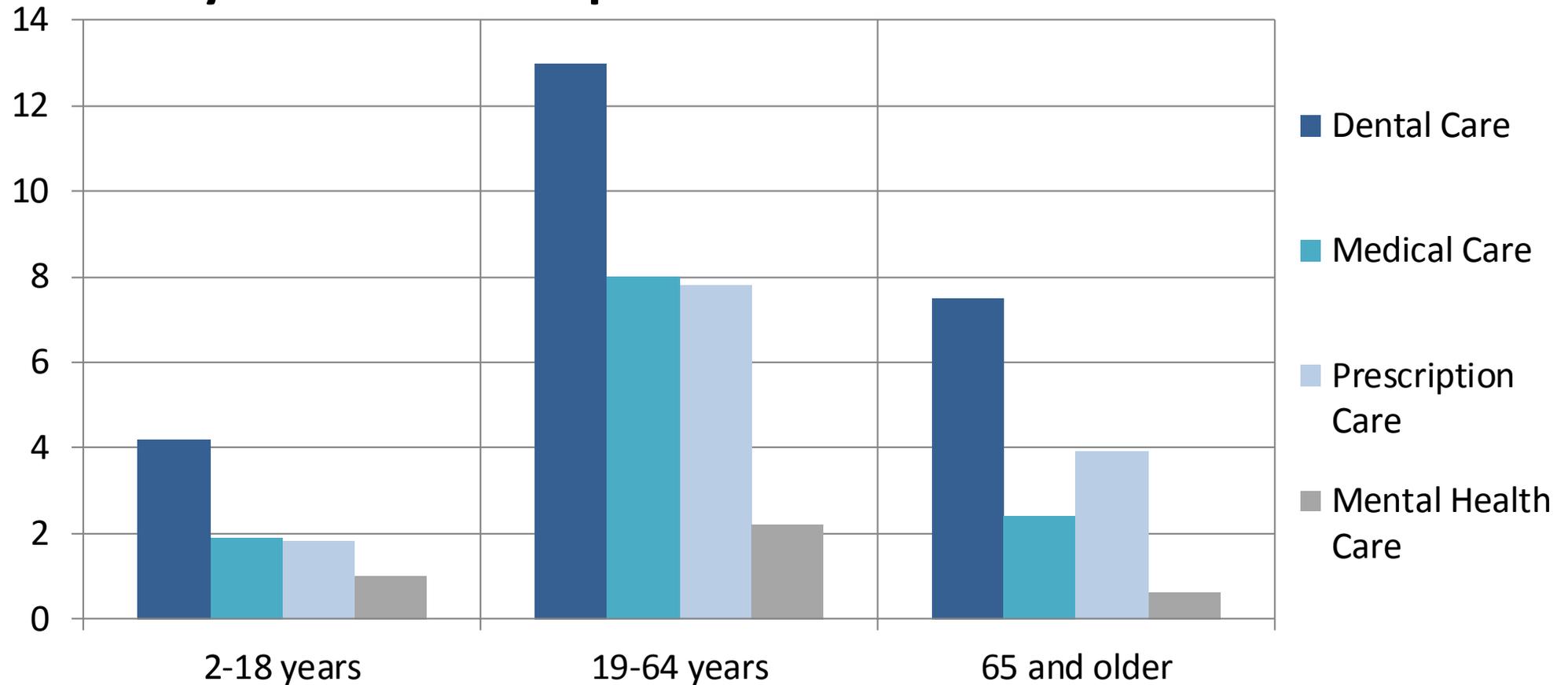
Total inflation-adjusted dental expenditures in the United States



Source: HPI: <https://www.ada.org/en/publications/ada-news/2017-archive/december/hpi-report-shows-dental-spending-increased-again-in-2016>

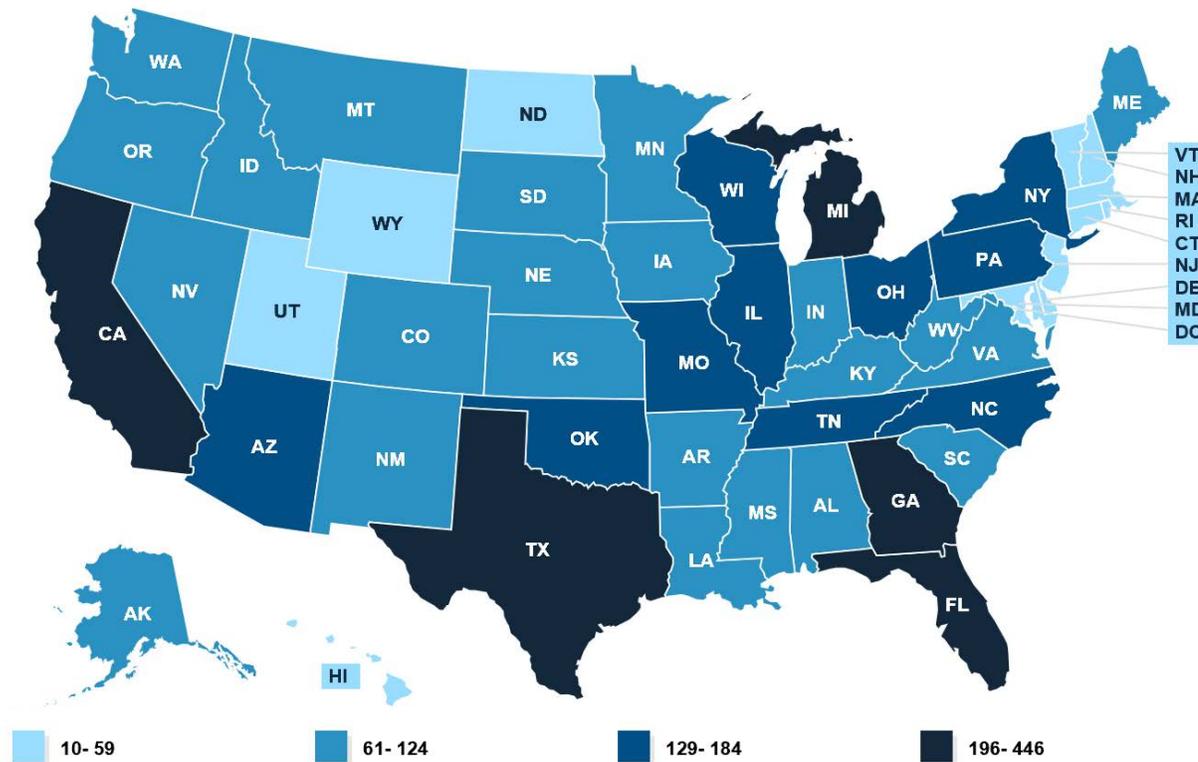
Cost: A Major Obstacle to Health Care

Percent of people who did not get selected health care services they needed in the past 12 months because of cost



Access to Professional Dental Care Affects OH

5,862 Dental Health Professional Shortage Areas (DHPsAs) affect 58 million*



Emerging Models of Care:

New Providers

- Dental Therapists
- Community OH Coordinators
- Physicians/Nurses

New Settings

- Primary Care
- Schools
- Teledentistry

Source: Kaiser Family Foundation. Bureau of Health Workforce, Health Resources and Services Administration (HRSA), U.S. Department of Health & Human Services, Designated Health Professional Shortage Areas Statistics: Designated HPSA Quarterly Summary, as of December 31, 2018.

Developing the 2020 SG's Report on Oral Health



The Charge from the Surgeon General

Guiding the 2020 Report:

The report will describe and evaluate **oral health** and the interaction between **oral health** and general health throughout the lifespan, considering advances in science, health care integration, and social influences to articulate promising new directions for improving **oral health** and oral health equity across communities.

Focus: The 2020 Report

“Big” questions to answer:

- Where we are now,
- Where we have made advances since 2000,
- What challenges persist since the last report,
- What new threats are emerging, and
- What are some promising new directions for research and improvement in oral health?

Development and Progress

How are We Gathering Input?

SG Listening Session (November 2018)

- Elicited input from more than 150 health professionals, researchers, educators, and other experts

Overview Webinar Inviting Public Comment (January 2019)

- More than 1,867 views
- More than 200 comments
- More than 100 suggestions of programs or activities to promote oral health
- **Association of State and Territorial Dental Directors (March 2019)**
- Asked ASTDD members to share exemplary private-public partnerships for improving oral health – 19 responses to date

Using the Input to Shape Content

- Six Section Editors and 20 Associates outline and expand topics and content
- About 400 researchers and health professionals review science and practice and write text
- More than 75 experts critically read and revise
- Federal clearance procedures ensure that the standards of the Surgeon General and the U.S. Department of Health and Human Services are met

Structure of the Report: Six Sections

1. Effect of Oral Health on the Community, Overall Well-Being, and the Economy
2. Oral Health in Children and Adolescents
3. Oral Health in Working-Age and Older Adults
4. Oral Health Integration, Workforce, and Practice
5. Substance Use Disorders, the Opioid Epidemic, High-Risk Behaviors, and Mental Health
6. Emerging Technologies and Promising Science to Transform Oral Health

Section 1 of the 2020 Report

Effect of Oral Health on the Community, Overall Well-Being, and the Economy

- **Section Editor:** Robert Weyant
- **Associate Editors:** Carlos Quinonez, Scott Tomar, and Marko Vujicic



Section 2 of the 2020 Report

Oral Health in Children and Adolescents

- **Section Editor:** Paul Casamassimo
- **Associate Editors:** Belinda Borrelli, Margherita Fontana, Jessica Lee, and Norman Tinanoff



Section 3 of the 2020 Report

Oral Health in Working-Age Adults and Older Adults

- **Section Editor:** Jocelyne Feine
- **Associate Editors:** Eliza Chavez, Judith Jones, Linda Niessen, and Susan Reisine



Section 4 of the 2020 Report

Oral Health Integration, Workforce, and Practice

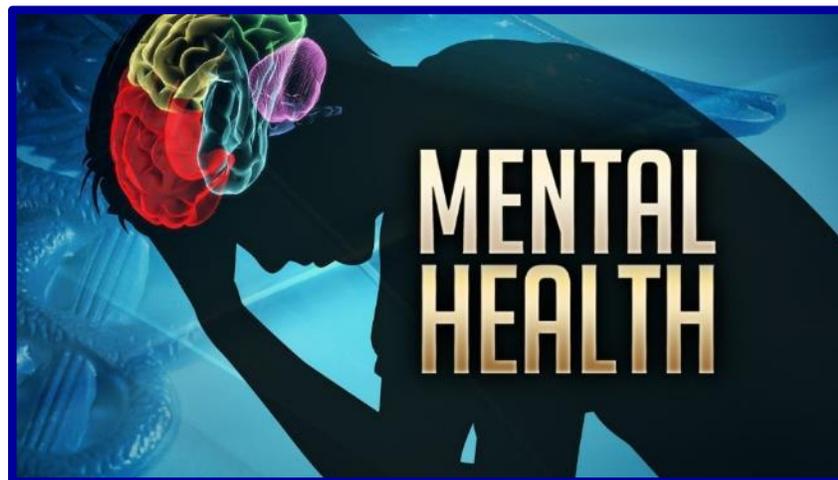
- **Section Editor:** Kathy Atchison
- **Associate Editors:** Jeff Chaffin, Jeff Fellows, and Nadeem Karimbux



Section 5 of the 2020 Report

Substance Use Disorders, the Opioid Epidemic, High-Risk Behaviors, and Mental Health

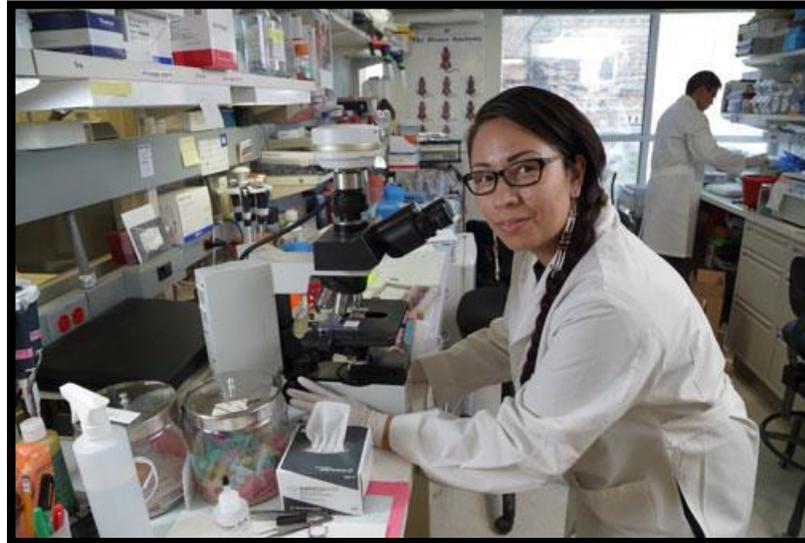
- **Section Editor:** Christian Stohler
- **Associate Editors:** Israel Agaku, Linda Fried, and Jon-Kar Zubieta



Section 6 of the 2020 Report

Emerging Technologies and Promising Science to Transform Oral Health

- **Section Editor:** Laurie McCauley
- **Associate Editors:** William Giannobile, Michelle Robinson, and Wenyan Shi



Expectations for the 2020 Report

It is anticipated that the 2020 Report will:

- Emphasize the importance of poor ***oral health*** as a public health issue
- Reinforce the importance of ***oral health*** throughout life
- Describe important contemporary issues affecting ***oral health***
- Outline a vision for future research and policy directions
- Educate, encourage, and call upon all Americans to take action

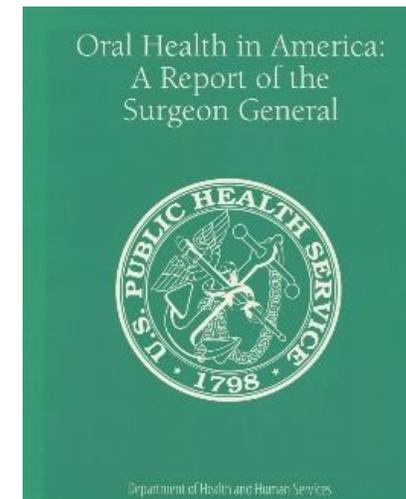
Influence of the 2020 Report

Available in Fall 2020, the Surgeon General's Report will provide:

- Information that will impact population health, the economy, national security, health professions education, and public policy
- Information providing guidance for research, education, and practice related to oral health
- Promising approaches to achieving oral health equity for our country's diverse communities
- A road map to optimal oral health for all

Questions

E-mail to: NIDCR-SGROH@nidcr.nih.gov



Copies of the 2000 Surgeon General's Report are available

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