Information to Advocate for Maintaining the National Eye Institute (NEI)

This slide deck has talking points and data to promote vision and eye research, specifically aimed at convincing Congress to **keep "eye" in NIH** . The last slide has information on paths to advocacy.

Key points and consequences of the White House Office of Management and Budget dated April 10, 2025

Key points	Consequences
Consolidate the number of NIH institutes from 27 to 8	Eliminates the NEI and allocation of vision-specific funding
Reduce the NIH budget by 43% (\$20 billion)	Cripples US jobs, economy, and discovery of new diagnoses and treatments
Cap the indirect rate at 15%	Impairs support for biomedical research

These changes would dramatically cut vision research and the ability to develop cutting-edge vision therapies to treat visual impairments and blindness

This information is meant to be shared, edited, and expanded upon to create a grassroots effort to **Promote Eye Research** and **Save the NEI.**

To Save Sight and Save the NEI, contact Congress, see Contact Congress - NAEVR/AEVR

Internal Trump administration document reveals massive

Most Americans would <u>rather lose</u> <u>a limb</u>



than lose eyesight



Vision health is important for quality of life Save Sight, Save the NEI

Scott et al., *JAMA Ophthalmol.* 2016;134(10):1111-1118. doi:10.1001/jamaophthalmol.2016.2627 https://jamanetwork.com/journals/jamaophthalmology/fullarticle/2540516

Developing cures and treatments for these causes of chronic visual impairment require years of rigorous research



Save Sight, Save the NEI

https://medialibrary.nei.nih.gov/

Visual loss has significant economic impact with alarmingly low vision research investment

Economic burden: \$199 billion in 2025

\$865 per American

Federal vision research funding: \$896.5 million since 2023



Preserving vision saves money Save Sight, **Save the NEI**

Research and discovery on all parts of the eye are needed to address visual impairments affecting 192.35 million Americans



Save Sight, Save the NEI

Rein et al. JAMA Ophthalmol. 2022. doi: 10.1001/jamaophthalmol.2022.4401; https://www.nvisioncenters.com/education/eye-disease-statistics/#cataracts; https://pubmed.ncbi.nlm.nih.gov/28705660/; https://pubmed.ncbi.nlm.nih.gov/28705660/; <a href="https://www.cdc.gov/vision-health-data/prevalence-estimates/dr-prevalence-estimates/dr-prevalence-estimates/dr-prevalence-estimates/dr-prevalence-estimates/pr

These diseases do not fit with the re-organization of NEI into the proposed "Institute of Neuroscience and Brain Research"



Save Sight, Save the NEI

Rein et al. JAMA Ophthalmol. 2022. doi: 10.1001/jamaophthalmol.2022.4401; https://pubmed.ncbi.nlm.nih.gov/28705660/; https://www.nvisioncenters.com/education/eye-disease-statistics/#cataracts; https://pubmed.ncbi.nlm.nih.gov/28705660/; https://www.cdc.gov/vision-health-data/prevalence-estimates/glaucoma.html; https://www.ncbi.nlm.nih.gov/sites/books/NBK607610/#:~:text=TABLE%203%2D4,8%2Dfold%20increase%20in%20prevalence

Visual impairments affect more Americans than many other health conditions. Dedicated eye research is essential for cutting edge treatments



- Rein et al., JAMA Ophthalmol. 2022 doi 10.1001/iamaophthalmol.2022.4401
- https://www.nvisioncenters.com/education/eye-diseasestatistics/#cataracts
- https://pubmed.ncbi.nlm.nih.gov/28705660/
- https://www.cdc.gov/vision-health-data/prevalence-estimates/dr prevalence.htm
 - https://www.cdc.gov/vision-health-data/prevalenceestimates/prevalence-estimates-glaucoma.htm
- NASEM Myopia report; https://www.ncbi.nlm.nih.gov/sites/books/NBK607610/#:~:text=TA BLE%203%2D4,8%2Dfold%20 increase%20 in %20 prevalence.;
- https://seer.cancer.gov/statfacts/html/all.html
- https://www.cdc.gov/nchs/hus/topics/heart-disease
- prevalence.htm; 5.5% in 2019; US population in 2019: 328.3 million
- https://www.ncbi.nlm.nih.gov/books/NBK83160/
- https://www.cdc.gov/diabetes/php/data-research/index.html 10.

The National Eye Institute (NEI) is dedicated to preserving America's eyesight



Partnership with the National Eye Institute (NEI) has helped develop vision-saving treatments since 1968



Save Sight, Save the NEI

https://www.eyeresearch.org/

Eye research is underfunded compared to the number of Americans affected with visual impairments



China outpaces the US in overall research quantity and quality



China's support in eye research surged 47% from 2002 to 2022



Prediction and monitoring of body health through the eye is made possible by funding from NEI



Without the NEI there is no Focus on Vision



Save Sight, Save the NEI

The NIH Supports, Helps, and Protects Americans



AIMBE.org UnitedforMedicalResearch.org

- There is an urgent need to increase awareness of vision disorders and importance of vision research to prevent blindness
- We need a grassroots effort to **Promote Eye Research** and **Save the NEI**
- This information is meant to be shared, edited, and expanded.
- To Prevent Blindness and Keep "eye" in NIH, contact Congress, go to www.eyeresearch.org/contact-congress

For more information, contact <u>www.eyeresearch.org</u>

Pathways to disseminate this information with the goal to promote Eye Research and save NEI



Ideas to disseminate this information

- Share with clinical faculty seeing patients
- Video displays in patient waiting areas
- Share with community members
- Share with vision patient advocacy groups
- Share with institutional governmental relations team that meet with Congressional staffers
- Share on social media
- Arrange congressional visits with your state representatives

Data slides The data for the graphics can be found here

Biomedical research supports advanced healthcare and economic activity in the US

- Sustained support for biomedical research has made the U.S. a world leader in innovative healthcare that saves lives and improves health
- National Institutes of Health (NIH) is the major funding agency for US biomedical research and supports research in every state
- NIH-funded research produced \$94.58 billion in new economic activity and over 400,000 jobs in FY24
- For every \$1 in NIH research, the US has \$2.46 increase in new economic activity

Eliminating the National Eye Institute will negatively impact visual health and treatment options for eye disease

- Vision loss is the top health concern for Americans
- Vision disorders and disease affect 65.5 million Americans, 19% of the population
- The prevalence of visual disorders and disease is <u>greater</u> than the prevalence of cancer, heart disease, and Alzheimer's combined (46 million)
- Decreased vision negatively impacts quality of life
- Decreased vision impacts earning potential (\$8 billion annually)
- Visual health and treatments for visual disease matter

Save the National Eye Institute to support Eye Research and Eye Care

Visual disease and disorders affects 65.5 million Americans – more than cancer, heart disease, and Alzheimer's disease (42.4 million)

Visual disease and disorders include:

- AMD, 19.83 million age 40 and older¹
- Cataracts, 20.5 million²
- Dry eye disease, 16.4 million³
- <u>Diabetic Retinopathy</u>, 9.6 million⁴
- <u>Glaucoma</u>, 4.22 million⁵
- Myopia, 121.8 million⁶

Compare this with other major health diseases:

- Cancer, 17.4 million⁷
 - Breast cancer, 3.9 million⁸
- <u>Heart disease</u>, 18.06 million⁹
- Cardiovascular disease, 82.6 million¹¹
- <u>Diabetes</u>, 38.4 million people¹²
- <u>Alzheimer's disease</u>, 6.9 million¹⁰

NEI research directly supports clinical eye care

- Optical coherence tomography
- Gene therapy
- Stem cell therapy
- Artificial Intelligence
- Anti-VEGF Drug Therapies for AMD and diabetic eye disease
- AREDS Nutritional supplements for AMD
- Pressure-reducing glaucoma drugs
- Sutureless amniotic membrane grafts for cornea scars

Economic impact of visual disease and disorders

- The direct medical costs for major adult visual disorders are estimated to be \$35.4 billion annually, including refractive errors, cataracts, glaucoma, AMD, and diabetic retinopathy.
 - Direct medical costs: \$16.2 billion
 - Other direct costs: \$11.1 billion
 - Productivity losses: \$8 billion
 - Annually, the federal government and state Medicaid agencies pay at least \$13.7 billion of these costs.

Major eye research advances that impact eye health

- National Eye Institute created by Congress in 1968
- Clinical trials on Diabetic Retinopathy that established current treatments (1971)
- Glaucoma Laser Trial (1990)
- RPE65 is cloned, advancing understanding of certain genetic mutations that cause blindness in children (1993)
- AREDS study to lower risk of AMD (2001)
- Cornea Donor Study that increased pool of donors for corneal transplants (2008)

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- Uncorrected refractive errors, primarily myopia, pose a significant economic burden in the US, with estimates suggesting annual productivity losses of around \$202 billion
- The direct medical costs for refractive error alone are estimated to be around \$5.5 billion.
- Annual global productivity losses associated with vision impairment from uncorrected myopia in adults and presbyopia are estimated to be US\$ 244 billion and US\$ 25.4 billion, respectively.