

Vision and Eye Health Surveillance

Joshua Ehrlich, MD, MPH

Ophthalmology & Visual Sciences
Institute for Social Research
University of Michigan



**Prevent
Blindness**
Our Vision Is Vision.

Importance of Vision and Eye Health

- **7.1 million** people in the U.S. are visually impaired or legally blind.
- Vision impairment is one of the **10 most prevalent disabilities in U.S.**
- Economic cost of vision loss was **\$134 billion** in 2017 in the U.S.
- Early detection and treatment of eye diseases can **prevent vision loss.**

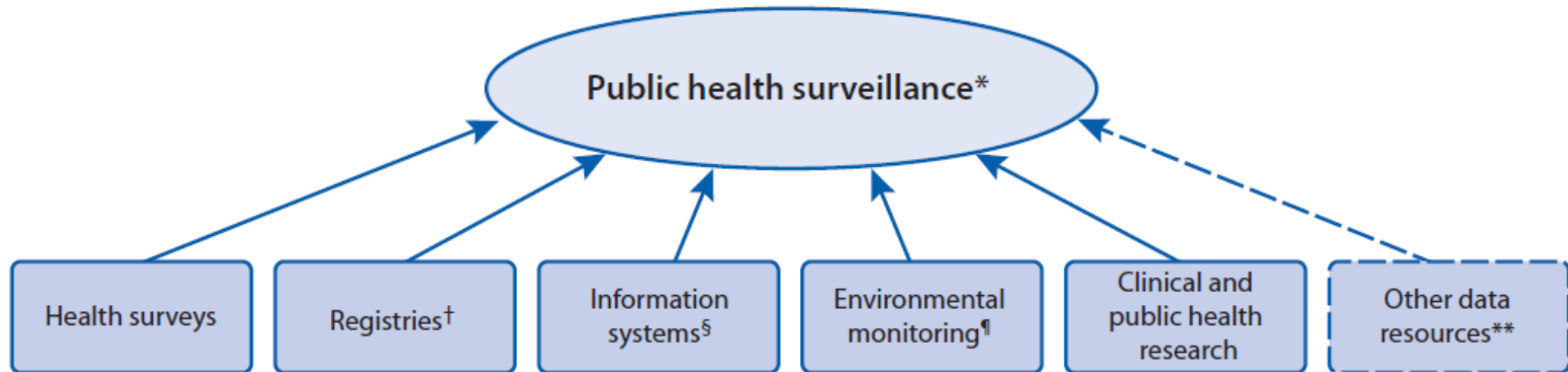
“In public health, we can’t do anything without surveillance. That’s where public health begins.”

— David Satcher, MD, PhD,
U.S. Surgeon General, 1998–2002

CDC’s Vision for Public Health Surveillance in the 21st Century. MMWR. Vol 61. 2012.



Public Health Surveillance



Public Health Surveillance

- Magnitude of the problem (prevalence and trends)
- Identifies disparities
- Identifies risk factors and social determinants of health
- Informs resource allocation
- Aids in the development of interventions and policies

Vision and Eye Health Surveillance in the U.S.

- Surveillance of vision and eye health has been limited
 - Local population-based studies
 - Self-reported vision impairment from national surveys
 - Examination-based data from 2005–2008 NHANES
- Prior to 2018, there was no coordinated, comprehensive surveillance system for vision and eye health



**MAKING EYE HEALTH
A POPULATION
HEALTH IMPERATIVE**

VISION FOR TOMORROW

“The Centers for Disease Control and Prevention should develop a coordinated surveillance system for eye and vision health in the United States.”



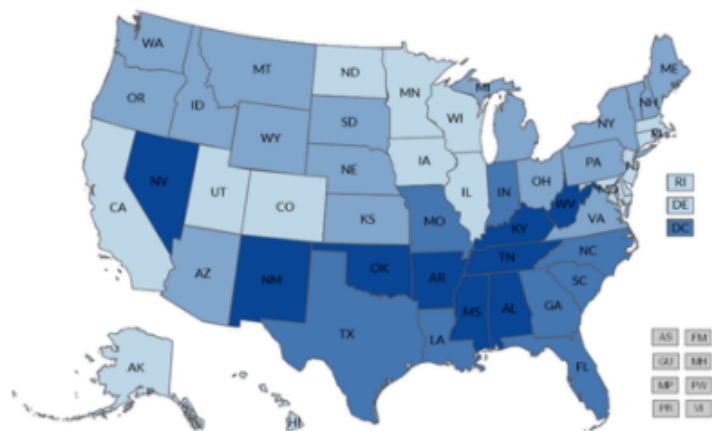


THE VISION AND EYE HEALTH SURVEILLANCE SYSTEM

A national data system for vision and eye health

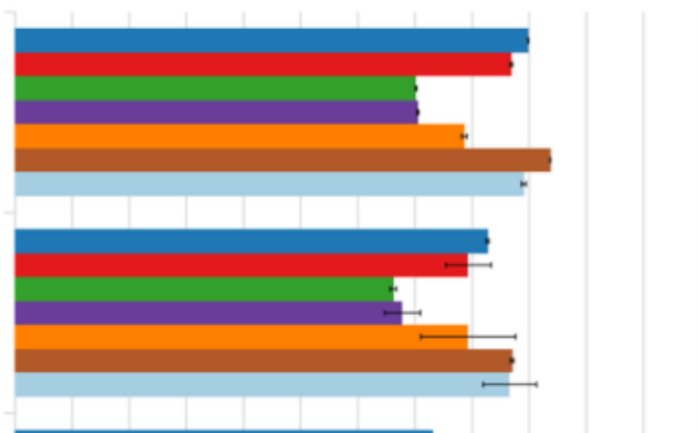
Data Highlights

American Community Survey



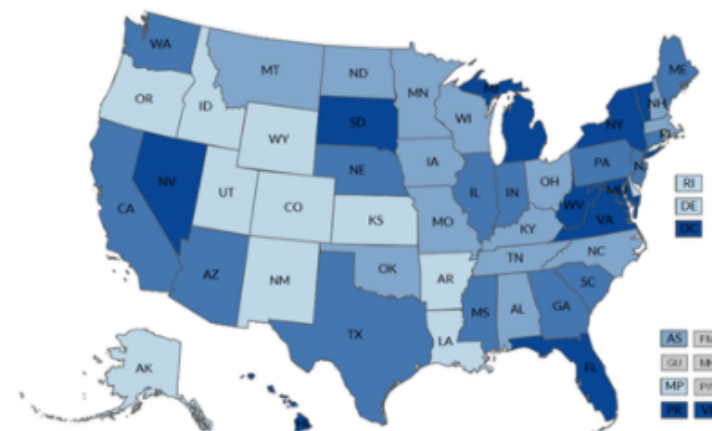
Prevalence of self-reported blindness and difficulty seeing

Medicare Claims



Racial disparities in eye examination rates

IRIS® Registry



Prevalence of diagnosed glaucoma

CDC's Surveillance of Vision and Eye Health in the U.S.

- Assesses the epidemiology of vision loss and eye diseases at the national, state, and county level
- Monitors trends over time
- Provides data to inform public health priorities and resource allocation
- Evaluates the impact of public health programs

World report on vision



“At present at least 2.2 billion people around the world have a vision impairment, of whom at least 1 billion have a vision impairment that could have been prevented or is yet to be addressed.”

<https://www.who.int/publications-detail-redirect/9789241516570>



Seventy-fifth session
Agenda item 24
Eradication of poverty and other development issues

**Resolution adopted by the General Assembly
on 23 July 2021**

[without reference to a Main Committee (A/75/L.108 and A/75/L.108/Add.1)]

75/310. Vision for Everyone: accelerating action to achieve the Sustainable Development Goals

The General Assembly,

Reaffirming its resolution 70/1 of 25 September 2015, entitled “Transforming our world: the 2030 Agenda for Sustainable Development”, in which it adopted a comprehensive, far-reaching and people-centred set of universal and transformative Sustainable Development Goals and targets, its commitment to working tirelessly for the full implementation of the Agenda by 2030, ensuring that no one is left behind, its recognition that eradicating poverty in all its forms and dimensions, including extreme poverty, is the greatest global challenge and an indispensable requirement for sustainable development, its commitment to achieving sustainable development in its three dimensions – economic, social and environmental – in a balanced and integrated manner, and to building upon the achievements of the Millennium Development Goals and seeking to address their unfinished business,

Recognizing the important contribution that the promotion of eye health can make to accelerating action towards the achievement of the Sustainable Development Goals,

Recognizing also that the contributions of persons with disabilities are important to the full and effective implementation of the 2030 Agenda, and noting the need for Member States, the United Nations system and other stakeholders to further strengthen the normative framework on disability, including the rights of persons with disabilities, in line with the pledge of leaving no one behind, and to consider disability as a global issue, cutting across the pillars of the United Nations,

Vision Health for Everyone Resolution

“Calls upon Member States to ensure access to eye care services for their population and to mobilize the necessary resources and support in this regard, in order to contribute to global efforts to reach, by 2030, at least 1.1 billion people who have a vision impairment and currently do not have access to the eye care services that they need.”

