



# 2025 Agency Overview

Deputy Commissioner Wendy Underwood

Senate Health and Human Services Committee

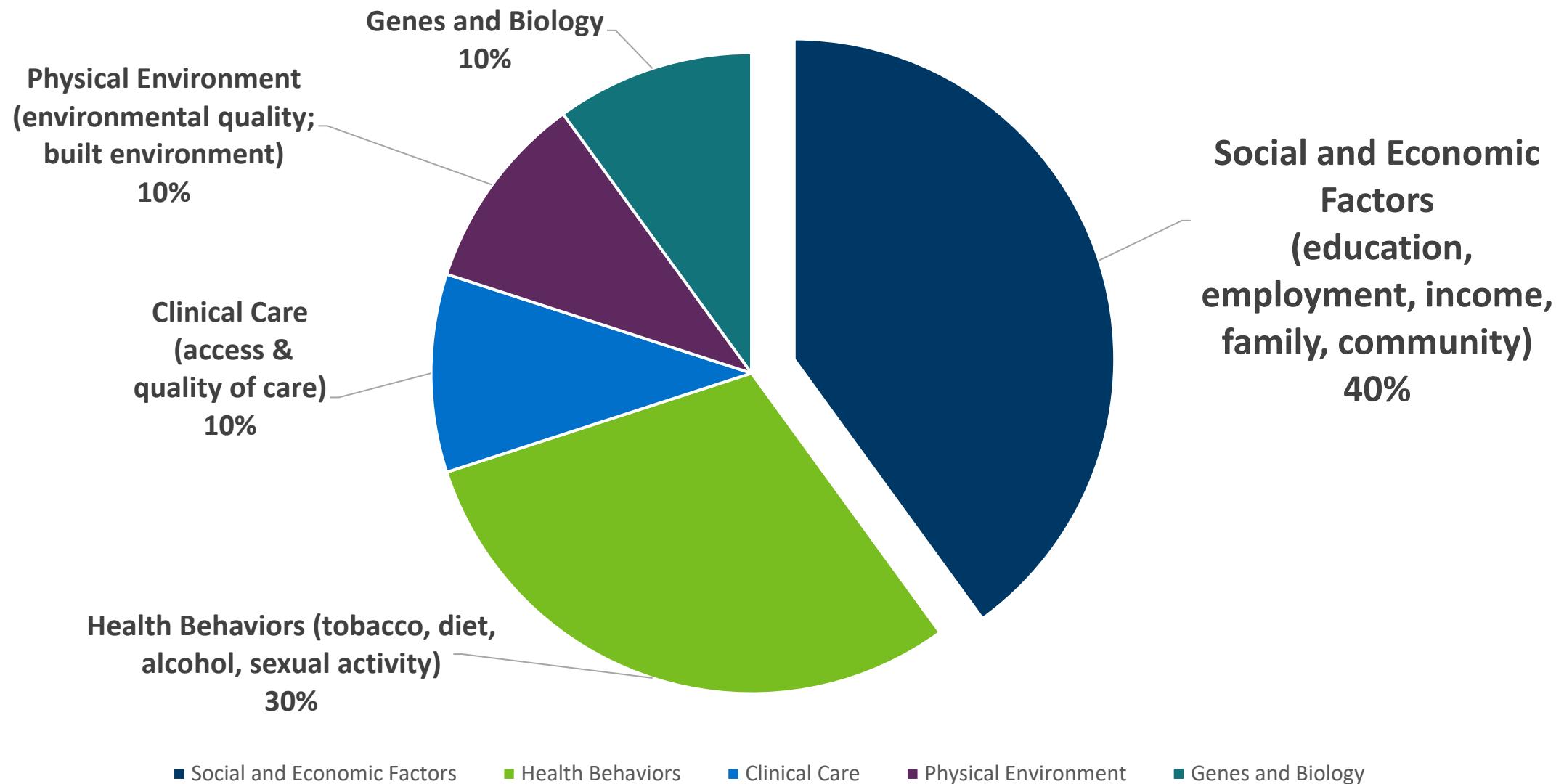
January 21, 2025



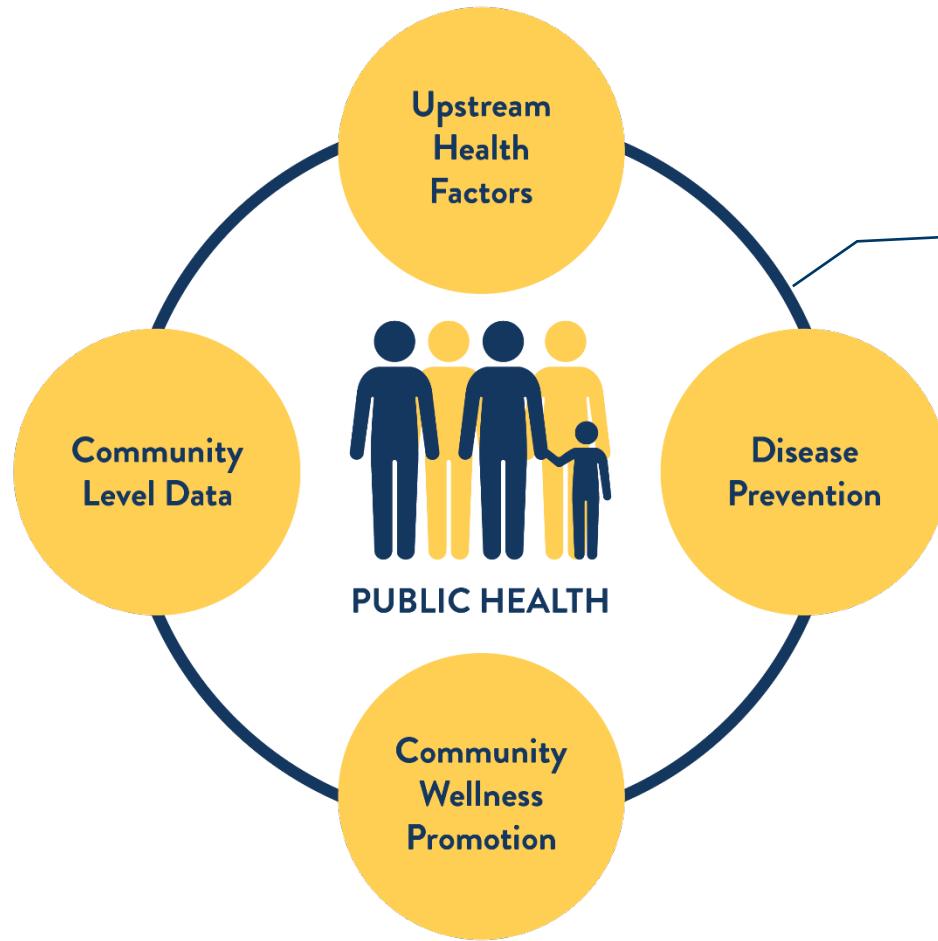
## MDH Mission:

*“Our mission is to protect,  
maintain and improve the  
health of all Minnesotans.”*

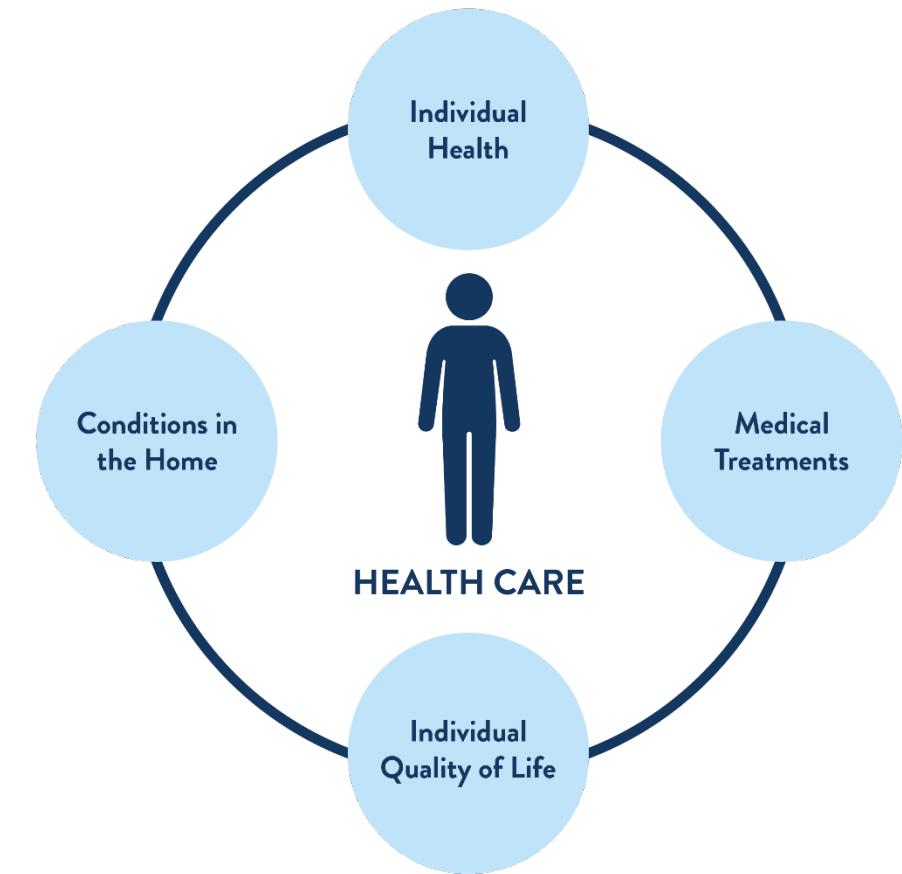
# What Determines Our Health?



# Public Health and Health Care



MDH addresses issues in the domain of **public health**. Examples of the scope of activities include drinking water, food standards, infectious diseases, maternal and child health, cancer screening, nutrition, and facility regulations



# Public Health in Minnesota

## Health Care/Human Services (DHS)

1. Providing medical coverage for a child with measles
2. Enrolling people in health insurance to ensure chronic disease treatment
3. Providing coverage for and treating people with addiction or overdose in hospital or program

## Public Health (MDH)

1. Providing information to parents about the value of immunizations
2. Working with communities to reduce prevalence of chronic disease
3. Addressing root causes of diseases of despair (alcohol abuse, suicide, etc.)

# Public Health in Minnesota

- Chronic conditions are closely tied to where we live, work, our culture, and our daily activities.
- Factors such as being able to find and afford nutritious food, to have meaningful work that pays a good wage, experiencing violence, and having a trusted support system all impact healthy behaviors and overall health.
- Systemic racism and discrimination-related stress also impacts people of color, including Black, American Indian, and other marginalized communities, putting them at higher risk of developing chronic conditions.



# The Minnesota Paradox



- Despite being among the healthiest states *on average*, Minnesota has some of the nation's worst health disparities—this is known as the “Minnesota Paradox”
- Compared to White adults, Minnesota's populations of color and American Indians experience:
  - Shorter life spans
  - Higher rates of infant mortality
  - Higher incidences of diabetes, heart disease, and cancer; and
  - Poorer overall health

# MINNESOTA DEPARTMENT OF HEALTH ORGANIZATION CHART

Executive Office Administration, Sandy Pizzuti, Supervisor

Communications Office, Sam McCullough, Interim Director

Office of Legislative Relations, Lisa Thimjon, Director

MNIT Health, Bill Flatley, Chief Business Technology Officer

Office of Data and Analytics, Nilo Hines

Office of Data Strategy and Interoperability, Chris Brueske, Director  
Center for Health Statistics, Dan Fernandez-Baca

**Chief of Staff, Imee Cambronero**  
Supported by Sandy Pizzuti

**Brooke Cunningham, MD**  
Commissioner  
Supported by Sandy Pizzuti

**Wendy Underwood**  
Deputy Commissioner  
Supported by Kelle Glefer

Affirmative Action Compliance Officer, Kotumu Kamara  
General Counsel's Office, Robin C. Benson, General Counsel  
Internal Audit and Analytics, Sandy Ludwig

## HEALTH PROTECTION BUREAU

Myra Kunas, Assistant Commissioner  
Supported by Michaelyn Nelson

State Epidemiologist and Medical Director, Ruth Lyndfield  
Bureau Strategic Administrative Manager, Vacant

**ENVIRONMENTAL HEALTH DIVISION**  
Tom Hogan, Director  
Vacant, Assistant Director  
Dan Symonik, Assistant Director

Drinking Water Protection, Sandeep Burman  
Environmental Health Operations Center, Open  
Environmental Surveillance and Assessment, David Uverseed  
Food, Pools and Lodging Services, Angie Wheeler  
Indoor Environments and Radiation, Mary Navara  
Well Management, Teressa Purrington  
Water Policy Center, Tenille Eshensur

**INFECTIOUS DISEASE EPIDEMIOLOGY, PREVENTION AND CONTROL DIVISION**  
Jessica Hancock-Allen, Director  
Emily Emerson, Assistant Director

Communications and Operations, Christine VanBergen  
Emerging Infectious Disease Epidemiology and Response Section, Kathy Como-Sabetti  
Cross Cutting Epidemiology, Programs and Partnerships Section, Kristin Sweet  
Foodborne, Waterborne, Vectorborne and Zoonotic Diseases, Kirk Smith  
Healthcare-Associated Infections/Antimicrobial Resistance, Jacy Walters  
STI/HIV/TB, Sarah Gordon, Interim  
Vaccine Preventable Disease, Margo Roddy

**PUBLIC HEALTH LABORATORY**  
Sara Vetter, Director  
Jill Simonetti, Assistant Director

Environmental Laboratory, Stefan Saravia  
Infectious Disease Laboratory, Anna Strain  
Newborn Screening, Carrie Wolf

## HEALTH IMPROVEMENT BUREAU

Robson (Halikano) Tura, Assistant Commissioner  
Supported by Nikki Jensen

Bureau Strategic Administrative Manager, Andrew Greenlee

### CHILD AND FAMILY HEALTH DIVISION

Noya Woodrich, Director  
Kathy Wick, Assistant Director

Children and Youth with Special Health Needs, Nicole Brown  
Family Home Visiting, Jenrie Uppert  
Maternal and Child Health, Savannah Riddle  
Supplemental Nutrition Programs, Kata Franken  
HelpMe Connect Coordinator, Shawn Holmes  
Title V (MCH Block Grant), Elizabeth Taylor-Schiro

### HEALTH PROMOTION AND CHRONIC DISEASE DIVISION

Khatidja Dawood, Director  
Chuck Stroebel, Assistant Director

Cancer Control/Sage Programs, Milarie Peterson-Hickey  
Center for Health Promotion, Ann Zukoski  
Chronic Disease and Environmental Epidemiology, Jay Desai  
Office of Statewide Health Improvement Initiatives, Kris Igo

### NEW DIVISION NAME PENDING

Catherine Diamond, Interim Director  
Beatrix Manantau, Acting Assistant Director  
Julie Hanson Perez, Operations Manager

Substance Use Prevention, Catherine Diamond  
Injury and Violence Prevention, Beatrix Manantau  
Operations, Julie Hanson Perez  
Commercial Tobacco Prevention and Control, Christina Thill

## HEALTH SYSTEMS BUREAU

Carol Backstrom, Assistant Commissioner  
Supported by Michaelyn Nelson

### HEALTH POLICY DIVISION

Diane Rydrych, Director  
Susan Castellano, Assistant Director  
Adverse Events Reporting, Rachel Jokela  
Health Care Homes, David Kurtzon  
Health Economics Program, Stefan Gidemeister  
Managed Care Systems, Julie Erickson  
Center for Health Information Policy and Transformation, Jennifer Fritz  
Office of Rural Health and Primary Care, Zora Radosevich  
Office of Vital Records, Molly Crawford

### HEALTH REGULATION DIVISION

Maria King, Director  
Susan Winkelmann, Assistant Director  
Lindsey Krueger, Assistant Director  
State-regulated Facilities, Occupations and Complaints, Daphne Ponds  
Federal-regulated Facilities, Occupations and Complaints, Sarah Grebenc  
Program Operations, Rick Michaels  
HRD Budget, Hardi Wangsabesar

## HEALTH EQUITY BUREAU

Kris Rhodes, Interim Assistant Commissioner  
Supported by Nikki Jensen

Bureau Strategic Administrative Manager, Olivia Walker  
Equity Grant Specialist, Allison Larson  
Budget and Compliance Coordinator, Darrell Rongulai  
Health Equity Performance and Research Manager, Mark Caldwell

### HEALTH EQUITY STRATEGY AND INNOVATION DIVISION

Odi Akosonu-DeSouza, Director  
Sara Chute, Assistant Director

Community Engagement and Collaboration Manager, Open  
Equity Capacity Building Manager, Open

### TRIBAL RELATIONS

Ravyn Gibbs, Tribal Liaison

### OFFICE OF AFRICAN AMERICAN HEALTH

Director, Vacant

### OFFICE OF AMERICAN INDIAN HEALTH

Kris Rhodes, Director

### OFFICE OF DIVERSITY, EQUITY, INCLUSION AND BELONGING

Director, Vacant

The Health Equity and Health Operations Bureaus work collaboratively to provide agency-wide support.

## HEALTH OPERATIONS BUREAU

Mal Greszak, Assistant Commissioner, Chief Operating Officer  
Supported by Kelle Glefer

Bureau Strategic Administrative Manager, Mike Bootchar

### OFFICE OF ORGANIZATIONAL WELLBEING AND EMPLOYEE EXPERIENCE

Annie Kiel, Director

### NEW DIVISION NAME PENDING

Chelsie Huntley, Director  
Becky Sechrist, Assistant Director

Agency Projects and Planning, Vidhu Srivastava  
Strategic Planning, Lizzia McNamara  
Public Health Practice, Kim Milbrath

### FACILITIES MANAGEMENT DIVISION

Kevin Umdon, Facilities Manager

Freeman Building Services, Michael Launderville  
Public Health Lab Building Services, Curtis Berg  
Regional Building Services, Elizabeth Mayer  
Facility Services, Susan Lysdahl

### FINANCIAL MANAGEMENT DIVISION

Joshua Bunker, Chief Financial Officer  
Tara Baronok, Assistant Director

Budget Operations, Misty Pollerin  
Budget Planning, Brendan Wright  
Communications and Continuous Improvement, Karen Gades  
Financial Operations, Martina Cameron  
Financial Services, Christine Taylor

### HUMAN RESOURCES MANAGEMENT DIVISION

Taylor Stiff, Director

Staffing Manager, Annie Marin  
Operations Manager, Kristi Lane  
Employees and Labor Relations Manager, Rachael Marshall  
Workforce Development Manager, Jennifer Winegarner  
Safety Administrator, Jolene Ziegler

### EMERGENCY PREPAREDNESS AND RESPONSE DIVISION

Cheryl Peterson-Kroeker, Director  
Deb Radi, Assistant Director  
Michelle Larson, Assistant Director

Public Health Emergency Preparedness, Sandra Hanson  
PH Emergency Preparedness Consultants, Amy Smith  
Organizational Services, Chessa Kendrick  
Healthcare Preparedness Program, Erin McLachlan  
Strategic National Stockpile, Chad Ostlund

# Health Protection Bureau

Environmental Health	Infectious Disease Epidemiology, Prevention and Control	Public Health Laboratory
<ul style="list-style-type: none"><li>• 7,000 public water systems</li><li>• 26,000 food, lodging, and swimming pool establishments</li><li>• Certify 12,000 food managers and support 36,000 active food managers</li><li>• Reduce unnecessary indoor radiation exposure for over 11,000 facilities</li><li>• Regulate installation of 6,500 new wells and sealing of 7,000 unused</li><li>• Provide educational support empowering 470,000 private well owners to keep their water safe</li></ul>	<ul style="list-style-type: none"><li>• 24/7 system to detect, investigate, and control diseases such as measles, bacterial meningitis, norovirus, E coli, rabies, Lyme disease, avian influenza, and sexually transmitted diseases</li><li>• Coordinate free vaccines to nearly half of Minnesota children</li><li>• Investigate farm workers potentially exposed to H5N1</li><li>• 624 disease investigations in 2024:<ul style="list-style-type: none"><li>• Responded to 373 outbreaks</li><li>• Investigated 251 clusters of intestinal (enteric) diseases</li></ul></li></ul>	<ul style="list-style-type: none"><li>• Screen over 60,000 newborns for 63 conditions<ul style="list-style-type: none"><li>• 485 babies identified with a disorder last year</li></ul></li><li>• 138,694 environmental and biomonitoring tests to identify toxic chemicals</li><li>• 93,172 tests to identify infectious disease trends and outbreaks last year</li></ul>

# Health Improvement Bureau

Child and Family Health	Health Promotion and Chronic Disease	Substance Use, Injury and Violence Prevention
<ul style="list-style-type: none"><li>• 154,000 pregnant women, infants, and young children receive nutrition services from WIC</li><li>• 63,000 home visits for over 9,500 families in all 87 counties and 9 tribal nations</li><li>• 15,000 developmental and social-emotional screenings<ul style="list-style-type: none"><li>• 1,000 referrals to services and supports</li></ul></li><li>• Infant mortality down 38% since 1990</li><li>• Teen pregnancy down 77% since 1990</li></ul>	<ul style="list-style-type: none"><li>• Enrolled 31,705 Minnesotans in a diabetes prevention program (proven 58% effective) since 2013</li><li>• Partnered with 430 clinics across the state to provide breast and/or cervical cancer screening to about 7,000 uninsured or underinsured women annually</li><li>• Other prevention activities include asthma, cardiovascular health, oral health, arthritis, and Alzheimer's and related dementias</li><li>• Working with partners, have trained over 120 community health workers</li><li>• SHIP is in all 87 counties and 10 tribal nations and works with 6,400 local partners</li></ul>	<ul style="list-style-type: none"><li>• Collect critical data from medical examiners, law enforcement, and hospitals to understand the circumstances of over 9,000 violent and overdose deaths and cases of acute substance use</li><li>• 988 Suicide and Crisis Lifeline</li><li>• Safe Harbor Human Trafficking and Exploitation Prevention and Response</li><li>• Over 18,000 Minnesotans have used Quitline for help quitting commercial tobacco</li></ul>

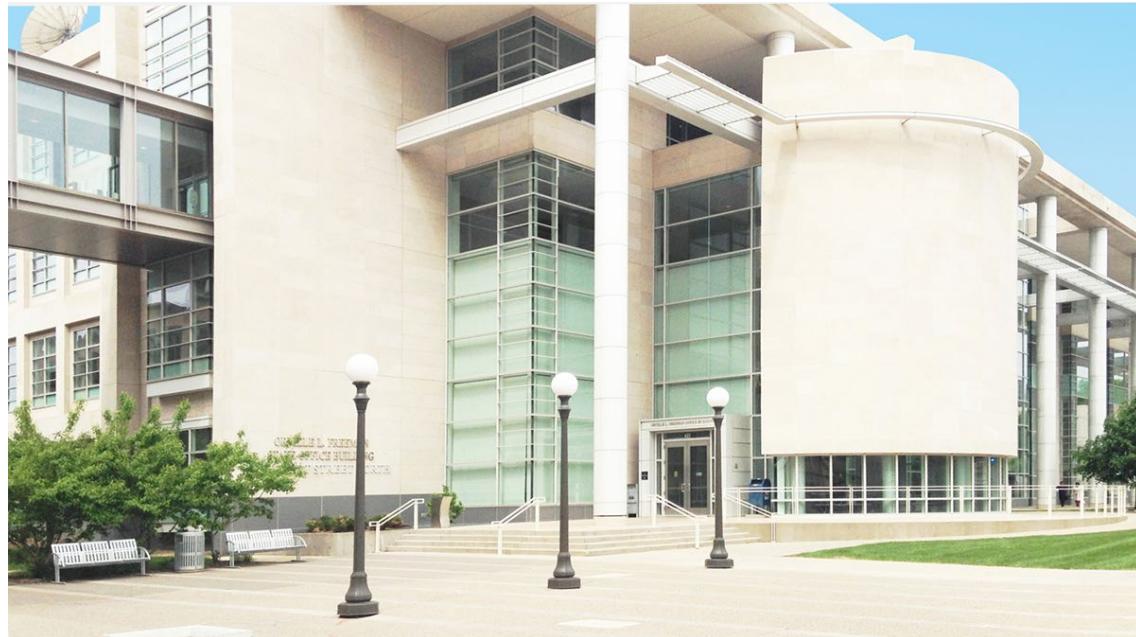
Health Policy	Health Regulation
<ul style="list-style-type: none"><li>• Certify and train 429 Health Care Homes (60% of all primary care clinics) to provide high quality, patient-centered, whole-person care</li><li>• Provided first-time access to original birth records to 3,087 adopted people in 2024</li><li>• Contributed to the increased secure use and exchange of electronic health record data from 45% in 2013 to more than 85% in 2024</li><li>• Publish information on health care market impacts, e.g., first state-level 340B Covered Entity revenue report and Prescription Drug Price Transparency Report</li><li>• \$70M in grants and loan forgiveness to support rural and underserved communities annually</li><li>• Regulate 12 health maintenance organizations and 3 county-based purchasing organizations that provide health care to over 1.7 million Minnesotans</li></ul>	<ul style="list-style-type: none"><li>• Monitor nearly 4,700 health care facilities and providers for safety and quality, including hospitals, nursing homes, and assisted living facilities</li><li>• Review qualifications and regulate more than 3,300 health professionals, including body art and birthing centers</li><li>• Maintain a registry of nearly 46,600 nursing assistants</li><li>• Inspect 523 funeral establishments, 92 crematories, and license 1,122 morticians</li><li>• Register more than 2,950 spoken language health interpreters</li><li>• Respond to thousands of citizen calls each year</li></ul>

# Health Equity Bureau

- Equity is at the foundation of public health and plays a crucial role in ensuring community health and well-being across Minnesota
- Office of American Indian Health works with Tribal governments and urban Tribal programs around Minnesota to improve American Indian public health outcomes
- Office of African American Health awarded the first round of Paths to Health grants along with collaboration with the Health Equity Resiliency and Vibrancy Framework Pilot Program to measure well-being in African American communities around Minnesota
- Provides support and guidance to local public health partners on their community engagement efforts to better address public health approaches and outcomes

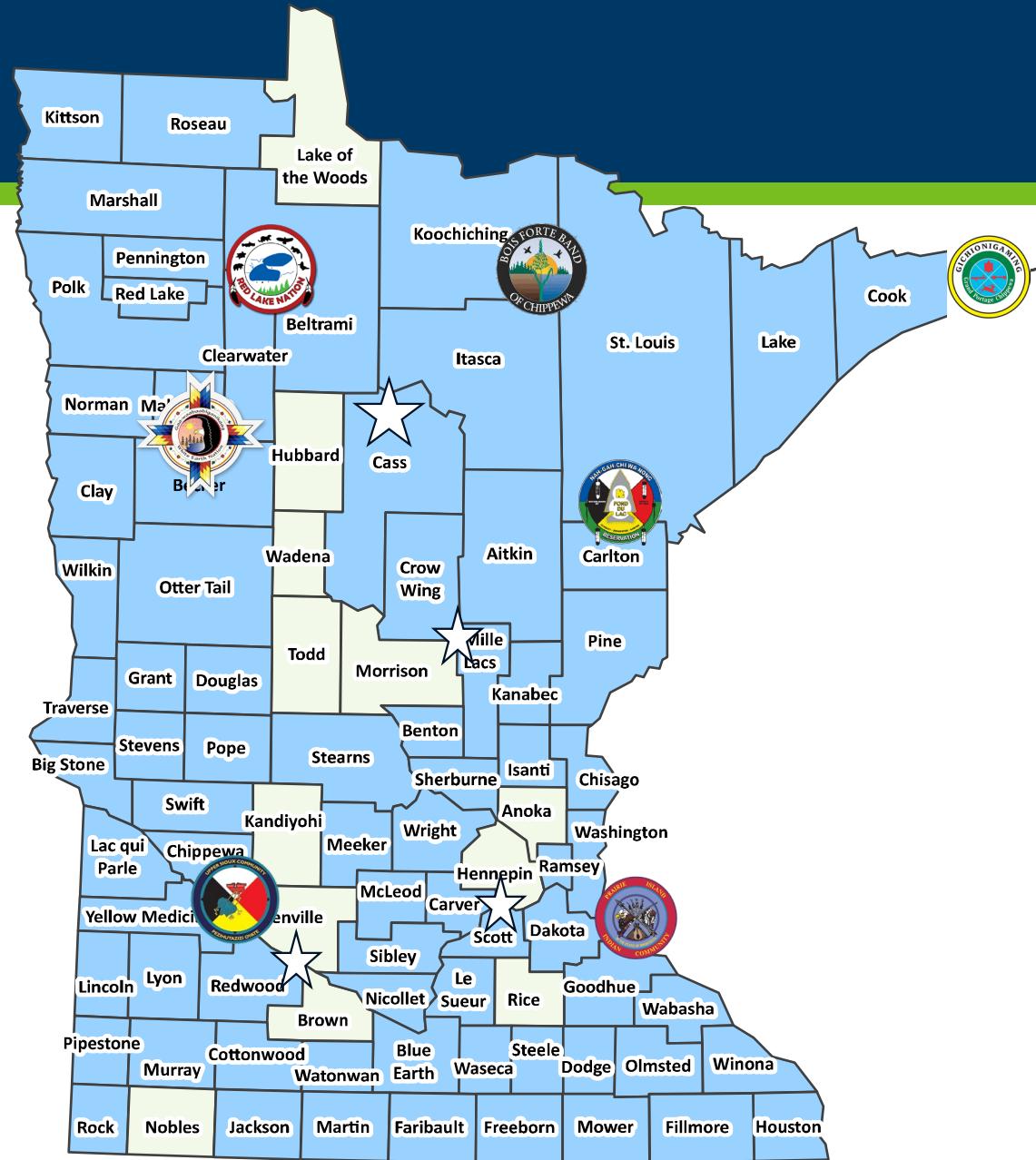


# Operations Bureau



- Manages 10 MDH facilities
- Provides human resource services to over 1,800 employees
- Provides information technology services support for 250 software applications, 256 servers, and 2,070 users
- Processes over 25,000 payment transactions, 2,500 grant agreements, and 575 contracts annually
- Supports MDH work with local public health and agency strategic planning

# MDH On the Road



# Update on Center for Health Care Affordability

- Created by Legislature in 2023
  - Health care costs rising faster than inflation
  - Cost burden on individuals, families and employers is growing
  - Care decisions driven by fears about costs can lead to poorer health overall
- MDH is not trying to reinvent the wheel
  - Talked to many stakeholders—employers, labor unions, providers, payers, consumer advocates, and other states
- Goal is to develop evidence-based solutions to high and rising health care spending
  - Centering individual and family voices and impacts
  - Strong advisory body that includes those with technical expertise
- We have hired a Director and we will begin to establish advisory bodies and continue community conversations about the impact of high health care costs on families and employers
- We look forward to continuing to work with the legislature as this work moves forward

# The Public Health Quandary: Prevention Often Invisible





# Public Health System Development in Minnesota

Chelsie Huntley, Director, MDH Community Health Division

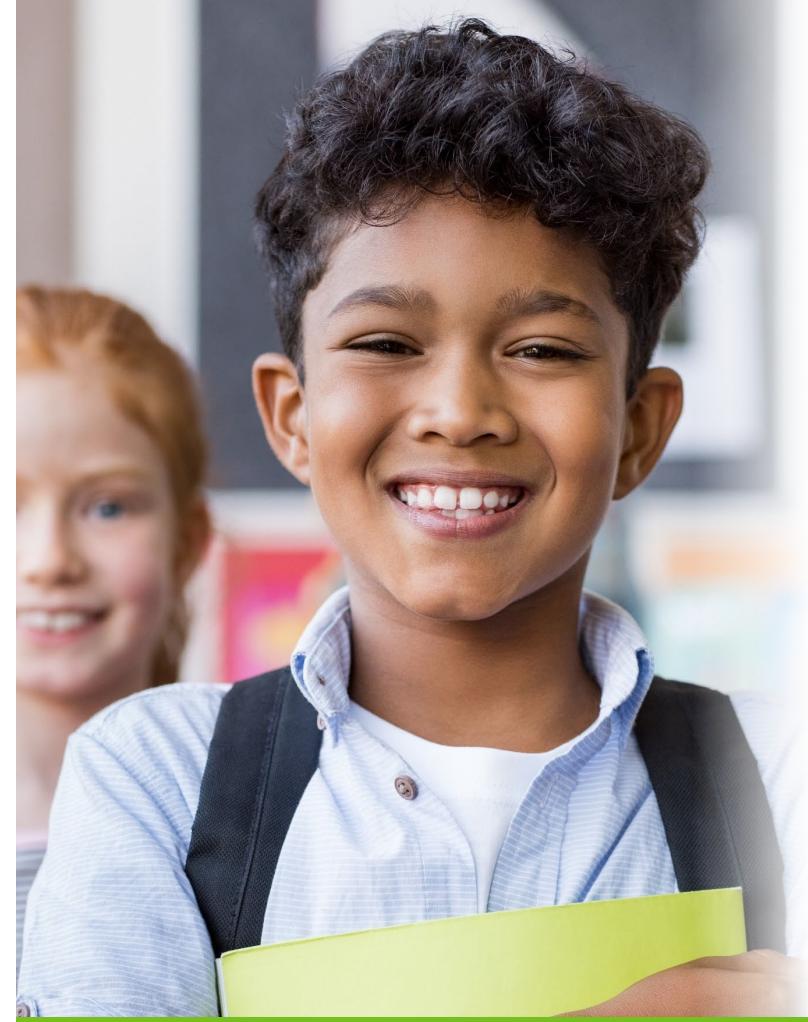
Nick Kelley, Public Health Administrator, City of Bloomington, 2024 LPHA Chair

Minnesota Senate: Health & Human Services Committee

January 2025



Every  
Minnesotan  
should have the  
opportunity to be  
their healthiest,  
no matter  
who they are or  
where they live.



**Where we live provides the building blocks  
for long-term health and well-being**

# For entire populations, public health...

 **Diagnoses**



 **Cooperates**

 **Prevents**



**“Public health is also about  
making sure kids are ready for school,  
using data to drive watershed management,  
fighting social isolation,  
soil and water conservation,  
maternal and child health,  
working for safe and affordable housing,  
helping fill food deserts  
in rural and urban settings.”**

*Commissioner Tarryl Clark, Stearns County*

# Minnesota's governmental public health system is outdated

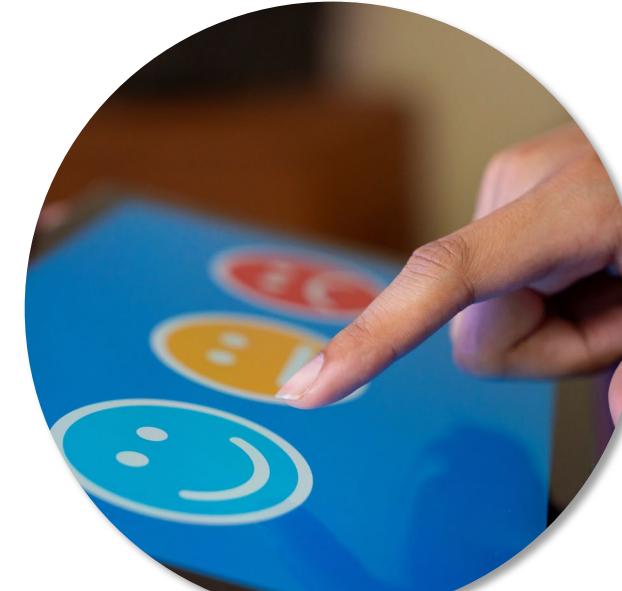
A lot has changed in 50 years:



Sharing and  
exchanging  
information and data

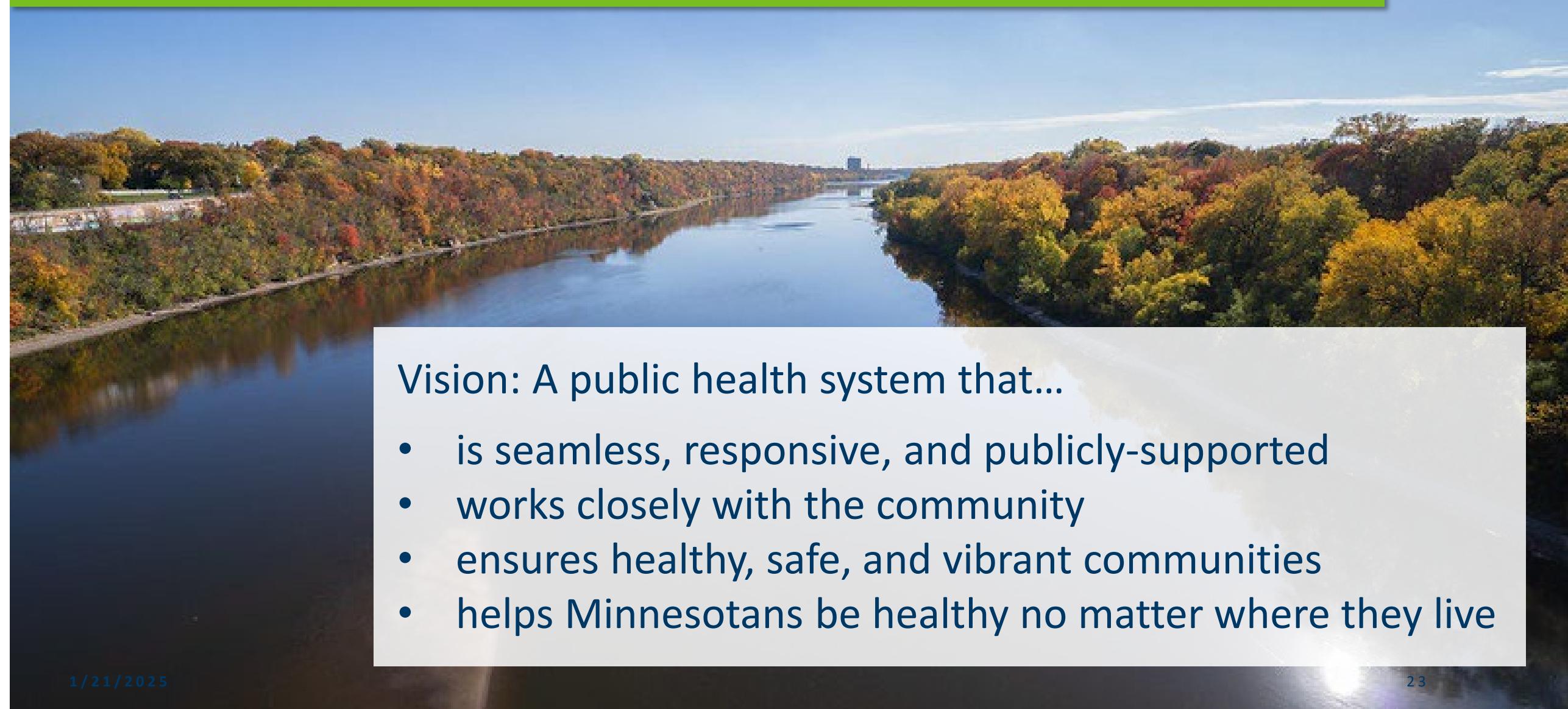


Taking in news  
and information  
(and sources)



Public expectations:  
convenience, specificity,  
engagement, cooperation

# Keep investing in a new approach to public health



Vision: A public health system that...

- is seamless, responsive, and publicly-supported
- works closely with the community
- ensures healthy, safe, and vibrant communities
- helps Minnesotans be healthy no matter where they live

# Grounded in shared leadership



Local health  
directors



State health  
officials



Locally-elected  
community health  
board officials

# State of the Public Health System

# Minnesota's public health system is locally driven, but also fragmented

## Strength

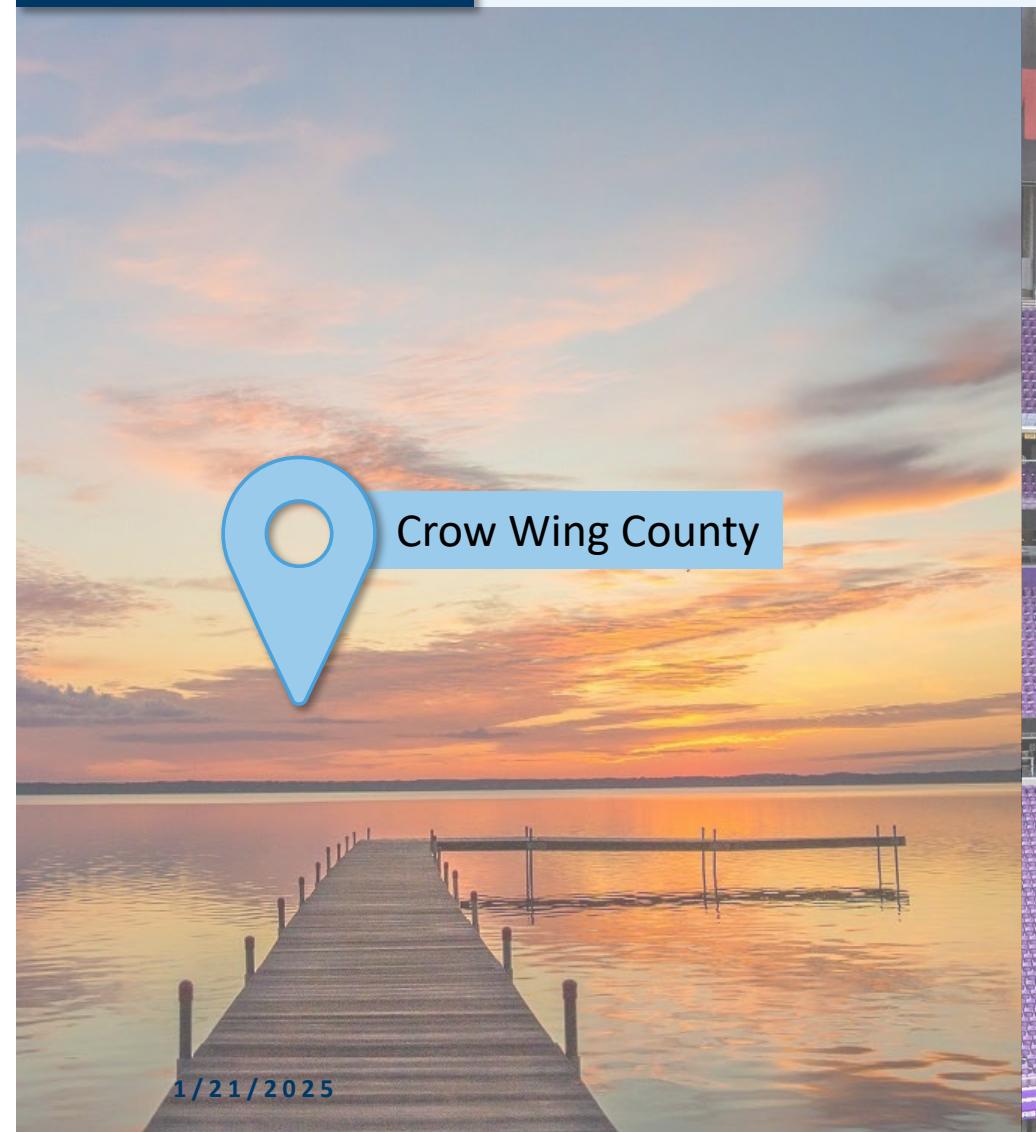
A versatile, locally-driven public health system

## Challenge

A fragmented system expected to address health factors beyond its reach

## ON THE GROUND

Our health doesn't stay behind when we leave our home. Neither should our access to quality, responsive public health.



1/21/2025



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# Our partnership is timeless, but our approach is outdated

## Strength

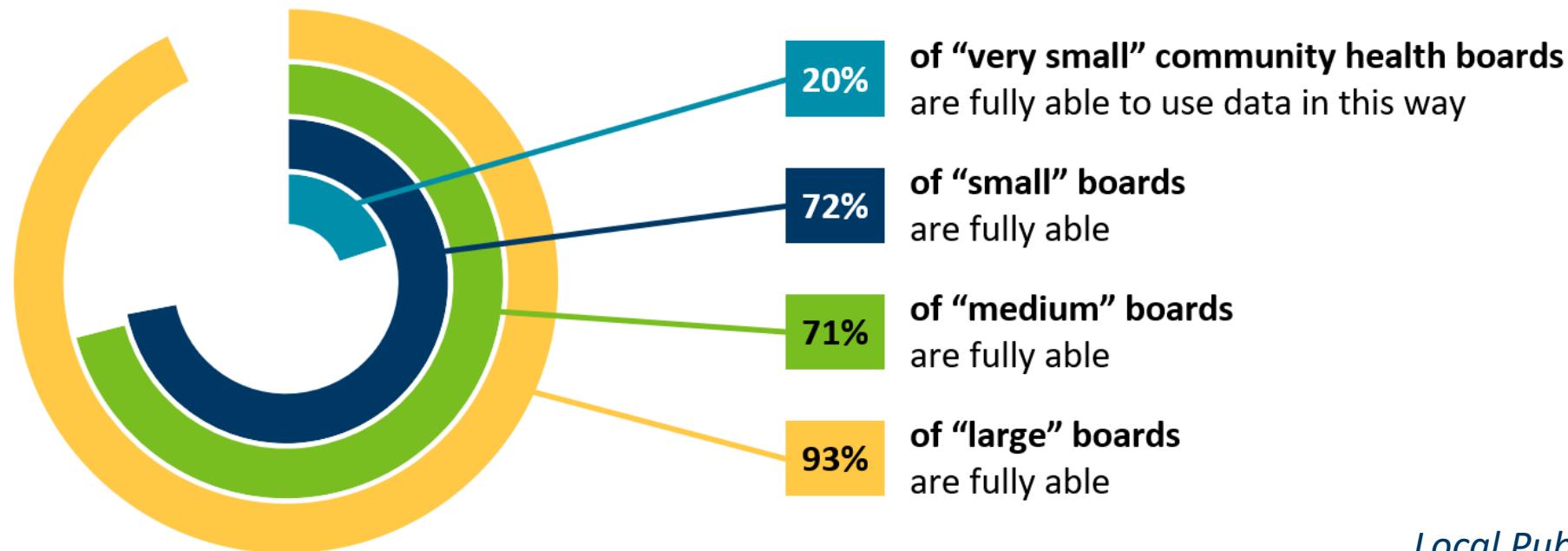
Our state-local partnership  
serves Minnesota well

## Challenge

Times have changed;  
outdated methods  
undermine trust and  
partnership

Community health boards with larger populations often have more capacity to use data for decision-making.

**Local community health board capacity to use data to recommend and inform public health actions, Minnesota, 2023**



*Local Public Health Act  
annual reporting, 2024*

# Governmental public health is small but mighty—and needs more capacity for foundational work

## Strengths

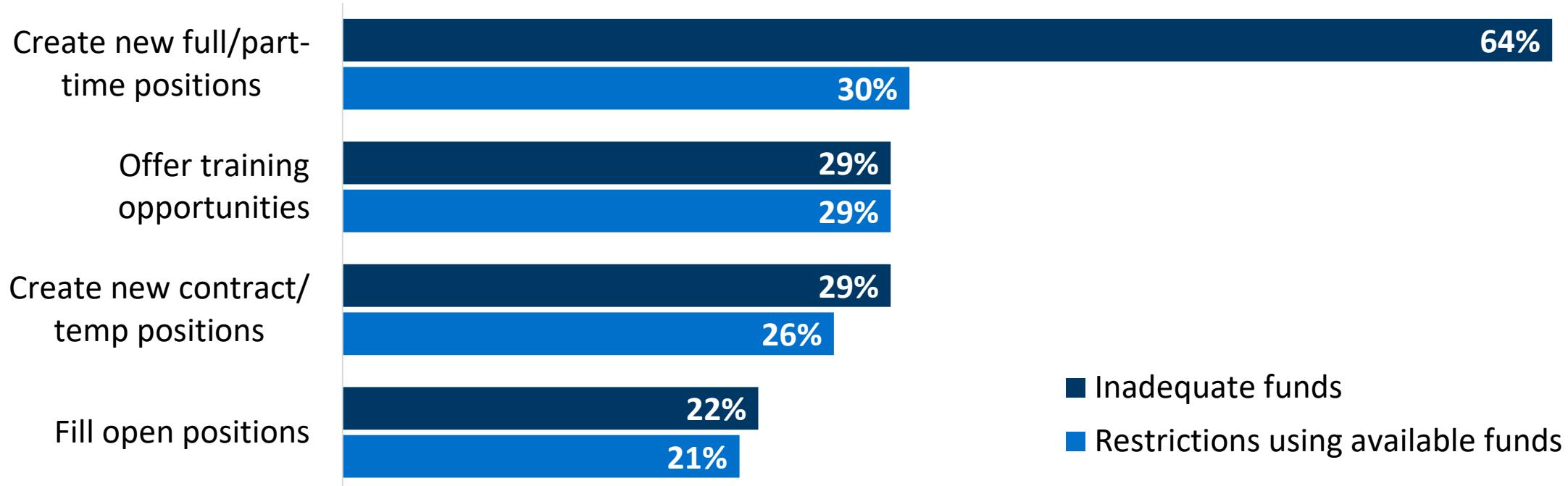
Deep and broad experience in workforce; commitment to community partnership and innovation

## Challenge

Simply not enough capacity for needed, necessary work

## Local health departments struggle to create new positions, fill open positions, and grow skills in existing positions.

### Challenges to increasing workforce capacity among Minnesota local health departments *before* the COVID-19 pandemic, 2022



*Karnik et al., 2023*

# Deep, broad expertise and experience cannot overcome chronic underfunding

## Strengths

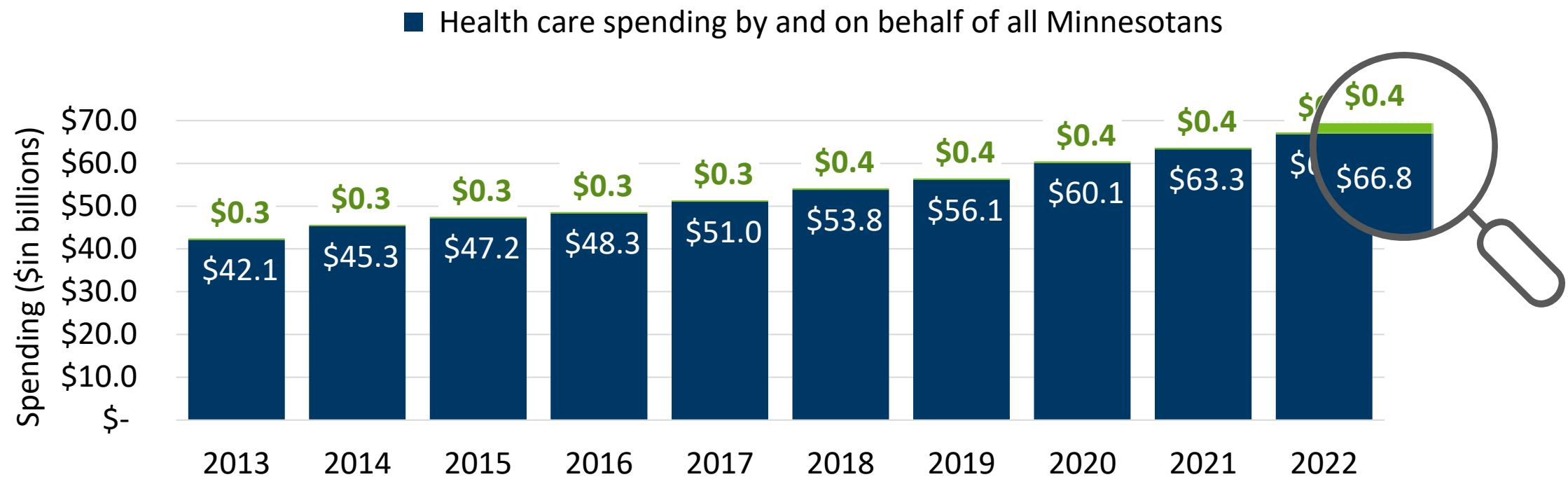
Cross-sector cooperation;  
focus on prevention

## Challenge

Funding is prescriptive and  
time-limited, inflexible,  
often addresses individual  
services, and cannot scale  
during emergencies

## Prevention and population-level solutions are chronically underfunded while medical costs balloon

### Public health and health care spending in Minnesota, 2012-2021



Minnesota Health Economics Program, 2024;  
Minnesota Center for Public Health Practice, 2024

Public health and prevention are smart investments—  
public health saves more money than it costs.

For every \$1.00  
invested in public  
health interventions...

**the median return  
is \$14.30.**

*Masters et al., 2018*

1/21/2025

Spending \$35 million  
on promoting physical  
activity, healthy foods,  
nonsmoking meant...

**\$365 million saved  
by Minnesotans on  
obesity-related  
spending.**

*Statewide Health Improvement  
Partnership, 2017*

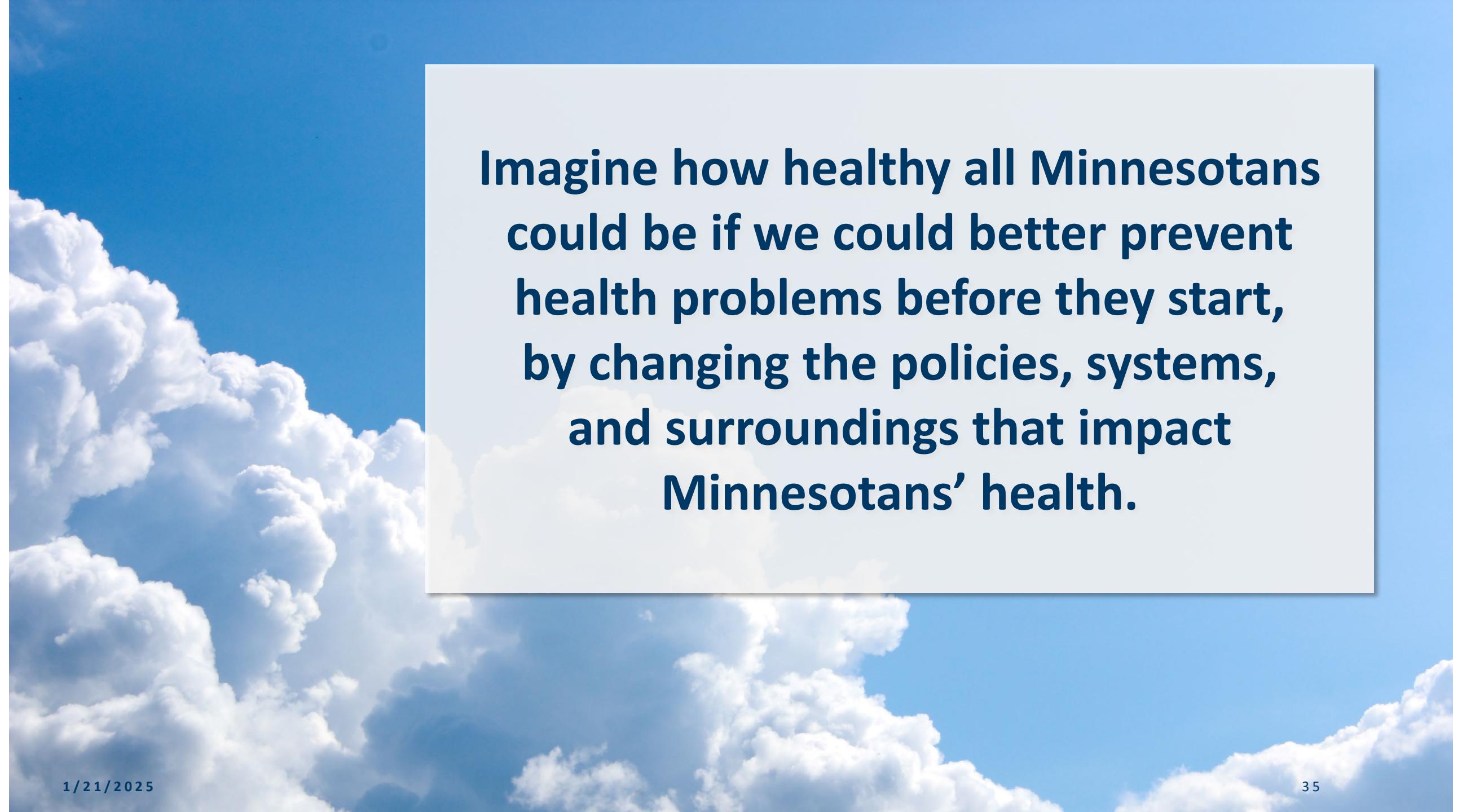
Investing in health  
outside of hospital  
settings...

**reduces death from  
all causes.**

*Lieder et al., 2018*

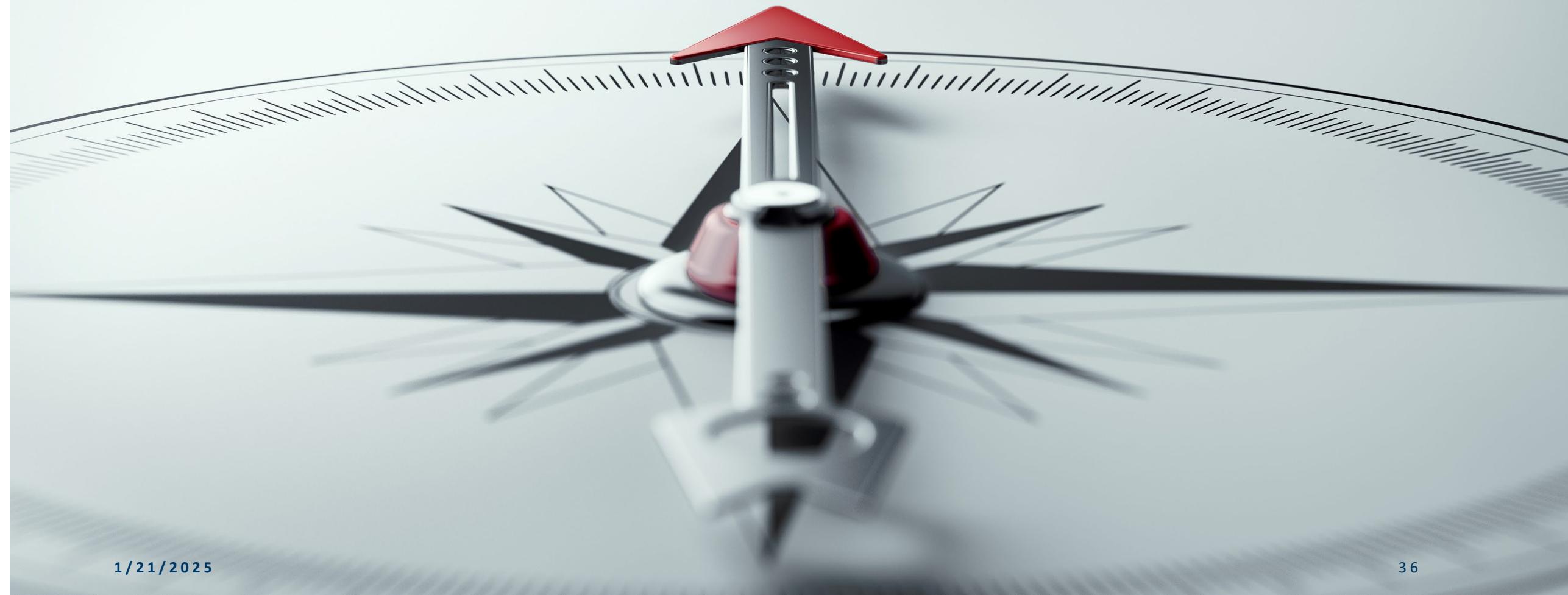
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**Imagine how healthy all Minnesotans could be if we could better prevent health problems before they start, by changing the policies, systems, and surroundings that impact Minnesotans' health.**

# A New Path Forward



# Recent state investments in public health: Thank you!

## 2021

- \$7 million increase to Local Public Health Grant base, \$500,000 increase to Tribal Health Grant base
- \$6 million to Minnesota Infrastructure Fund to test new and better ways to deliver public health

## 2023

- \$9.8 million to Foundational Public Health Responsibility Grant, for local public health fundamental work
- \$535,000 to Tribal Nations for fundamental, foundational public health work

# 21<sup>st</sup> century public health tools

- Quickly sharing timely, reliable data and information with each other and with communities
- Developing new tools and technology to meet population health needs

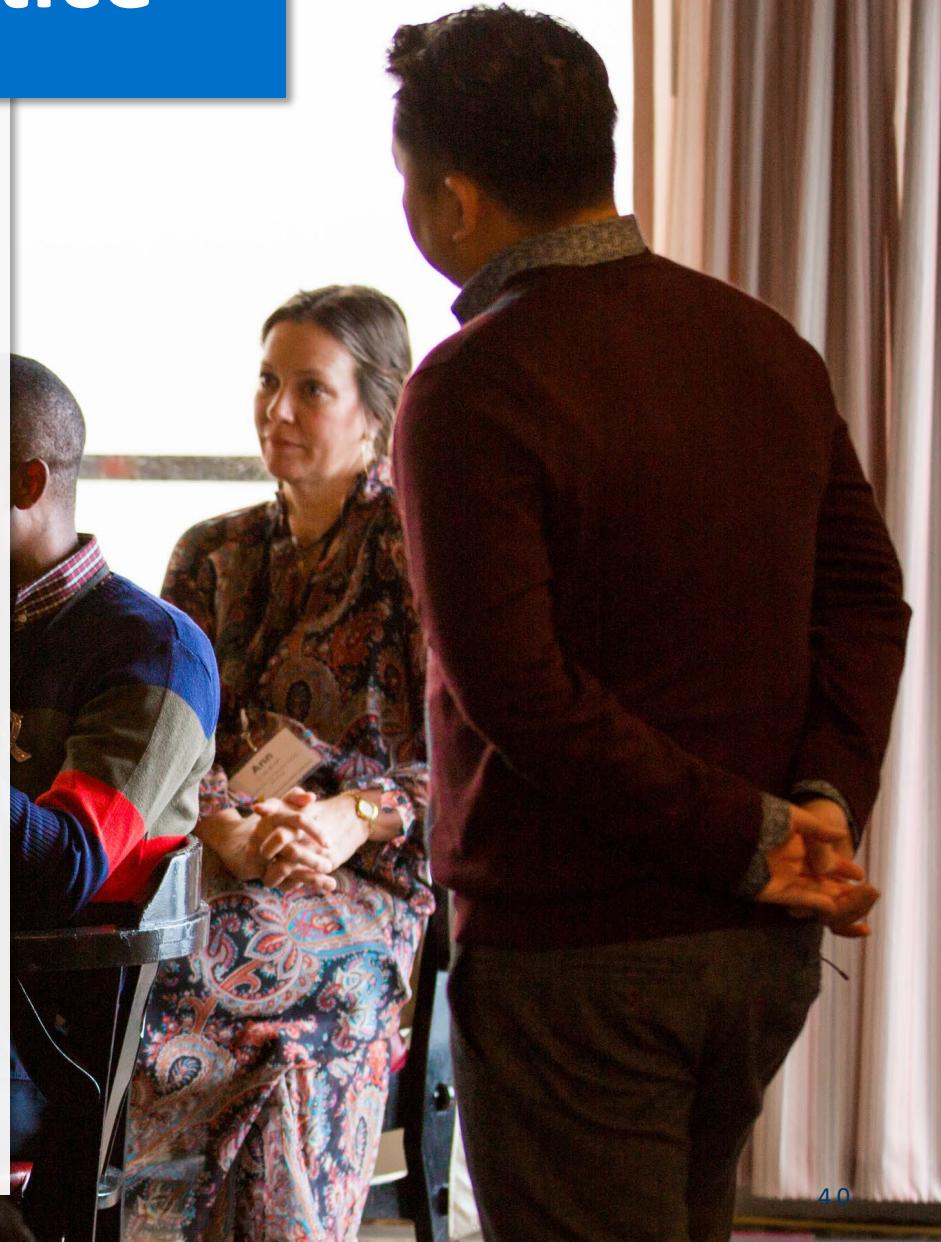


“[Local public health]  
has been dreaming of  
utilizing aggregate hospital  
data for decades.  
**This is a huge milestone!”**

*Minnesota Infrastructure Fund Grant recipients*

# 21<sup>st</sup> century public health practice

- Grounded in collaboration, community voice, and equity
- Public health as community health strategists
- Agile, responsive, customer-focused
- Addressing root causes of disease by focusing on upstream prevention



“Community input connects us to actual community needs so we aren’t guessing and getting it wrong.”

*St. Paul-Ramsey Trusted Messenger Convening Report*

# Sustained investment

- Foster right-sized public health solutions
- Address local needs from the ground up
- Avoid panic-neglect funding cycle



“Imagine a field of corn or soybeans. It needs a regular, sustained supply of nutrients and water, to flourish and yield the best results.

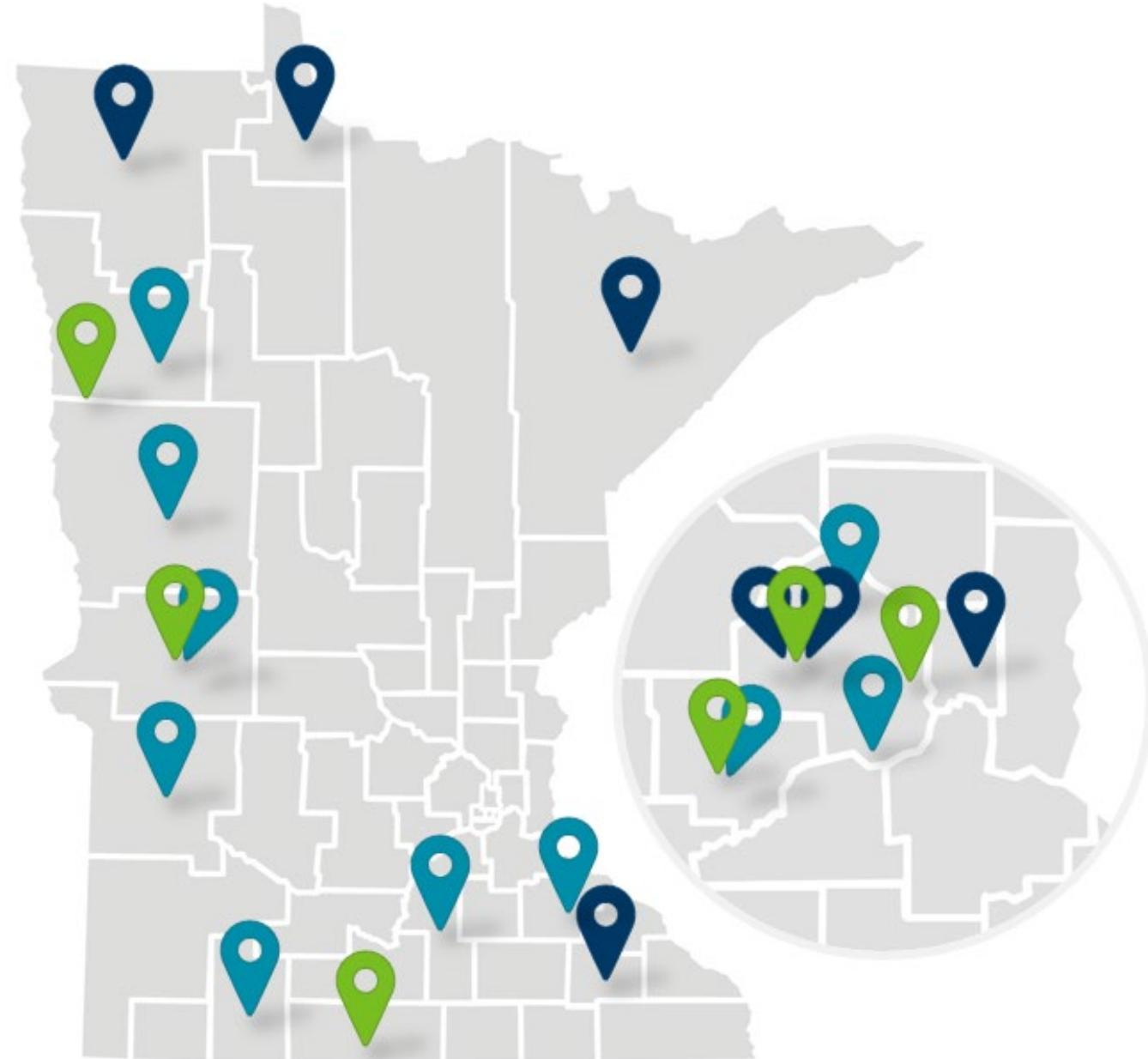
**No crop will thrive without a steady supply of needed resources. Neither will the community’s health.”**

*Commissioner De Malterer, Waseca County*

# Local innovation

- Right-sized and responsive to local need
- Borne out of front-line, local experience
- Adaptive, iterative, scalable statewide
- Supported by Minnesota Infrastructure Fund





# Innovation projects supported by the Minnesota Infrastructure Fund

- **New project (2024-ongoing)**
- **Continuing project (2022-ongoing)**
- **Finished project (2022-2024)**

“With data... we were able to partner with schools to **prevent youth self-harm and suicide**, provide education and **prevent youth from using harmful nicotine products**, and implement community-wide strategies to **mitigate the opioid crisis at a local level**.”

*Minnesota Infrastructure Fund Grant recipient*

# On the horizon: Keep moving forward, together...

- Continued partnership
- Continued investment
- Continued stewardship of data, resources, and innovation

**...toward a seamless, responsive, publicly-supported public health system, for all Minnesotans no matter where they live**



# Thank You

Chelsie Huntley  
[chelsie.huntley@state.mn.us](mailto:chelsie.huntley@state.mn.us)

[www.health.state.mn.us/systemtransformation](http://www.health.state.mn.us/systemtransformation)

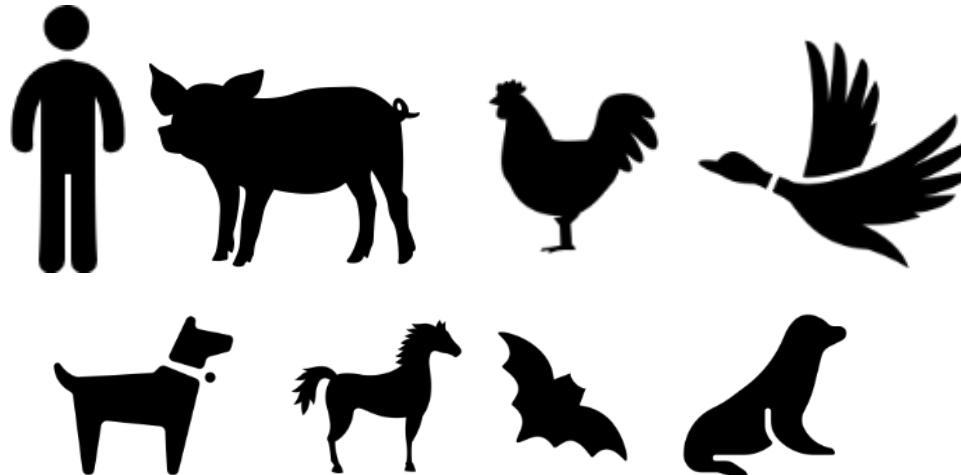
Nick Kelley  
[nkelley@BloomingtonMN.gov](mailto:nkelley@BloomingtonMN.gov)



# Minnesota H5N1 Response

# Influenza is Alphabet Soup

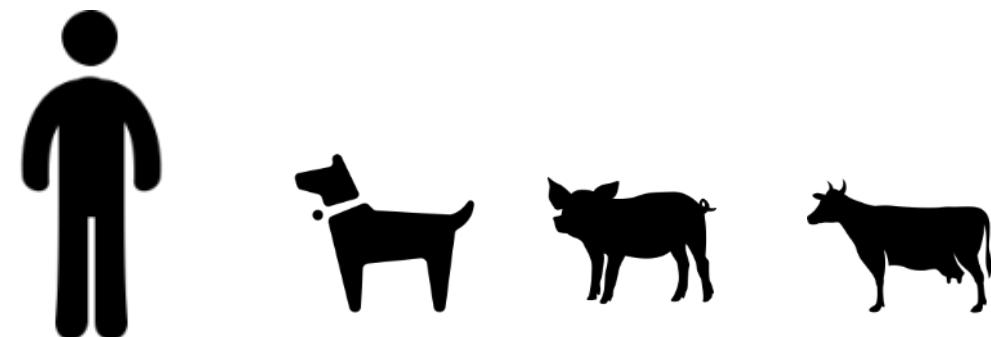
## Influenza A



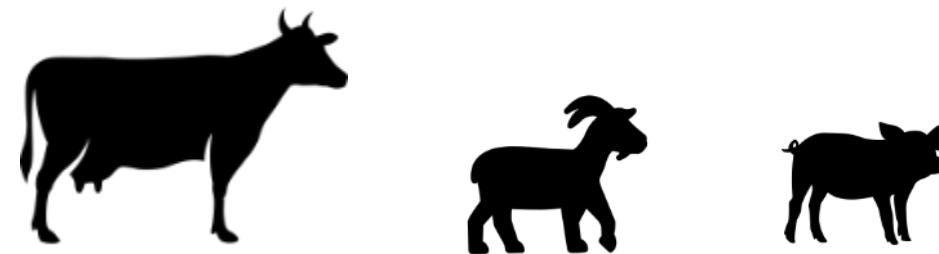
## Influenza B



## Influenza C



## Influenza D



# 2022 – 2025 H5N1 HPAI Animal Detections

- Minnesota
- 182 Poultry Cases
  - 142 commercial poultry operations
  - 40 non-commercial (backyard) premises
- 10 Livestock Cases
  - 1 goat herd
  - 9 dairy cattle herds
- 5 Companion Animals
  - 5 cats
- Nationally
  - 1405 confirmed poultry H5N1 HPAI
    - 821 commercial poultry operations
    - 584 non-commercial (backyard) premises
  - 931 Livestock Cases
    - 1 goat herd; 1 alpaca herd; 1 pig
    - 928 dairy cattle herds
  - 74 Companion Animals
    - 74 cats

# Finland reports H5N1 avian flu in blue foxes on fur farm

Lisa Schnirring, July 13, 2023

Topics: [Avian Influenza \(Bird Flu\)](#)

## Cats suffer H5N1 brain infections, blindness, death after drinking raw milk

Mammal-to-mammal transmission raises new concerns about the virus's ability to spread.

REUTERS/GRIGORY DUBINSKY



Mass Mortality at Punta Delgada: H5N1 Decimates Argentina's Elephant Seal Population

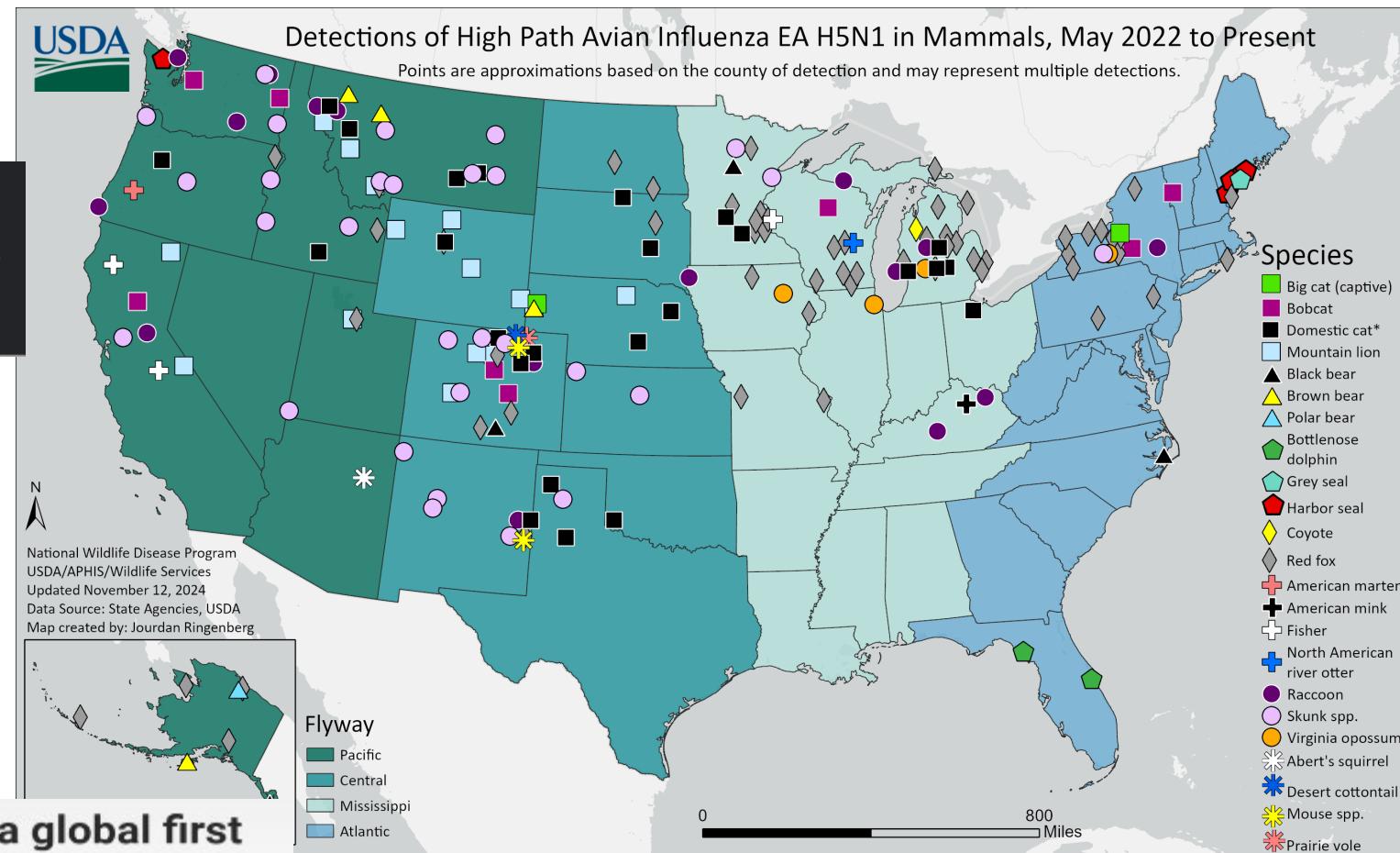


Avian influenza death of Alaska polar bear is a global first and a sign of the virus' persistence

PUBLISHED Jan 2, 2024



1/21/2025



## Explosion of sea lion deaths in Peru amid deadly bird flu outbreak

By CNN's Phillip Wang and CNN's Abel Alvarado

2 minute read · Published 7:16 PM EST, Mon March 6, 2023



'Incredibly concerning': Bird flu outbreak at Spanish mink farm triggers pandemic fears

Spread among captive mink could give the H5N1 strain opportunities to evolve and adapt to mammals

24 JAN 2023 · 6:00 PM ET · BY KAISER PERMANENTE

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# H5N1 Avian Influenza Viruses and Human Risk

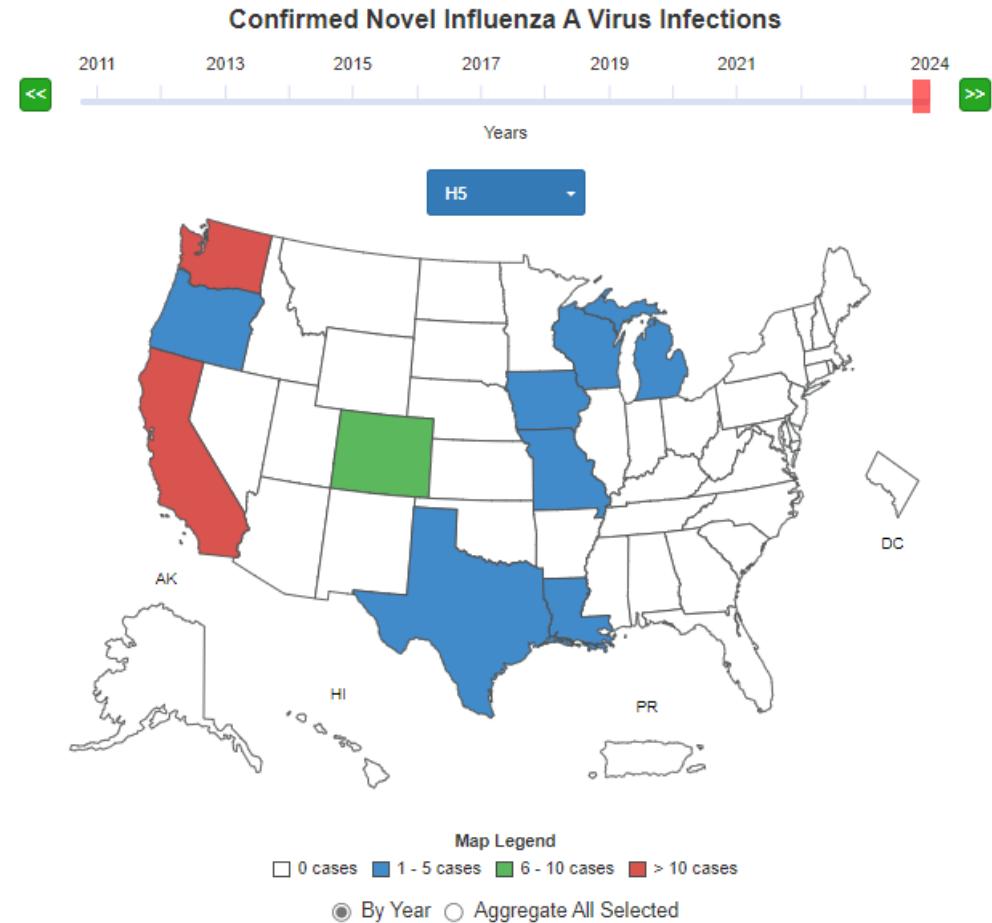
- H5N1 avian influenza viruses can be spread to people through direct contact with infected animals **or their environments**
  - Person-to-person spread is rare and limited
- Low risk to general public at this time
  - Risk is primarily occupational



# U.S. H5N1 Human Cases

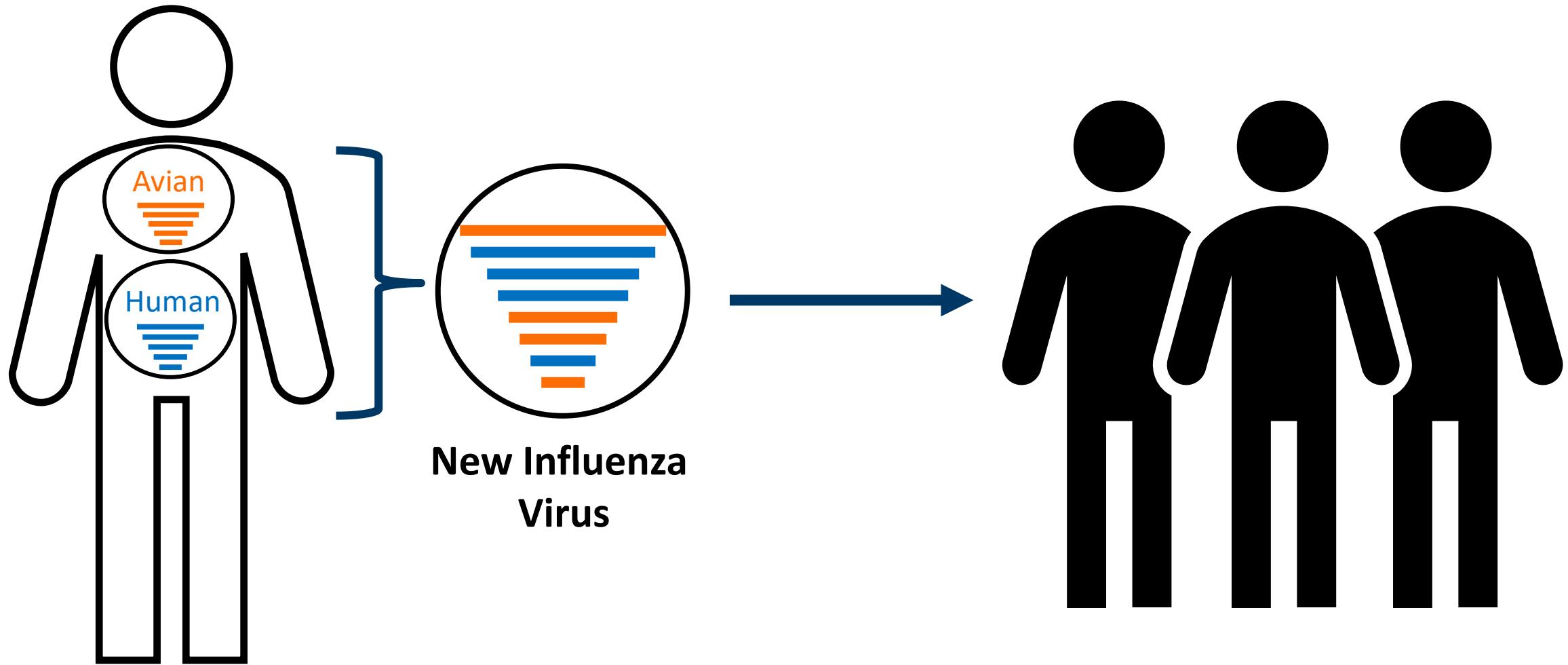
- Human cases in U.S.: 67

- Associated with poultry farm exposures: 23
- Associated with backyard flock/wild birds: 1
  - Patient death after extended hospitalization
- Associated with dairy cattle exposures: 40
- Detected by routine influenza surveillance: 3, exposure unknown



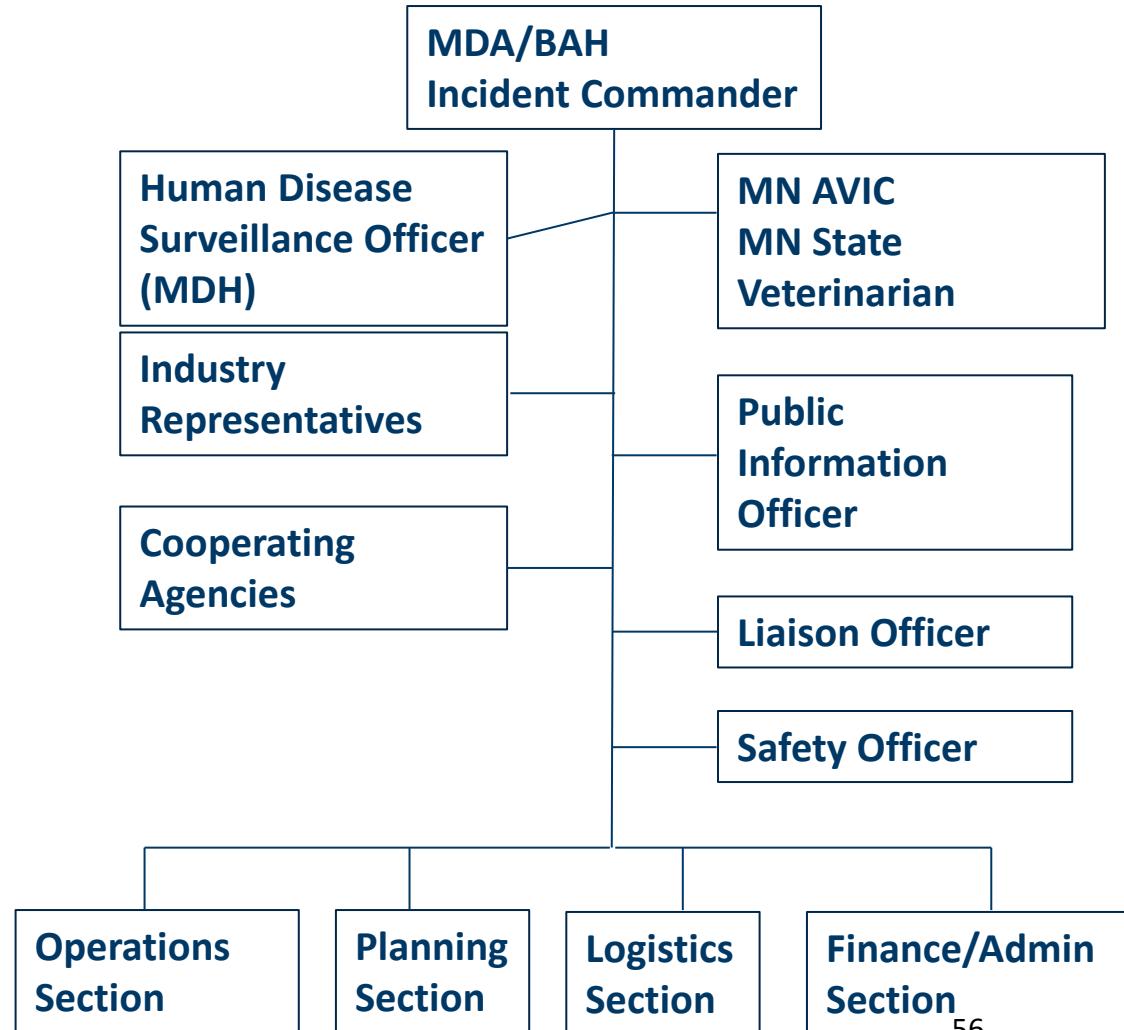
<https://www.cdc.gov/bird-flu/h5-monitoring/index.html>

# Reassortment is our big fear!



# One Health Approach to H5N1 Avian Influenza

- Three agencies work closely together in incident response
- Minnesota Board of Animal Health
  - Animal health, animal disease control
- Minnesota Department of Agriculture
  - Milk and food safety
- Minnesota Department of Health
  - Human disease monitoring, prevention, information for industry, clinicians, and public
- Other agencies include U of MN Extension, U MN Vet Diagnostic Lab, DNR, Public Safety



# MDH Work: Response

- Monitor the health of workers and others in direct contact with infected animals, in collaboration with BAH, MDA, since 2022
  - >2400 people monitored
- Coordinate testing for H5 among exposed people when needed (75 tested), facilitate influenza antivirals when indicated
  - Collaborate with local clinics, local public health
  - MDH standing orders available if no alternatives, small supply of oseltamivir if no alternatives
- Monitor established routine human influenza and wastewater surveillance for potential detections of H5

# MDH Work: Education and Outreach

- Communicate and coordinate with federal and jurisdictional health partners
- Communicate, educate, and coordinate with clinicians, local public health, tribal health, dairy and poultry industries, veterinarians
- Educate agricultural and migrant worker organizations
  - Partner with U MN Ag extension
  - Provide personal protective equipment to affected industries (supported by federal government)

# PPE Recommendations and Health Monitoring



- **Coveralls or Tyvek/ with hat**
- **Rubber boots**
- **Latex or nitrile gloves**
- **Goggles**
- **N 95 respirator**
  - Optional face shield or waterproof apron
- **Monitor** health for 10 days after last exposure
  - Testing and prophylaxis

# H5N1: A Challenging Pathogen

- Currently causing rare mild illness in a young healthy population
  - Hourly workers on 24/7 operations
  - Limited literacy and English proficiency
  - Systemic barriers to health services
- Inadequate personal protective equipment
- Routine seasonal influenza vaccine does not offer H5N1 protection
  - May help decrease the chance of someone being dually infected with seasonal influenza A and H5

# MDH Work: Communications

- Primary Audiences:
  - Dairy owners, operators, workers, families of workers, and consumers
  - Poultry workers and industry
  - Other people in contact with potentially infected animals
  - Agritourism professionals
  - Local public health, health care providers

# MDH Work: Communications

- Tactics
  - Collaborate with MDA and BAH on consistent messaging when responding to news media and producing communications products for the public
  - Work with local community partners, clinics and agencies to deliver tailored, multilingual messages to people in contact with potentially impacted animals; promote personal protective equipment and seasonal flu vaccination (translated as needed)
    - Email
    - Videos
    - Fact sheets
    - Social media

- Worked with local public health during fall 2024 to promote seasonal influenza vaccine among farmworkers in rural areas
  - Sponsored 8 vaccination clinics with 250 people receiving influenza vaccinations
- Planning underway should H5 vaccine be needed
  - Reviewing lessons learned from COVID-19 vaccination clinics
  - 2 doses will be needed for robust immunity
    - 5 million doses currently in federal stockpile; another 10 million expected to be produced by spring
    - Estimated capacity to produce 100 million doses in a 5-month span (egg-based vaccine)
    - Work being done on mRNA vaccines