



Public Health Advisory Committee

January 27, 2015, 6:00 – 8:00 pm

Minneapolis City Hall, Room 132

AGENDA

Agenda Item	Presenter	Time	Committee Action
Welcome and Introductions	Karen Soderberg	6:00 – 6:05	Approve agenda
PHAC Logistics and Updates Approve Minutes Nominations for Co-Chair & vote <i>Jennifer Pelletier</i> <i>Nominations from the floor?</i> Sub-committees Reports: <i>Communications/Operations:</i> 2014 Annual Report <i>Policy & Planning:</i> Proposal for Housing Advisory Committee <i>Collaboration & Engagement:</i>	Karen Soderberg Karen Soderberg Dan Brady	6:05 – 6:30	Approve Minutes Open / close nominations Vote
Presentation <i>Healthy Communities</i> <i>Transformation Initiative</i>	Charlene Muzyka, MHD Sr. Public Health Researcher & Epidemiologist	6:30 – 7:05 7:05 – 7:15	Informational session Questions/discussion
Department Updates	Gretchen Musicant	7:15 – 7:30	Discussion
Sub-Committee Planning time: <i>Communications/Operations:</i> Annual Report; schedule new member orientation for 5:15 p.m. in Feb & March <i>Policy & Planning:</i> Agenda planning-prioritization for 2015 <i>Collaboration & Engagement:</i> Raising of America planning - discuss priorities / goals for community engagement		7:30 – 8:00	Discussion

Next Sub-committee meeting: February 24, 2015, Minneapolis City Hall, Rooms 132 & 333

Next Meeting of the Full Committee: March 24, 2015, Minneapolis City Hall, Room 132

If there are any problems/changes the night of the meeting, please call 612-919-3855

Public Health Advisory Committee (PHAC) Minutes



January 27, 2015

Members Present: Julie Ring, Harrison Kelner, Akisha Everett, Jahana Berry, Karen Soderberg, Abdullahi Sheikh, Sarah Jane Keaveny, Margaret (Peggy) Reinhardt, Autumn Chmielewski, Dr. Rebecca Thoman, Silvia Perez, Linda Brandt, Jennifer Pelletier

Members Excused: Sarah Dutton, Daniel Brady, Joseph Colianni

Members Unexcused: Sahra Noor, Dr. Happy Reynolds-Cook, Birdie Cunningham, Tamara Ward

MHD Staff Present: Gretchen Musicant, Don Moody

Guests: Charlene Muzyka, Austin Cariveau

Karen Soderberg called the meeting to order at 6:00 p.m. at City Hall.

Item	Discussion	Outcome
Introduction	Members and guests introduced themselves.	
Agenda/Min Approval	Minutes and Agenda Members had no additions to the January agenda. Members had no changes to the December minutes.	Agenda approved by unanimous consent motion to approve minutes carried
Co-Chair vacancy	The co-chair vacancy was noted and discussed. Jennifer Pelletier was nominated for co-chair; no other nominations.	Sarah Jane Keaveny made motion to accept Jennifer as co-chair; Linda Brandt seconded the motion; motion carried
Reports from Sub-committees: <i>Operations / Communication</i> <i>Collaboration & Engagement</i> <i>Policy & Planning</i>	2014 Annual Report is being drafted for submission in February then presentation to the HE&CE committee in March. C&E is working on community viewing events and post-viewing activities for the upcoming documentary, <i>The Raising of America</i> , and how to collaborate this opportunity with other City initiatives (such as Cradle to K[indergarten]) and our community partners. Dan Brady drafted details for an advisory committee regarding housing. Next steps are to finalize the draft then show to Council Member(s) willing to bring this idea to the Council.	
Presentation: Healthy Communities Transformation Initiative <i>Charlene Muzyka</i>	Charlene presented on the Healthy Communities Transformation Initiative (HCTI), a project, funded by HUD's Office of Healthy Homes and Lead Hazard Control. Two key elements of the HCTI are the development of a Healthy Communities Index (HCI) and a Healthy Communities Assessment Tool (HCAT). In September 2014, Healthy Housing Solutions, Inc. (HHS – the organization managing HCTI for HUD) began working with four pilot cities (Albuquerque, New Mexico; Minneapolis, Minnesota; San Diego, California; and Providence, Rhode Island) to test both the HCI and the HCAT over a nine-month period. Neighborhood conditions are important determinants of health and human development outcomes and this initiative. The HCTI is a three-year project to develop a systematic, evidence-based approach to help local jurisdictions assess the physical, social, and economic roots of community health by establishing a core set of standard indicators (an index) that can be used as a foundation to evaluate the health of a community. The program includes creation of a website which will showcase the index.	Charlene will bring the committee's suggestions and comments to HHS. Once the website is launched, the website address will be sent to the PHAC. Charlene will send a follow-up survey about the website after the committee members have had the opportunity to use it.

Public Health Advisory Committee (PHAC) Minutes



Item	Discussion	Outcome
	<p>The index and website will help determine the uses and effects of the index.</p> <p>Charlene then gave a demonstration of the website; which officially launches February 23. While development of the HCI and the HCAT is well underway, Charlene is looking for input and suggestions from the PHAC these. The web site showcases HCI indicators, is a public platform to share information about community health, is a useful resource for determining how to improve community health, and can be used to compare and rank neighborhoods. The website allows comparing neighborhoods and includes details of the various indexes including listing the sources of the data used (often with direct links to the data).</p> <p>Some of the discussion included weighting of indexes (currently there is none, all are equally weighted), high school graduation rates (only included in neighborhoods which have a high school, and that HS's rates are included there), can textual measures be added?, and possible stakeholders and how they could use the website.</p>	
Department Updates- Gretchen Musicant	<p>National Public Health Week is April 6-12. Public Health Week activities are being planned including an event in the City Hall rotunda on April 9 which will include the third annual MHD presentation of awards for Local Public Health Heroes [Community Partners awards?]. MHD is looking for PHAC members to be involved in soliciting nominations and to help review the nominations for selection of the final awardees.</p> <p>Mayor's office is finalizing the Cradle to K Cabinet Draft Plan to Address to Early Childhood Disparities in Minneapolis (to be released later this month). The three main goal areas are Healthy Beginners (children receive a healthy start rich with experiences and increase community awareness of this importance), Stable Housing (increase housing options for lowest income families, address childhood homelessness, provide resources for very low income families to increase their economic stability), Access to Quality Early Childhood Experiences (improve low-income family access to quality early learning programs, increase the amount of high quality child care, work with community partners to ensure all children are prepared for kindergarten).</p> <p>Governor's 2-year budget saw stable funding for SHIP, 2.6 million approved for Home Visiting (using evidence based models, which meshes with the Mayor's Cradle to K initiative), and some funding for family planning (for our Community Based Organizations partners).</p>	Silvia and Karen volunteered to help with the Public Health Week nominations process.

Meeting adjourned at 7:21 p.m.; after which sub-committee members met to orient new members and discuss above mentioned sub-committee items.

Minutes submitted by Don Moody and Margaret Schuster

Next Sub-Committee Meeting: February 24, 2015, Minneapolis City Hall, Room 132 & 333, 6:00-8:00 p.m.

Next Full Committee Meeting: March 24, 2015, Minneapolis City Hall, Room 132, 6:00-8:00 p.m.

CITY OF MINNEAPOLIS - HEALTH

Healthy Communities Transformation Initiative

Charlene Muzyka

Senior Public Health Researcher & Epidemiologist

Minneapolis Health Department

Office: 612-673-3931

charlene.muzyka@minneapolismn.gov



October 24, 2014

Overview

- Project Overview (HCTI)
- Index Development (HCI)
- Website Development (HCAT)
- Project Pilot Phase
 - Pilot City Responsibilities
 - Pilot Timeline
- Questions

Some important acronyms

- **HCTI** – Healthy Communities Transformation Initiative
 - Name of the project - **“The Project”**
- **HCAT** – Healthy Communities Assessment Tool
 - **“The Website”**
- **HCI** – Healthy Communities Index
 - When considered together all the health indicators and domains make up the index – **“The Index”**
- **HHS** – Healthy Housing Solutions, Inc.
 - Organization managing HCTI for the HUD Office of Lead Hazard Control and Healthy Homes

Background

- Neighborhood conditions are important determinants of health and human development outcomes
- Identifying and monitoring indicators can improve community health
- Growing need for health-focused, comprehensive, and nationally-relevant indicators and best practices
- Project initiated and funded by HUD
- Minneapolis was approached by HUD to participate

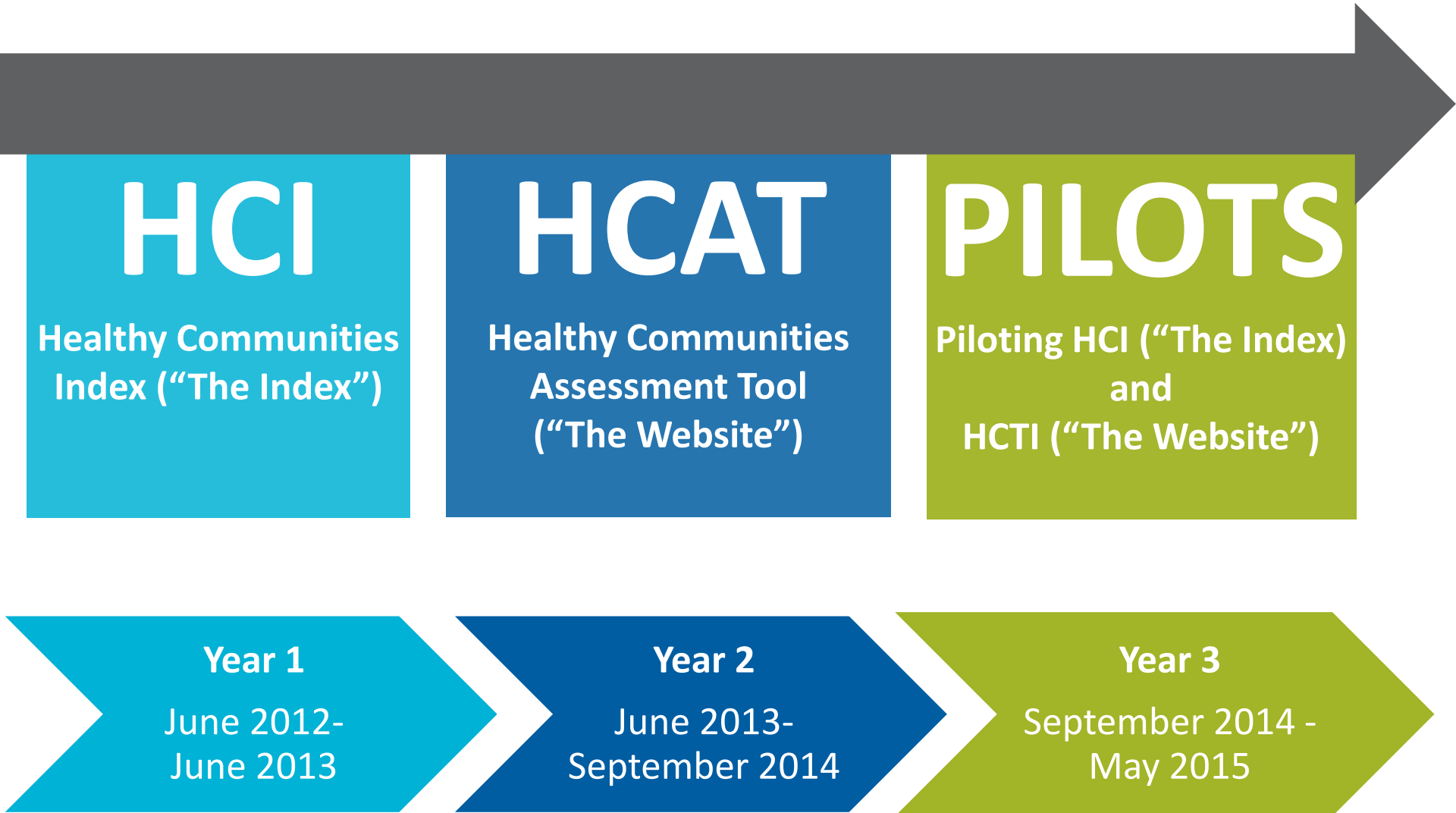
What is this project about?

- A three-year project to develop a systematic, evidence-based approach to help local jurisdictions assess the **physical, social, and economic roots of community health**.
- The project will establish a core set of standard indicators (an index) that can be used as a foundation to evaluate the health of the community
- Create a website to showcase the index
- Pilot the website to determine utility and impact

Possible index and website uses

- Strategic planning and policy development
- Land use regulation
- Public infrastructure and program investments
- Plan and perform performance monitoring
- Civic engagement
- Education
- Philanthropy
- Business and residential site selection

Project timeline & process



Index development



HCI

Healthy Communities
Index (“The Index”)

Neighborhood health indicator

- A *reliable and valid* measure of a *social, economic, or environmental* characteristic of, or condition in, a *neighborhood* that *influences health* and *human development* or that is broadly representative of the health and human development of the population in the place.

Considered

- **More than 200 indicators**

Reviewed

- **More than 90 indicators**

Recommended

- **37 core indicators**
- **5 contextual indicators**

Final domains & indicators



Environmental Hazards



Educational Opportunities



Natural Areas



Employment Opportunities



Transportation Services



Neighborhood Characteristics



Housing



Economic Health



Social Cohesion



Health Systems & Public Safety

Demographic & contextual measures

- Life Expectancy (City)
- Racial Segregation / Diversity
- Income Inequality
- Concentrated Poverty
- Park Quality (City)

Not factored into summary score on HCAT (website)

The website



HCAT

**Healthy Communities
Assessment Tool
("The Website")**

Why was the website created?

- Showcase HCI indicators
- Public platform to share information about community health
- Resource to improve community health
- *Compare* and *rank* neighborhoods*

*HUD requirement

What is on the website?

- Indicator and neighborhood focused pages
 - Description of neighborhoods, link to neighborhood association
- Indicators from each domain
 - Description of each, rationale for inclusion, key citations, and rank for each neighborhood
 - Section on how to interpret scores/data, links to initiatives in Minneapolis to address indicator, comparison/targets
- Demographic and contextual indicators
- Ability to download indicator data for each neighborhood



Healthy Communities Assessment Tool

Minneapolis, Minnesota

[Home](#)[About](#)[Search Neighborhoods](#)[Indicators](#)[Resources](#)

The Healthy Communities Assessment Tool (HCAT) ranks each city neighborhood on more than 40 social, economic, and physical factors important to community health. Users can examine how their own neighborhood performs on each factor and compare neighborhoods on their overall ranking of core indicators from the Healthy Communities Index (HCI).



[Get info about the Healthy Communities Transformation Initiative \(HCTI\) and commonly used terms.](#)



[Learn more about the HCAT, HCI indicators, and the ranking system.](#)



[Download data used in the HCAT.](#)

SEARCH NEIGHBORHOODS

Use my current location

or

Type in an address...

Submit

EXPLORE DOMAINS AND INDICATORS



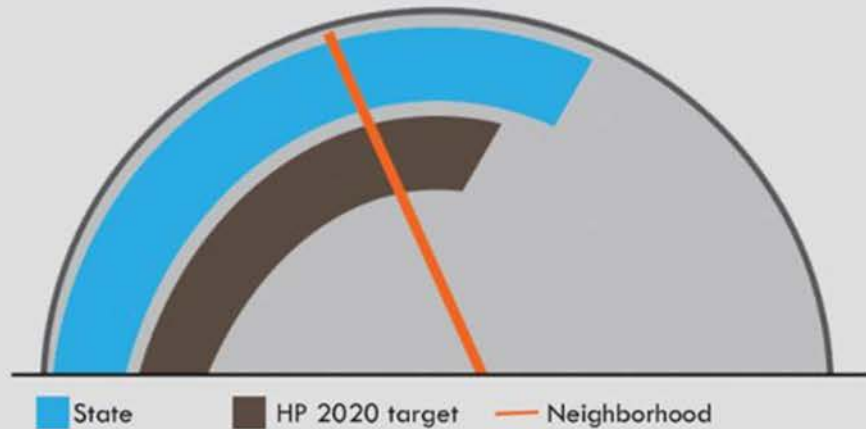
Targets

- Three maximum for each indicator

Tier 3

Indicator level

Comparisons with national, state, county, city scores or goals/ benchmarks to provide important context for neighborhood performance on individual indicators.



Piloting the index & website



PILOTS

Piloting HCI (“The Index”) and
HCTI (“The Website”)

Pilot cities

Minneapolis, MN



San Diego, CA



Albuquerque, NM



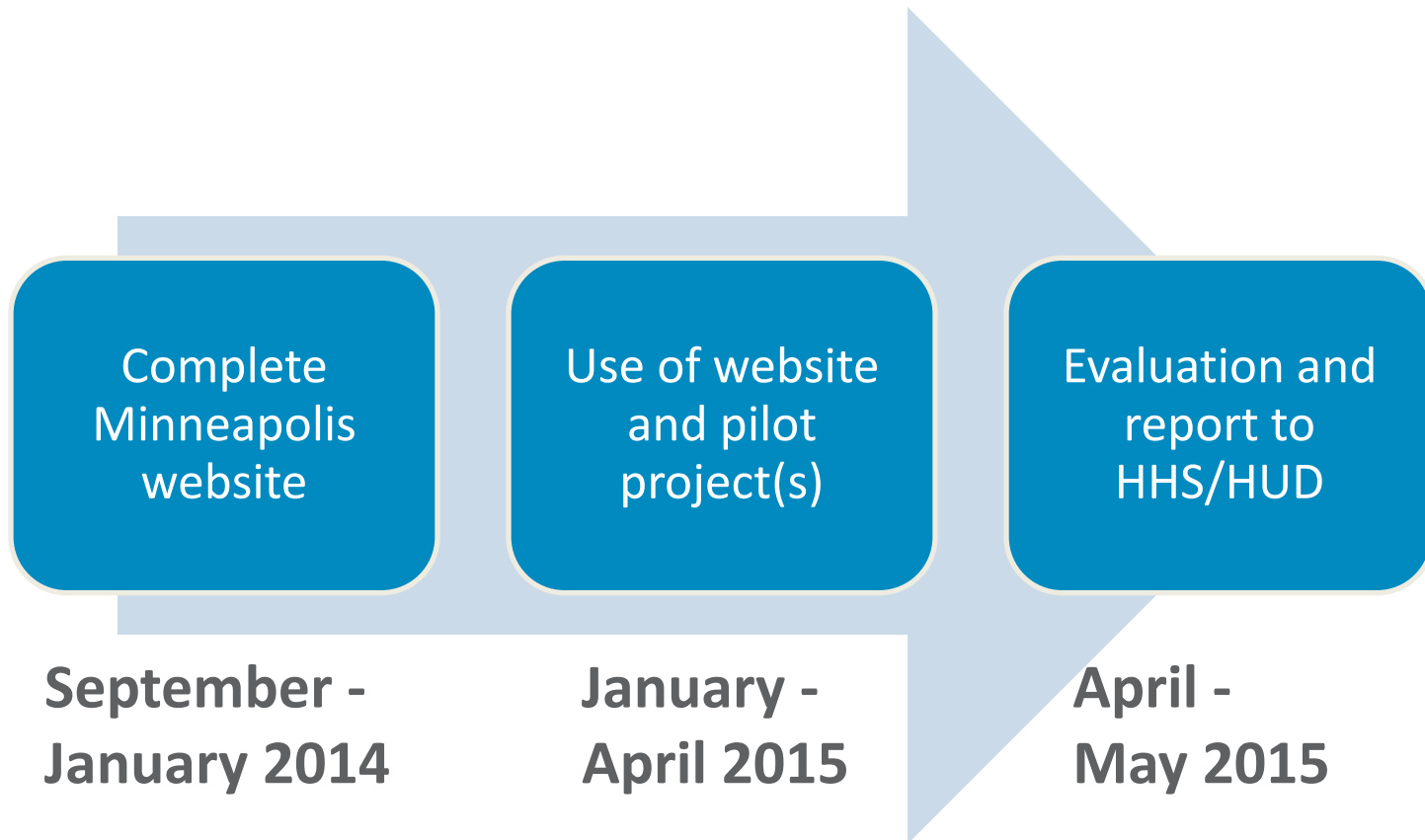
Providence, RI



Pilot phase goals

- Create Minneapolis pilot website
- Use the index and website in our work
- Evaluation

Pilot phase timeline



Who will pilot website in Minneapolis?

- Stakeholder group
- Target organizations based on specific projects
 - Neighborhood organizations
- Stakeholders include representatives from:
 - **City of Minneapolis:** Mayor representative, City Coordinators Office, NCR, Health
 - **Other government organizations:** Hennepin County – Healthy Community Planning Unit, MDH – Environmental Health Tracking Program & Center for Health Equity, Minneapolis Parks and Recreation Board
 - **Other:** Public Health Advisory Committee representative, Center for Earth, Emergency and Democracy (CEED), Allina Health – Backyard Initiative, Minneapolis Public Schools (Research), Youth Coordinating Board

Stakeholder ideas for pilot project(s)

- City Coordinator Office could use it as an indicator system
 - Strategic planning and target establishment
 - Results Minneapolis focused
- **Green Zone initiative development**
- Link to youth report card
- Place based equity
- Link to Minnesota Department of Health, Health Portal
- **Introduce tool to neighborhood associations**
- Data for grant applications, need assessment, engagement, measure impact

Evaluation of index & indicators

- Examples of feedback questions include:
 - Are indicators appropriate for different communities?
 - What, if any, key indicators are missing from the Index?
 - Was the number of indicators included in the index appropriate?
 - Should any of the indicators be dropped or modified?
 - Were the contextual measures appropriate and useful?
 - What do you like/dislike about the design and functionality of the website?

Evaluation of website & projects

- Examples of feedback questions include:
 - Was HCAT helpful to identify areas for additional resources and investment?
 - Was HCAT helpful to help make planning decisions?
 - Did HCAT help support development of community programs?
 - Did HCAT encourage different sectors to work together?
 - Was HCAT useful to encourage public engagement and awareness of community health issues?

Reporting & end of pilot

- Report developed based on feedback
- Edits to pilot website
- Continued hosting of website by HUD **OR** Website given to City of Minneapolis to host

Suggestions for PHAC involvement

- Introduce the website to colleagues
- Consider using the website and indicators in your work
- Consider applying place based equity lens to your work
- Give feedback on the website

Questions?

Charlene Muzyka

Senior Public Health Researcher & Epidemiologist

Minneapolis Health Department

Office: 612-673-3931

Charlene.muzyka@minneapolismn.gov



Public Health Advisory Committee

February 24, 2015, 6:00 – 8:00 pm

Minneapolis City Hall, Room 132 & Room 333

AGENDA

Agenda Item	Presenter	Time	Committee Action
New member orientation	<i>Karen, Jennifer, Margaret</i>	5:30 – 6:00	
Pre-meeting meal for members	La Loma Tamales	5:45 – 6:00	
PHAC Logistics / Department Updates <i>Approval of annual report, if ready</i> <i>Public Health Week “Local Heroes Awards”</i> Notes for Sub-committees: <i>Communications/Operations:</i> 1. <i>Orientation for new members</i> 2. <i>Review / edit Annual report & ppt.</i> <i>Policy & Planning:</i> 1. <i>Discuss Housing Advisory Committee recommendation</i> 2. <i>Discuss support for U of MN project called MN Electronic Health Library (see below)</i> 3. <i>Review Mayor’s Cradle to K initiative draft report and prepare feedback</i> 4. <i>Review PHAC priorities; generate agenda ideas for next 3 months</i> <i>Collaboration & Engagement:</i> 1. <i>Continue planning for Raising of America viewing / discussion</i>	<i>Karen / Margaret</i> <i>Desralynn Cole - MHD</i> <i>Karen Soderberg</i> <i>Dan Brady</i> <i>Margaret Schuster</i>	6:00 – 6:10 6:10-6:20 5:20 – 7:30 6:20 – 8:00 6:20 – 8:00	Approve report

Next Meeting of the Full Committee: March 24, 2015, Minneapolis City Hall, Room 132

Next Sub-committee meeting: April 28, 2015, Minneapolis City Hall, Rooms 132 & 333

Policy & Planning: U of MN has an initiative to open up the U's biomedical library to everyone in the state (currently available to just staff and students) called the MN Electronic Health Library. It's a tremendous resource and something PHAC might consider endorsing. It's somewhat time-sensitive--they are looking for funding in this legislative session. Short informational videos can be found here: <http://hsl.lib.umn.edu/about/mehl>

If there are any problems/changes the night of the meeting, please call 612-919-3855.

Public Health Advisory Committee (PHAC) Minutes



February 24, 2015

Members Present: Harrison Kelner, Akisha Everett, Jahana Berry, Karen Soderberg, Abdullahi Sheikh, Sarah Jane Keaveny, Margaret (Peggy) Reinhardt, Dr. Rebecca Thoman, Silvia Perez, Sarah Dutton, Jennifer Pelletier, Tamara Ward, Daniel Brady, Joseph Colianni

Members Excused: Julie Ring, Dr. Happy Reynolds-Cook, Birdie Cunningham, Autumn Chmielewski, Linda Brandt

Members Unexcused: Sahra Noor

MHD Staff Present: Margaret Schuster, Don Moody, Desralynn Cole, Paul Rebman

Guests: Lynsay Madley, Cristen McDonald (both University of Wisconsin, Eau Claire BSN students)

Karen called the meeting to order at 6:10 p.m. at City Hall.

Item	Discussion	Outcome
Introduction	Members and guests introduced themselves.	
Agenda Approval	Members had no additions to the agenda.	
<i>2014 Annual Report</i>	The 2014 Annual Report was reviewed. The PHAC co-chairs will present the report to the Health, Environment & Community Engagement Committee on March 2; the report will also be available on the Health department's website.	Dan Brady made a motion to accept the 2014 Annual Report as is; Tamara Ward seconded; motion carried by unanimous consent
<i>Public Health Week "Local Heroes Awards"</i>	Paul Rebman reviewed the April 6-10 planned activities for the Public Health Week. <i>Local Heroes</i> award nominations forms were provided to the committee for the members and to share with the community. The deadline for nominations is March 6.	
Sub-Committees	Members then broke into sub-committee groups	
Communications / Operations: <i>1. Orientation for new members</i> <i>2. 2014 Annual Report</i>	1. The co-chairs conducted new member orientation. 2. The 2014 Annual Report was approved (see above).	four PHAC members received Orientation (see above)
Collaboration & Engagement: <i>1. Continue planning for Raising of America viewing / discussion</i>	1. Sub-committee members continued planning for community viewings and discussions on the documentary series, <i>Raising of America</i> , beginning summer 2015: www.raisingofamerica.org 2. Possible venues were discussed, a list of tasks developed, and assignments for next meeting were made: a. Watch Episode 1 (if available) or 2 and, while watching, consider the discussion questions the committee developed. Are these the right questions for facilitating community discussion? b. Consider questions we developed for defining our goals / desired outcomes. c. Report out on information gained from the various venues.	Discussion; assignments made

**Public Health Advisory Committee (PHAC)
Minutes**



February 24, 2015

Item	Discussion	Outcome
Policy & Planning: <i>1. Discuss Housing Advisory Committee recommendation</i> <i>2. Discuss support for U of MN project called MN Electronic Health Library</i> <i>3. Review Mayor's Cradle to K initiative draft report and prepare feedback</i> <i>4. Review PHAC priorities; generate agenda ideas for next 3 months</i>	<p>1. The draft proposal was discussed and feedback provided. Focus of the draft should be a recommendation for the formation of a committee (instead of suggesting what such a committee should do).</p> <p>3. The Cradle to K Cabinet draft report was reviewed and discussed. The members had many suggestions for input though also had many questions. How will the "improve mental health services for children 0-3" be implemented? How is the City going to support this; i.e., what are the mechanisms for services and funding? Some key indicators had specific details (e.g., p.13 "All infant mortality rates will not exceed national benchmark of 6.6. deaths per 1000 by 2016"), others did not (e.g., p.13 "Increase the number of children linked to services that promote school readiness."); would like to see details of what the current status is with specific 'objectives' included with each goals and strategy. Who is currently providing the services listed in the report? How are they doing and what do they say they need to increase their quantity and quality of service? What is the 'how/why/purpose' of the report and plan? Is this aspirational? intended to influence the next [City/State] budget cycle?</p> <p>4. The Summary of Prioritizing Activities was reviewed, topics to be followed-up on, and future planning were considered. What items from 2014 have not been covered? What items could dovetail with our 2015 efforts? Can specific details be extracted from the Healthy Communities Transformation Initiative Healthy Communities Assessment Tool, such as the state of Mental Health in the City? How does this sub-committee get new PHAC member input into this process? Should the committee redo the activity? Could this process be done on-line via Survey Monkey or the like? Is there a way the PHAC can encourage the MPS to participate in the State's Health Survey?</p> <p>2. The http://hsl.lib.umn.edu/about/mehl was shown and one of the videos was viewed.</p>	<p>1. Dan will revise the draft based upon feedback received; proposal draft will be presented to the committee at the March meeting</p> <p>3. Sarah Jane Keaveny will draft a letter of recommendation based upon the discussion.</p> <p>4. Don will look into Survey Monkey option and create a survey for polling the members for the March meeting</p> <p>2. Discussion of the site & uses deferred to the next meeting.</p>

Meeting adjourned at 8:05 p.m.

Minutes submitted by Don Moody and Margaret Schuster

Next Full Committee Meeting: March 24, 2015, Minneapolis City Hall, Room 132, 6:00-8:00 p.m.

Next Sub-Committee Meeting: April 28, 2015, Minneapolis City Hall, Room 132 & 333, 6:00-8:00 p.m.



250 South 4th Street – Rm 510
Minneapolis, MN 55415
612 673-2301
health@minneapolismn.gov



Who is your Minneapolis Public Health Hero?

Minneapolis Health Department is celebrating community partners who play important roles in public health. We want to say thanks for being a part of the city focus on the well-being of people and our environment.

Dates to remember:

Nominations are due by **4 p.m.,
Friday, March 6, 2015.**

Award winners will be announced
on **Friday, March 13, 2015.**

The Local Public Health Hero Award
Ceremony will be at **11:30 a.m.,
Thursday, April 9, 2015, in the City
Hall Rotunda.**

Award nominations will be evaluated and award winners selected by the City of Minneapolis Public Health Advisory Committee and Minneapolis Health Department staff.

When writing your nomination:

We need you to nominate individuals, teams, and organizations. We want to celebrate their contributions to Minneapolis public health.

Awards will recognize work towards the Minneapolis Health Department goals.

We are looking for leaders who demonstrate the highest ethical standards.

This year's Public Health Week focus is "Healthy where you are." We would like a diverse group that represents many communities and neighborhoods across the city.

Thank you for nominating a Local Public Health Hero!

Public Health Week 2015: Healthy where you are

Minneapolis Health Department Goals

Which Minneapolis Health Department goal(s) does your Hero work towards? *(Check all that apply)*

- ☐ **A Healthy Start to Life and Learning**
 - Thriving babies
 - School-ready children

- ☐ **Thriving Youth and Young Adults**
 - Prevent teen pregnancy
 - Reduce sexually transmitted infections/HIV rates through targeted services to youth and young adults most at risk
 - Reduce violence among youth
 - Invest in activities that promote: mental and physical health; social, emotional and life skill learning; and, positive development for all youth

- ☐ **Healthy Weight and Smoke-Free Living**
 - Affordable and accessible opportunities for healthy eating, physical activity and smoke-free living for all ages and abilities
 - Communities expect healthier environments

- ☐ **A Healthy Place to Live**
 - Healthy indoor environment for everyone

- ☐ **Safe places to eat, swim, and stay**
 - Minimize the risk of disease and injury from food, lodging and swimming establishments

- ☐ **A Healthy Environment**
 - Clean, healthy natural environment (air, soil, water) free of environmental hazards and pollution
 - Environmental nuisances (noise, odor) are minimized

- ☐ **A Strong Urban Public Health Infrastructure**
 - City and community prepared for emergencies – now and into the future
 - Health care safety net for everyone who needs it
 - Diverse, engaged, and skilled staff
 - State-of-the art implementation of programs and procedures to improve population and environmental health
 - Research and policy-related activities that improve population and environmental health

Please email to Mageen Caines, mageen.caines@minneapolismn.gov by 4 p.m., Friday, March 6, 2015.

Public Health Week 2015: Healthy where you are

Today's Date: [Click here to enter a date.](#)

Your name and contact information (optional): [Click here to enter text.](#)

Individual Nomination: ☐ **OR** **Organization Nomination** ☐

Name(s) of Nominee(s): [Click here to enter text.](#)

Nominee's Organization: [Click here to enter text.](#)

Nominee's contact information (if possible):

Mailing address:

Email:

Phone number:

How does your Hero's work fit with the Minneapolis Health Department goals? Introduce us to the work that your Hero does. Please be specific and detailed about this work. Connect the Hero's work to the Minneapolis Health Department goals. **(One paragraph)**

How does your Hero's work make Minneapolis a better place? We would like to know who your Hero serves. Tell us how your Hero makes our city a great place to live, work, and play. **(One paragraph)**

Join Us for a Public Forum

Mayor Hodges and the Cradle to K Cabinet invite you to attend a community meeting to talk about the Draft Plan to Address Early Childhood Disparities in Minneapolis. There will be opportunity to learn more about the details of the plan, to talk with others in the community and to share your feedback on the recommendations and strategies.

Read the Draft Report now and give feedback!

It is posted on the Mayor's Website at:

<http://www.ci.minneapolis.mn.us/mayor/cradle/WCMS1P-136627>

Tuesday, March 3, 2015

Co-hosted by Children's Hospital, Way to Grow and YWCA of Minneapolis

6:00p.m. - 7:30p.m.

Children's Hospital – Education Center, 2nd Floor
2525 Chicago Avenue, Minneapolis, MN 55404

Thursday, March 5, 2015

Co-hosted by Children's Defense Fund, Think Small, Start Early Funders

6:00p.m. - 7:30p.m.

Phyllis Wheatley Community Center – Gertrude Brown Room
915 Emerson Ave N., Minneapolis, MN 55411

Food will be served and Child Care is available

We want to make sure to have enough food and chairs for everyone, so please let us know you are attending.

March 3rd at Children's Hospital

Register at: <http://march3forum.eventbrite.com>

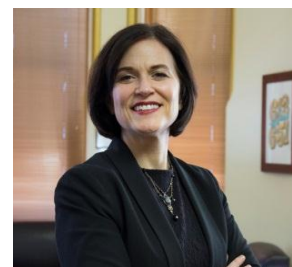
March 5th at Phyllis Wheatley Community Center

Register at: <http://march5forum.eventbrite.com>

Questions? Contact dianne.haulcy@minneapolismn.gov



Minneapolis
City of Lakes



Mayor Betsy Hodges' Cradle to K Cabinet

Mayor Hodges' Cradle to K Cabinet is a new collaborative of multi-sector experts, leaders, and parents who are working to prevent disparities by aligning policies, closing gaps, and increasing resources where needed. The goal is to ensure that all Minneapolis children have a healthy start, are stably housed, and have continuous access to high-quality, child-development-centered child care and early education, regardless of their race, neighborhood, income or family structure.

Goals:

- 1. All children prenatal to 3 will receive a healthy start rich with early experiences that prepares them for successful early education and literacy.*
- 2. All children are stably housed.*
- 3. All children ages prenatal to 3 have continuous access to high quality child development*



If there are any problems/changes the night of the meeting, please call 612-919-3855.

Public Health Advisory Committee (PHAC) Minutes



March 24, 2015

Members Present: Julie Ring, Sahra Noor, Harrison Kelner, Akisha Everett, Dr. Happy Reynolds-Cook, Karen Soderberg, Sarah Jane Keaveny, Margaret (Peggy) Reinhardt, Birdie Cunningham, Silvia Perez, Jennifer Pelletier, Daniel Brady, Joseph Colianni

Members Excused: Abdullahi Sheikh, Autumn Chmielewski, Dr. Rebecca Thoman

Members Unexcused: Jahana Berry, Sarah Dutton, Tamara Ward

MHD Staff Present: Gretchen Musicant, Margaret Schuster, Don Moody

Guests:

Jennifer Pelletier called the meeting to order at 6:00 p.m. at City Hall.

Item	Discussion	Outcome
Introduction	Members and guests introduced themselves.	
Agenda/Min Approval	Members had no additions to the March agenda. January minutes were reviewed February minutes were reviewed	Minutes approved by unanimous consent
Reports from Sub-committees: <i>Operations / Communication</i> <i>Collaboration & Engagement</i> <i>Policy & Planning</i>	Co-Chairs presented the annual report to the HE&CE (Health, Environment & Community Engagement committee) New members received orientation at prior meetings. Planning for community viewings and discussions continue regarding the Raising of America series; work tasks have been assigned, many interested venues have been identified, including ones which may help provide support for the sessions (such as Corcoran Park). Draft of the proposal recommending formation of a Housing Advisory Committee was discussed and approved. There was a lot of discussion about the proposals' content, yet the final agreed upon revisions were very minor. Next steps include meeting with HE&CE Chair, Cam Gordon. Council Member Lisa Bender was also interested in this topic – per a conversation initiated by PHAC member Peggy Reinhardt. Feedback letter on the Cradle to K draft plan was discussed; PHAC had received an extension on feedback deadline (to March 25) to allow for committee approval of letter. There was a lot of discussion about the letters' content, yet the final agreed upon revisions were very minor. MHD staff will implement committee's wording suggestions with support from Committee co-chairs, Karen and Jennifer, and Policy & Planning leader, Dan Brady. MHD staff will submit the finalized letter on March 25.	New members provided with orientation manual Dan Brady made motion to accept & submit draft letter; Happy Reynolds-Cook seconded; motion passed Happy Reynolds-Cook made a motion for approved changes to be made and the final version submitted to Mayor's representative on Wed, March 25; Julie Ring seconded; motion passed

Public Health Advisory Committee (PHAC) Minutes



Item	Discussion	Outcome
Presentation: Prioritizing Activity	For the benefit of new committee members, MHD staff provided a brief overview of prior prioritizing activities and its purpose. Dan Brady led the discussion of the results of the recent on-line PHAC - Prioritizing Activity. Topic ideas were aligned under MHD department goals. Each goal had at least one area which rose to the top of PHAC's priority list. A summary of the discussion follows.	Agenda topics and presenters for future meetings will be planned & scheduled
	For the goal, "A Healthy Place to Live," Homelessness received the most votes and a lot of discussion about the definition of homelessness (who is counted and who is counting?) and barriers to homelessness.	MHD staff to find a presenter on Homelessness for the May meeting.
	For the goal, "Thriving Youth and Young Adults," Substance Abuse / Mental Health received the most votes. Are these the same or two topics? How do aspects of social connectedness and "intrinsic unfairness" relate to this? How are PTSD and the effects of poverty being considered and addressed? What is the public health place in this, and what is PHAC's role? The Adverse Childhood Experiences (ACE) Study was mentioned. Many ideas presented as to who might be good presenter on this topic.	
	For the goal, "Healthy Weight and Smoke-Free Living," Access to Healthy Food received the most votes. Committee members expressed interest in finding out more about the Corner Stores and Urban Gardening initiatives, also concerns for healthy food shelves and healthy food donations.	An update on MHD efforts in these areas can be scheduled.
	For the goal, "A Healthy Start to Life and Learning," School Ready Children received the most votes. This priority builds on the interest and work begun in 2014. It also aligns with the Mayor's Cradle to K initiative. How can we coordinate working in this area with the Mayor's Cradle to K Cabinet?	
	For the goal "A Healthy Environment," Clean Air received the most votes. MHD Environmental Health division has been doing an air quality monitoring study and their report should be out in Fall.	Schedule EH update and revisit this topic when the air quality report is available.
	The "What's Missing" aspect also received much discussion. Very strong agreement that disparities are a strong component in all of the identified priorities. Citizens having access to quality mental health help and building the community's general resilience to mental health is important. Healthy Sleep was passionately presented as an underlying component of all aspects health, including mental health, substance abuse, school ready children, making healthy food choices, etc. Talking to someone about getting good sleep is a friendly gateway to discussion of more difficult topics.	Several members agreed that a presentation on sleep would be a good agenda item for a future meeting.
Department Updates- Gretchen Musicant	Upcoming Youth Violence Week activities were detailed. Upcoming Public Health Week activities were reviewed. May is Mental Health month and Gretchen talked about the Let's Talk campaign. Gretchen reported that she is now on the board for national partner, NACCHO (National Association of City-County Health Officials).	

Meeting adjourned at 7:45 p.m.

Minutes submitted by Don Moody and Margaret Schuster

Next Sub-Committee Meeting: April 28, 2015, Minneapolis City Hall, Room 132 & 333, 6:00-8:00 p.m.

Next Full Committee Meeting: May 26, 2015, Minneapolis City Hall, Room 132, 6:00-8:00 p.m.

GOAL: A Healthy Place to Live

(9) Homelessness

- (1) Recreation opportunities
- (0) Reduce lead exposure for kids
- (0) Regional development
- (2) Senior support services
- (2) Transportation alternatives
- (0) Workplace wellness

Other

- (1) Home ownership as public health issue, walkability, access to healthy food. Urban gardening
- (1) Healthy Living

GOAL: Thriving Youth and Young Adults

- (3) Invest in pro-social activities
- (3) Prevent child sex abuse
- (3) Reduce youth violence
- (1) Sex trafficking
- (2) STI / HIV prevention
- (7) Substance abuse / mental health**
- (2) Teen pregnancy prevention

Other

GOAL: Healthy Weight and Smoke-Free Living

(5) Access to healthy food (food deserts, choices in various stores)

- (2) Healthy food – after school programs
- (4) Healthy food policy – Minneapolis venues
- (3) Support biking / walking infrastructure & opportunities
- (1) Support smoke-free housing

Other

GOAL: A Healthy Start to Life and Learning

- (2) Healthy foods in daycare

- (4) Maternal health

(6) School ready children

Other

- (1) Early Childhood Mental Health

GOAL: A Healthy Environment

(5) Clean air

- (1) Clean soil
- (2) Clean water
- (4) Energy use
- (1) Noise
- (1) Recycling

Other

What's Missing?

- (1) Businesses – Engagement / Partnership

(9) Disparities – a strand that runs through many of these goals/goal areas

- (1) Healthy Sleep
- (4) Mental Health – access

Other

- (1) The importance of raising the wage to address health disparity



Notes – Agenda for the Sub-Committees of the Public Health Advisory Committee

April 28, 2015, 6:00 – 8:00 pm

Minneapolis City Hall, Room 132 & Room 333

AGENDA

Agenda Item	Presenter	Time	Committee Action
Supper is served!	La Loma Tamales	5:45 – 6:00	
PHAC Logistics, Introductions, and Department Updates	Margaret	6:00 – 6:10	
Update on issues and policy work related to Tobacco Initiatives	<i>D’Ana Tijerina, Public Health Specialist – MHD; Betsy Brock, MPH, Director of Research – ANsr-MN and Kari Oldfield, J.D., Legal and Community Outreach Coordinator – ANsr-MN</i>	6:10 – 6:45	
Sub-committees: <i>Communications/Operations: Orientation with Jane Auger, including orientation manual review, ethics training, and oath of office signature</i>	<i>Karen Soderberg</i>	6:50 – 8:00	
<i>Policy & Planning: Agenda planning and discussion</i>	<i>Dan Brady</i>	6:50 – 8:00	
<i>Collaboration & Engagement: Planning, goal setting, and assignments for hosting Raising of America showings</i>	<i>Margaret Schuster</i>	6:50 – 8:00	

Next Meeting of the Full Committee: May 26, 2015, Minneapolis City Hall, Room 132

Next Sub-committee meeting: June 23, 2015, Minneapolis City Hall, Rooms 132 & 333

In preparation for the update on issues and policy work related to tobacco initiatives, please refer to the Health Department website which provides information in both English and Spanish:

www.tobaccodeception.org

If there are any problems/changes the night of the meeting, please call 612-919-3855.



Public Health Advisory Committee

May 26, 2015, 6:00 – 8:00 pm

Minneapolis City Hall, Room 132

AGENDA

Agenda Item	Presenter	Time	Committee Action
Welcome and Introductions	Karen Soderberg	6:00 – 6:05	
PHAC Logistics and Updates Approve Minutes Reports from Sub-committees: <i>Communications/Operations:</i> <i>Policy & Planning:</i> <i>Collaboration & Engagement:</i>	Karen Soderberg <i>Karen Soderberg</i> <i>Dan Brady</i> <i>Margaret Schuster</i>	6:05 – 6:15	Approve Minutes
Presentation Homelessness: Current situation and ways forward	Mikkel Beckmen, Director Mpls./Hennepin County Office to End Homelessness	6:15 – 6:50 6:50 – 7:00	Presentation Q&A / Discussion
Presentation Rethink Your Drink, Every Sip Counts campaign	Vish Vasani – Public Health Specialist, Minneapolis Health Department	7:05 – 7:25	Informational
Department Updates	Gretchen Musicant	7:30 – 7:45	Informational / Discussion
Information Sharing Announcements, news to share, upcoming events		7:45 – 8:00	Announcements

Next Sub-committee meeting: June 23, 2015 Minneapolis City Hall, Rooms 132 & 333

Next Meeting of the Full Committee: July 28, 2015, Minneapolis City Hall, Room 132

For more information: [Heading Home Hennepin - Statewide Initiative to End Homelessness](#)

For more information: [Public Health Advisory Committee - City of Minneapolis](#); presentations, agendas, and meeting minutes posted on Meeting Records page.

If there are any problems/changes the night of the meeting, please call 612-919-3855.

Public Health Advisory Committee (PHAC) Minutes



May 26, 2015

Members Present: Jahana Berry, Karen Soderberg, Sarah Jane Keaveny, Dr. Rebecca Thoman, Sarah Dutton, Jane Auger, Jennifer Pelletier, Tamara Ward, Daniel Brady, Joseph Colianni

Members Excused: Julie Ring, Akisha Everett, Margaret (Peggy) Reinhardt, Birdie Cunningham, Autumn Chmielewski, Silvia Perez

Members Unexcused: Sahra Noor, Harrison Kelner, Dr. Happy Reynolds-Cook, Abdullahi Sheikh

MHD Staff Present: Gretchen Musicant, Margaret Schuster, Don Moody

Guests: Mikkell Beckmen, Vish Vasani

Karen Soderberg called the meeting to order at 6:03 p.m. at City Hall.

Item	Discussion	Outcome
Introduction Minutes Approval Reports from Sub-committees: <i>Operations / Communication</i> <i>Collaboration & Engagement</i> <i>Policy & Planning</i>	<p>Members and guests introduced themselves.</p> <p>March Minutes: Dr. Rebecca Thoman changed from unexcused to excused absence</p> <p>O/C reporting -</p> <p>C&E reporting – Margaret gave an update on the planning about event hosting for the <i>Raising of America</i> documentary</p> <p>P&P reporting – Dan reviewed the PHAC 2015 agenda planning summary and mentioned that Peggy, Gretchen, Margaret and he will be meeting with Cam Gordon to discuss the Housing Advisory Committee proposal</p>	<p>motion to approve minutes with listed edit carried by unanimous consent</p>
Presentation: Homelessness: Current situation and ways forward <i>Mikkell Beckmen</i>	<p>Mikkell presented on homelessness, including a brief overview of the homelessness in the past, the current situation of homelessness in the metropolitan area and efforts to reduce (end) homelessness.</p> <p>Prior eras of increased homelessness in the United States include after the Civil War, the Great Depression, post-World War II and the Korean war and effected primarily combat veterans. Each of these was improved through increased Federal spending on housing subsidies. Between 1978 and 1982, the budget for Housing & Urban Development department decreased from 26% to 6% of the Federal budget while also shifting the available Federal money from housing market interventions (building housing) to tax credits for mortgages.</p> <p>Homelessness is significantly 'a poor people' condition (5-10% of people below the poverty line do not have stable housing) and social views on homelessness and social attitudes towards poor people help perpetuate homelessness (for example, if they were not sinners, were not lazy, were not trying to take advantage of the system, they would not be homeless).</p> <p>There are only two routes to ending homelessness – lowering the cost of housing (e.g., via subsidies, portable vouchers) and raising personal income (higher wages and higher benefits; most shelter residence makes less than \$15K/year, there are few instances of those making \$25K/year or more using shelters).</p> <p>Housing stability impacts every measureable outcome (e.g., health, education, employment) and stable housing is the essential platform for health and community life.</p>	

**Public Health Advisory Committee (PHAC)
Minutes**



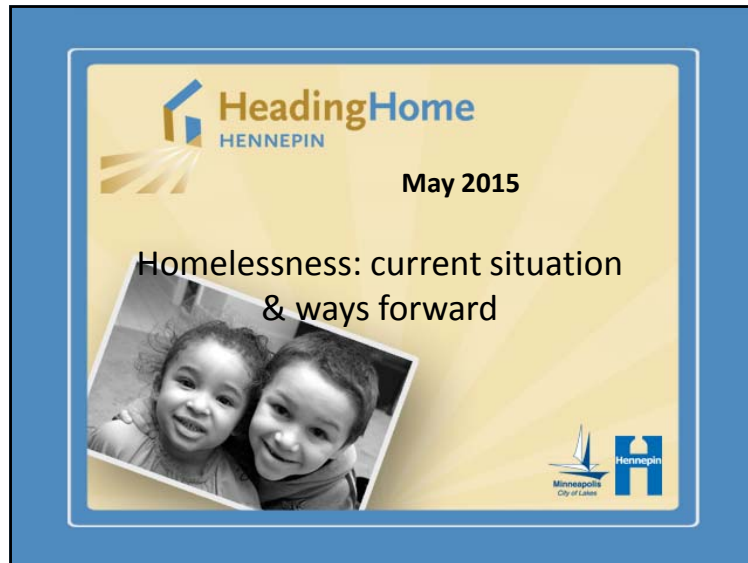
Item	Discussion	Outcome
Presentation: Rethink Your Drink, Every Sip Counts campaign <i>Vish Vasani</i>	<p>Vish discussed the upcoming <i>reThink Your Drink, Every Sip Counts</i> campaign, part of the Minneapolis Health Department's Healthy Living initiative. This is a partnership between MHD and community organizations to educate the public & raise awareness about the link between frequent sugary drink consumption & negative health effects, to improve the availability of beverage options, and to encourage people (and places!) to rethink their drink choices & make (make available!) healthier choices.</p> <p>A large part of our diets are what we drink and excess calories in beverages are major contributors to rising obesity rates and chronic health issues (such as diabetes). Currently, on average, Americans consume about 300 more calories a day than are needed with almost half of those extra calories come from sugary drinks.</p> <p>Vish talked about (and passed around some of) the various promotional materials which can be ordered, like magnets and posters which are available in different languages (English, Hmong, Spanish, Somali) and with a wide variety of images (both general message and community matching images).</p> <p>The reThink Your Drink website is active and the <i>reThink Your Drink</i> kickoff event is on Wednesday, July 1, at the Crystal Court in the IDS Center.</p>	
Department Updates- Gretchen Musicant	<p>2015 Legislative Session Update on the Health and Human Services financial bill which included increases in Public Health Grant funding for Rural Community Health Boards, maintains TANF funding for home visiting, and maintains funding for SHIP.</p> <p>Gretchen will attend the hearing on June 8 about amending the Tobacco Dealers ordinance. Sarah Dutton will also attend.</p> <p>A handout showing possible requests, programs enhancements and reductions to the 2016 Budget was shared. Suggested increases focused on the mayor's goals of increasing equity, running the city well, and growing the city.</p>	
Information Sharing –	West Metro Safe Harbor Conference flyer	

Meeting adjourned at 8:00 p.m.

Minutes submitted by Don Moody and Margaret Schuster

Next Sub-Committee Meeting: June 23, 2015, Minneapolis City Hall, Room 132 & 333, 6:00-8:00 p.m.

Next Full Committee Meeting: July 28, 2015, Minneapolis City Hall, Room 132, 6:00-8:00 p.m.



"Every available study indicates that offering homeless people housing ensures they will not be homeless anymore. On the other hand, offering services without housing does not"
– Martha Burt

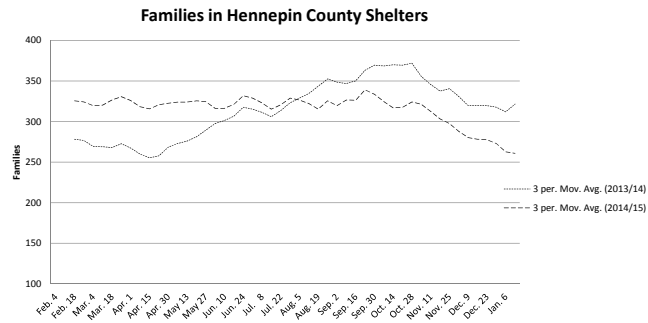
Why does it exist?

"the most visible of the subjugated victims of greed." Jonathan Kozol

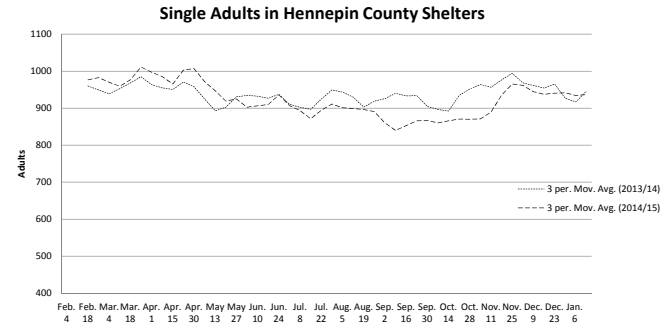
Symptom rather than problem

Federal Government decisions
Housing Market interventions

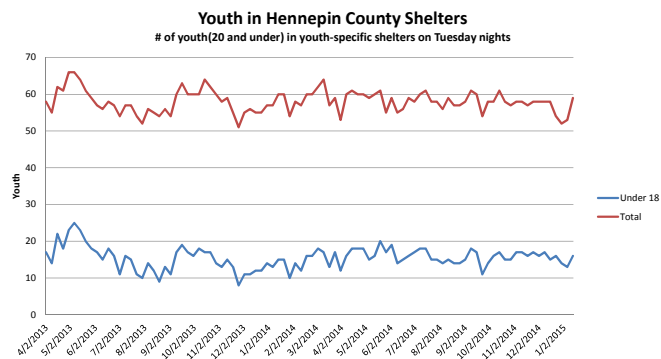
Family homelessness trending down



Single homelessness steady

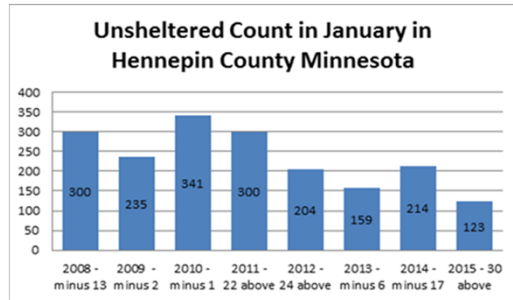


Youth homelessness steady



Annual Point-in-Time Count

	2009	2010	2011	2012	2013	2014
Families						
Emerg Shelter	965	519	995	1102	1336	1465
Trans Hsg	734	657	561	697	629	617
Unsheltered	31	50	16	50	3	6
Single Adults						
Emerg Shelter	955	1215	982	981	1095	1036
Trans Hsg	371	366	335	338	347	382
Unsheltered	225	180	152	138	180	202
Unaccompanied Youth 17 and younger						
Emerg Shelter	0	20	4	11	18	9
Trans Hsg	0	30	54	12	2	10
Unsheltered	0	18	1	0	4	2



Rental Housing Market:

- Vacancy rate for Minneapolis: 2.1% in third quarter 2014
- Average rent in Minneapolis for a 1 bedroom apt is \$1014, compared to \$796 for Fair Market Rent.
- Average rent for 2 bedroom is \$1440, compared to \$996 for Fair Market Rent.
- MN Family Investment Program for family of 3 is \$532 and General Assistance is \$203, unchanged for decades

What is needed?

Only 2 ways to end it

- Lower the cost of housing –
- Subsidies, portable vouchers
- Focus on the lowest incomes and most at-risk populations
- Raise personal income
- Higher wages
- Higher benefits for the disabled

Stable Housing is the essential platform for Health & Community Life

Housing stability impacts every outcome we can measure –

- In health,
- education,
- employment,
- participation in community,
- strong families,
- lower rates of involvement in criminal justice and social service sectors

Opportunities

- Make housing stability a goal of every department
- Public Housing creation
- Prevention
- Prioritize our existing resources
- Integrate “homeless” services into mainstream systems

For further dialogue

Mikkel Beckmen

Director

Minneapolis / Hennepin County Office to End Homelessness

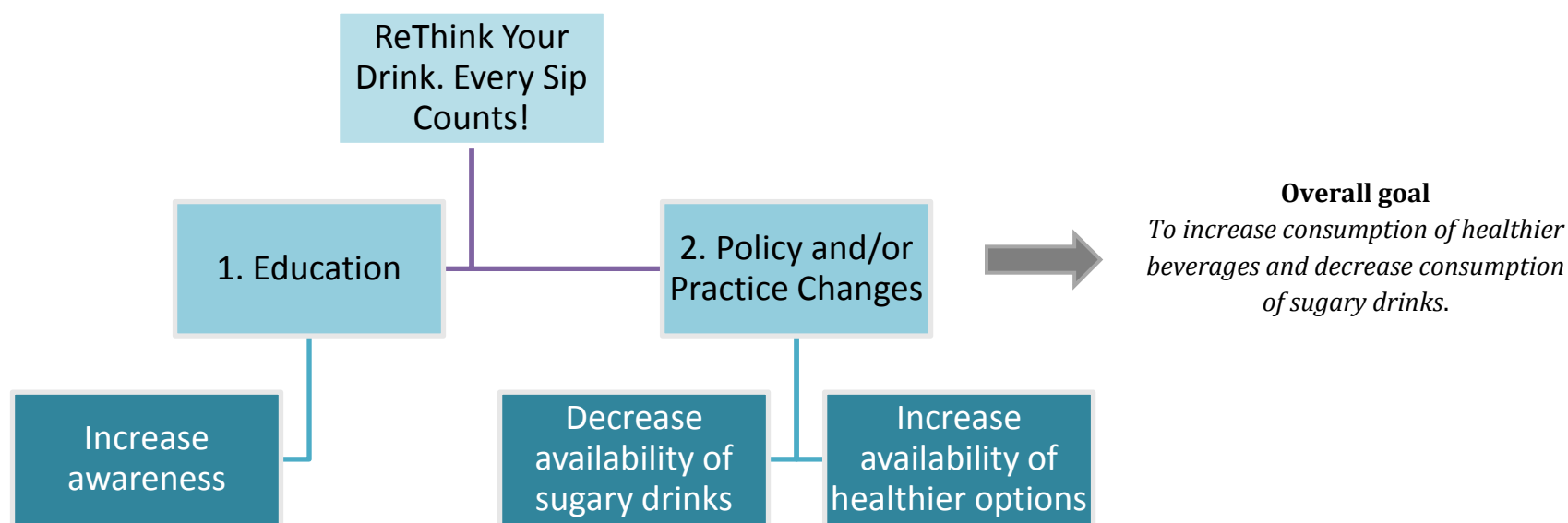
Mikkel.beckmen@hennepin.us

612-596-1606

Healthier Beverage Initiative: *ReThink Your Drink. Every sip counts!*

What is ReThink Your Drink. Every sip counts!

ReThink Your Drink. Every Sip Counts! is a community-driven initiative that (1) encourages residents to choose healthier beverages over sugary options and (2) increases the availability of healthier beverages in different places where adults and children spend their time.



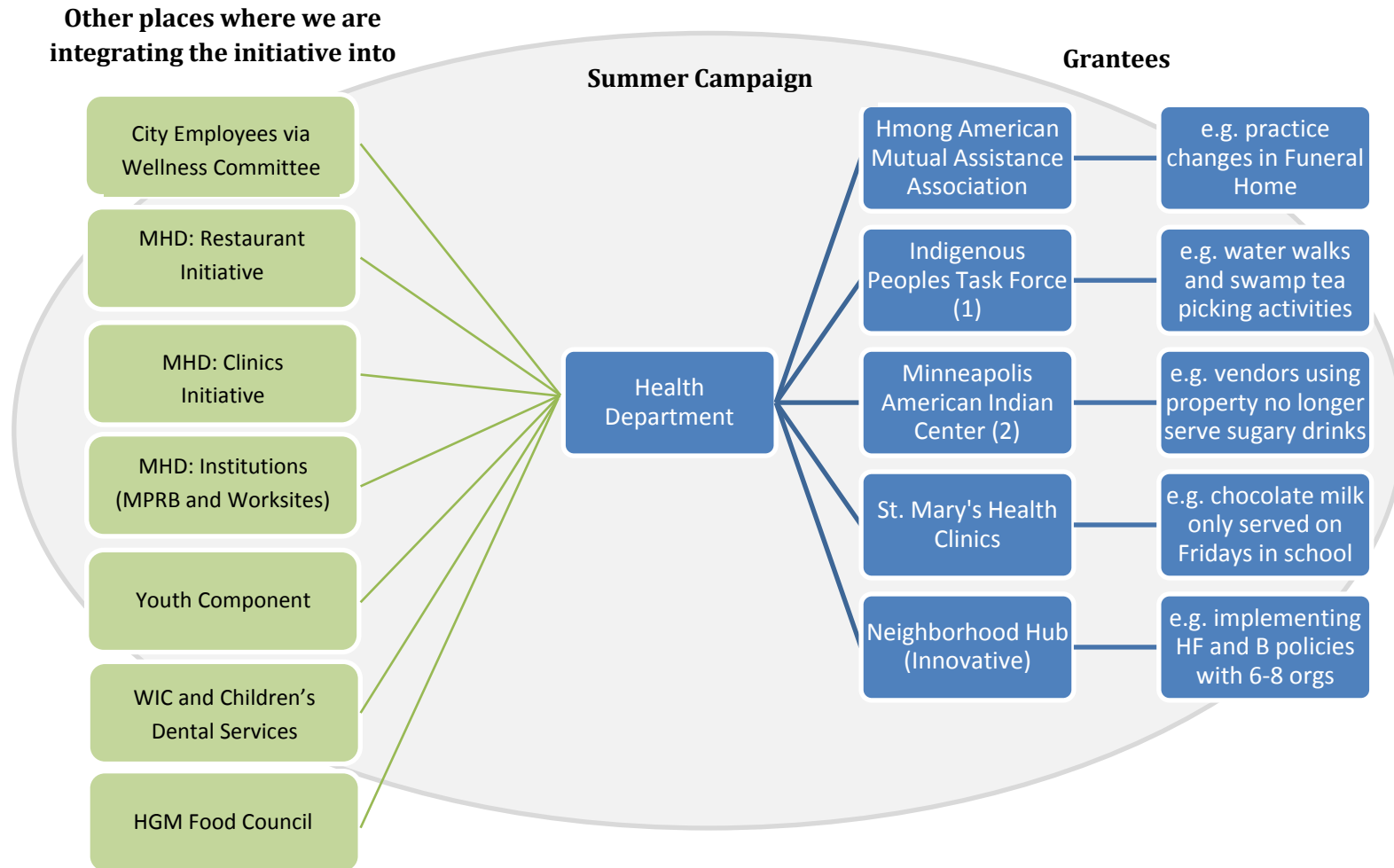
Who are the community partners implementing the initiative?

1. Hmong American Mutual Assistance Association
2. Indigenous Peoples Task Force
3. Minneapolis American Indian Center
4. St. Mary's Health Clinics
5. Neighborhood Hub

Why were these organizations selected?

Low-income communities and communities of color are more likely to regularly consume sugary drinks and are at a higher risk for obesity and other related chronic diseases.

This project is supported by the Minneapolis Health Department with Statewide Health Improvement Program funding, Minnesota Department of Health.



This project is supported by the Minneapolis Health Department with Statewide Health Improvement Program funding, Minnesota Department of Health.

Affordable Housing is Nowhere to be Found for Millions

For the first time in decades, the federal government will invest funds in the creation of rental housing units explicitly targeted to extremely low income (ELI) households, those with incomes at or below 30% of area median income (AMI). This will be achieved with the implementation of the National Housing Trust Fund (NHTF). The NHTF was signed into law in 2008 but up until now, had not received funding. It will finally begin distributing funds to state agencies early in 2016. This investment in deeply affordable housing comes at a critical time, as this report will show.

Every year, the National Low Income Housing Coalition (NLIHC) examines the availability of rental housing affordable to ELI and other low income renter households and has shown that the gap between the number of ELI households and the number of rental homes that are **both affordable and available**¹ to them has grown dramatically since the foreclosure crisis and recession. Despite this growing need, most new rental units being built are only affordable to households with incomes above 50% of AMI. At the same time, the existing stock of federally subsidized housing is shrinking through demolition and contract expirations, and waiting lists for housing assistance remain years long in many communities. Federal housing assistance is so limited that just one out of every four eligible households receives it.

The NHTF is structured as a block grant to states, and at least 90% of all funding will be used to produce, preserve, rehabilitate and operate rental housing. Further, 75% of rental housing funding must benefit ELI. The funding of the NHTF will make a difference in the lives of many ELI renters by supporting the development and preservation of housing affordable to this income group. However, additional funding to the NHTF will be necessary to assure support to all income eligible households in need of housing.

¹ An affordable unit is one in which a household at the defined income threshold can rent without paying more than 30% of its income on housing and utility costs. A unit is affordable and available if that unit is both affordable and vacant, or is currently occupied by a household at the defined income threshold or below.

Along with examining the housing needs of income groups commonly defined by HUD (see Box 1), NLIHC continues this year to look at the housing needs of renter households with incomes at or below 15% of AMI, an income category not examined by HUD, but one that includes the country's most vulnerable renters. NLIHC calls the 15% AMI category "deeply low income (DLI)" for the purposes of this report.

As in previous years, the data in this report are offered at the national, state, and metropolitan level. The data used in this analysis come from the 2013 American Community Survey (ACS).

See Box 1 for definitions of DLI and the official HUD income categories.

Key findings of this issue of *Housing Spotlight* are:

- The number of ELI renter households rose from 9.6 million in 2009 to 10.3 million in 2013 and they made up 24% of all renter households in 2013.
- There was a shortage of 7.1 million affordable rental units available to ELI renter households in 2013. Another way to express this gap is that there were just 31 affordable and available units per 100 ELI renter households. The data show no change from the analysis a year ago.
- For the 4.1 million renter households DLI renter households in 2013, there was a shortage of 3.4 million affordable rental units available to them. There were just 17 affordable and available units per 100 DLI renter households.
- Seventy-five percent of ELI renter households spent more than half of their income on rent and utilities; 90% of DLI renter households spent more than half of their income for rent and utilities.
- In every state, at least 60% of ELI renters paid more than half of their income on rent and utilities.

BOX 1: DEFINITIONS

- **AREA MEDIAN INCOME (AMI):** The median family income in the metropolitan or nonmetropolitan area
- **DEEPLY LOW INCOME (DLI):** Households with income at or below 15% of AMI
- **EXTREMELY LOW INCOME (ELI):** Households with income at or below 30% of AMI
- **VERY LOW INCOME (VLI):** Households with income between 30% and 50% of AMI
- **LOW INCOME (LI):** Households with income between 50% and 80% of AMI
- **NOT LOW INCOME:** Households with income above 80% of AMI
- **COST BURDEN:** Spending more than 30% of household income on housing costs
- **SEVERE COST BURDEN:** Spending more than 50% of household income on housing costs

- No state had more than 56 units of rental housing affordable and available for every 100 ELI households, and no state had more than 37 units of rental housing affordable and available for every 100 DLI households.
- Among the 50 metropolitan areas with the largest renter household populations, the number of affordable and available rental units for every 100 ELI households ranged from 10 in Las Vegas-Henderson-Paradise, NV to 47 in Boston-Cambridge-Newton, MA.

Shortage of Affordable Units

The number of renter households in the United States has steadily increased over the last decade, after the homeownership rate peaked in 2004 (69%). Since 2004, the proportion of the United States population renting has increased from 31% to 36% in 2013. Nearly one out of every four renter households, approximately 10.3 million, were ELI in 2013. However, there were just 5.8 million rental units affordable to these households, resulting in an absolute shortage of 4.5 million affordable units. In other words, in 2013, for every 100 ELI renters, there were only 56 affordable units (*Figure 1*).

Among the 10.3 million ELI renter households, 4.1 million were DLI. For DLI renters, affordable rental housing was scarce. There were just 2.4 million rental units affordable to this income group in 2013. In addition, 90% of DLI households were paying more than half of their income on housing costs. Households paying more than 50% of their income towards housing costs are considered severely housing cost burdened, and for these households, an unforeseen expense, such as a car repair, can turn into a financial disaster. Severely cost-burdened households, with

little ability to build a financial cushion, are at risk of becoming homeless.

Many DLI renters are people with long-term disabilities or are elderly, and many rely on Supplemental Security Income (SSI) to cover housing costs and other needs. In 2012, SSI was the sole source of income for 4.8 million Americans.

The maximum monthly SSI payment is currently \$733 for an individual and \$1,100 for a couple.² In 181 housing markets across 33 states, one-bedroom rents exceeded 100% of monthly SSI income.³

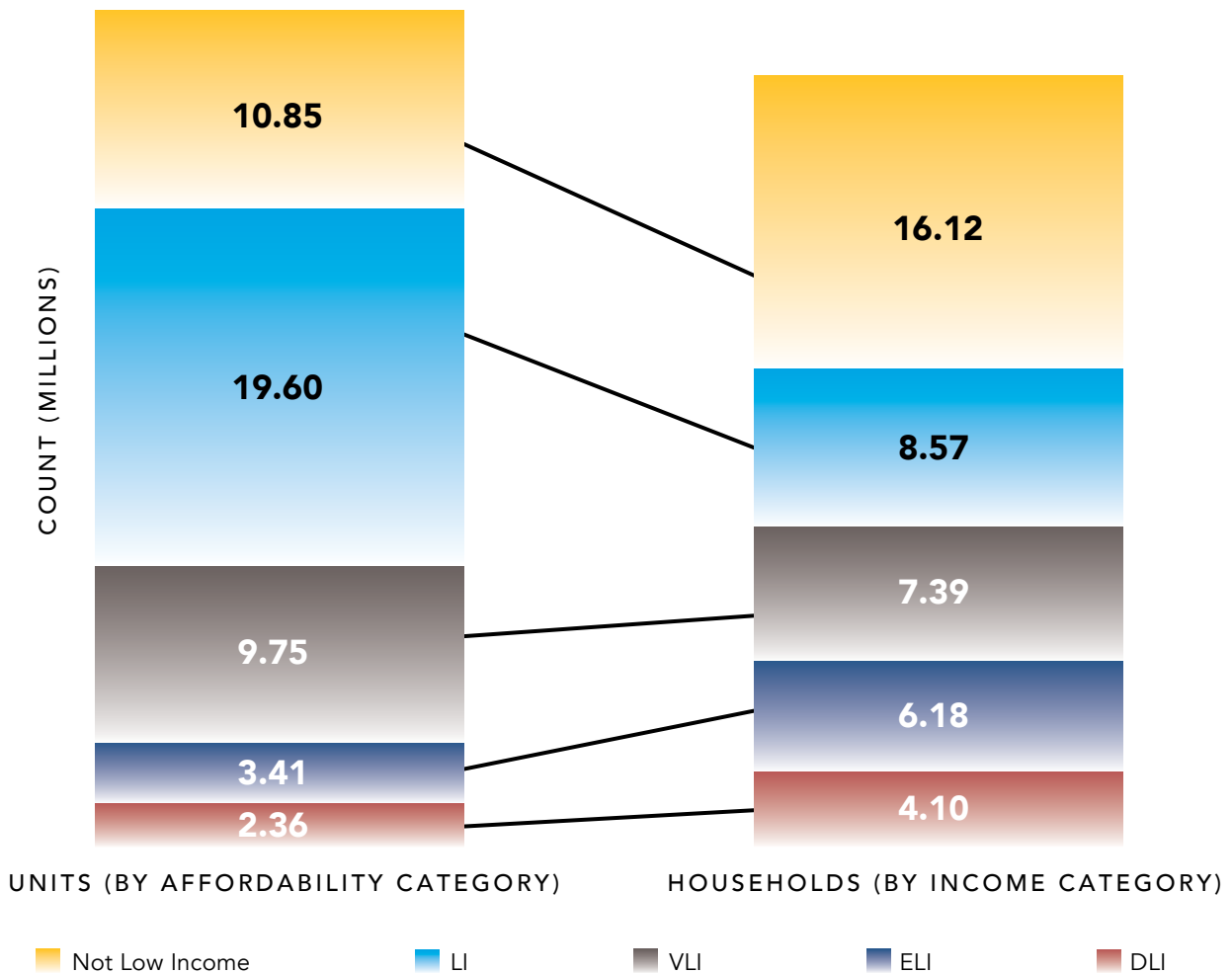
For very low income (VLI) renter households, those with income between 31% and 50% of AMI, there was a surplus of 2.3 million affordable rental units. However, overall, there were 17.7 million renter households with incomes at 50% of AMI or less, and just 15.5 million rental units in this category, creating a gap of 2.1 million rental units.

In 2013, there were 19.6 million rental units on the market affordable to low income households, those with incomes between 51% and 80% of AMI, but there were only 8.6 million low income households, creating a surplus of 11 million units affordable to households in this income group. This mismatch in supply and demand results in 73% of all ELI renter households and 59% of all VLI renter households living in units that rent at prices out of their affordability range.

The ACS only includes households who are housed, leaving out those who are homeless. Thus, the need for affordable housing is even greater than the ACS data indicate. According to the 2014 HUD Point-in-Time Count, there were 401,051 homeless people in shelters and 177,373

2 Social Security Administration (2015). SSI Federal Payment Amounts for 2015. Retrieved from <http://www.socialsecurity.gov/OACT/COLA/SSI.html>. Note that some states supplement the federal SSI payments.

3 Technical Assistance Collaborative (2013). *Priced Out* 2012. Retrieved from <http://www.tacinc.org/knowledge-resources/priced-out-findings>.

FIGURE 1: RENTAL UNITS AND RENTERS IN THE US, MATCHED BY AFFORDABILITY AND INCOME CATEGORIES, 2013

Source: NLIHC Tabulations of 2013 ACS PUMS data

unsheltered homeless people on a single night in 2014.⁴ The general accepted number of people who were homeless over the course of 2012 was 1,488,371.⁵ Between 2013 and 2014, the number of chronically homeless individuals declined 2.5%, a statistic that HUD attributed to an increase in the inventory of permanent supportive housing during the same period. Further progress towards ending homelessness requires increased investment in housing for ELI households.

4 HUD. (2014). *The 2014 Annual Homelessness Assessment Report*. Washington, D.C.: Author. Retrieved from <https://www.hudexchange.info/resources/documents/2014-AHAR-Part1.pdf>.

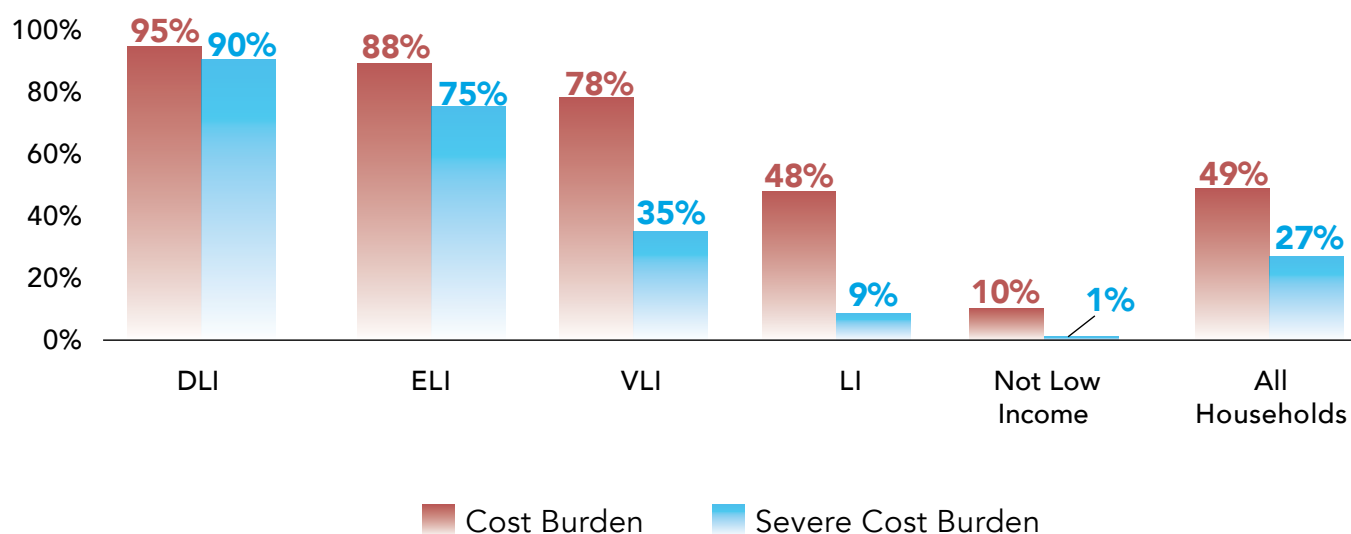
5 US Department of Housing and Urban Development. (2013). *The 2012 Annual Homeless Assessment Report (AHAR) to Congress: Estimates of Homelessness in the United States*. Retrieved from <https://www.onecpd.info/resources/documents/2012-AHAR-Volume-2.pdf>.

One additional issue with the ACS is that there is evidence that it significantly undercounts the American Indian/Alaska Native populations,⁶ and therefore the housing needs of this population may also be misrepresented in these data. States with large populations of American Indian/Alaska Native people should use data presented here with caution and seek out alternative sources of information to gain a full understanding of the housing needs in their communities.

Affordable But Not Available

The gap analysis must go beyond computing just the shortage of units that are affordable to certain renters,

6 DeWeaver, N. (2013). *American Community Survey Data On the American Indian/Alaska Native Population: A Look behind the Numbers*. Retrieved from http://www.ncai.org/policy-research-center/initiatives/ACS_data_on_the_AIAN_Population_paper_by_Norm_DeWeaver.pdf.

FIGURE 2: COST BURDEN AND SEVERE COST BURDEN AMONG RENTER HOUSEHOLDS, 2013

Source: NLIHC Tabulations of 2013 ACS PUMS data.

because not all of the units that are affordable are available or appropriate for households to rent. First of all, many of those units are occupied by higher income renters, and thus are not available for rent by those most in need. These affordable units also may not be available or suitable for some households because they are in poor condition, or may be too far from jobs, public transportation, or other needed services.

Finally, the range of affordable rents varies considerably within each income category, so that a unit affordable to someone with income at 29% of the area median, for example, is not likely to be affordable for someone with income at 15% of the area median. Therefore, the shortage of 4.5 million affordable homes does not fully illustrate the extent of the housing shortage facing ELI renters. Of the 5.8 million rental units affordable to ELI households, approximately 45% were occupied by higher income households in 2013. After accounting for the units occupied by higher income households, the number of affordable rental units available to ELI households falls to 3.2 million. In other words, there were just 31 affordable and available units per 100 ELI renter households. There is a need for 7.1 million additional rental units affordable to these households.

The situation is even starker for DLI renter households. Of the 2.4 million rental units affordable to this income group, 1.7 million house higher income households. Accordingly,

there were just 17 units of affordable rental housing available per 100 DLI households. There is an immediate need for an additional 3.4 million units of housing affordable and available to DLI renter households.

Due to the increased demand for rental housing and the rise in the number of higher income renter households, it has also become harder for VLI households to find affordable units. There were only 57 affordable and available units per 100 VLI renter households. For low income renter households, there were 97 affordable and available units for every 100 renter households, nearly a one for one match.

Housing Cost Burden and Its Consequences

Because of the acute affordable housing shortage, many ELI renter households must pay more than they can afford for their homes. In 2013, 88% of ELI renter households, 78% of VLI renter households, and 48% of low income renter households experienced housing cost burden, paying more than 30% of income toward rent and utilities. In comparison, just 10% of renter households with income above 80% of AMI had housing cost burdens (Figure 2).

More troubling is the number of lower income renters experiencing a severe housing cost burden, spending more than half of their income on rent and utilities. Approximately 11.2 million renters had severe housing

cost burden in 2013, of which 69% were ELI households and 23% were VLI households. Three quarters of the 10.3 million ELI renter households experienced severe housing cost burden.

A housing cost burden can negatively affect a household in many ways. A recent survey found that three out of four housing cost-burdened renters made sacrifices, such as cutting back on health care, to afford rent.⁷ ELI renters facing a housing burden may cut back on groceries, health care prescriptions, or vehicle maintenance to pay the rent. Renters are also 57% more likely than homeowners to turn to pay-day lenders when finances get tight, often further complicating their financial situation.⁸ Finally, cost-burdened households can rarely afford to build up savings for education, retirement, or other long term needs.

Low income renters not facing a housing cost burden face other housing challenges. Many households cope with the shortage of affordable units by doubling up with family or friends, often leading to overcrowded conditions. Other households rent affordable yet substandard housing, facing pest infestation, leaky roofs, outdated electrical systems, rusty pipes, and gas leaks. Living in substandard housing can be a predictor of poor social and emotional development for children.⁹ These conditions exist because the supply of decent quality affordable housing remains inadequate. An investment in expanding the supply of affordable housing would reduce the number of American households forced to face overcrowded and poor housing conditions.

Extent of the Shortage Varies by State

Moving from the national to the state level, a state-by-state analysis shows that no state has sufficient housing units affordable to ELI renter households. Appendix A shows the number of affordable and available units per 100 renter households at different income levels, the percentage of renters with severe housing cost burden, and the number of

additional units needed to adequately address the demand for affordable rental housing for each state.

Some states had a much wider gap to fill than others. The need for rental housing affordable for ELI households varied from 7,426 units in Wyoming to 981,745 units in California. The states where ELI renters were least likely to find housing affordable and available to them were Nevada, with just 15 units of available and affordable housing per 100 ELI renters, followed by California (21), Oregon and Arizona (22), and Florida (23). The states with the most rental units affordable and available per 100 ELI households were South Dakota (56) and Wyoming (55) (*Figure 3*).

Looking at severely cost-burdened renters by state shows that, in every state, at least 60% of all ELI renters experienced severe housing cost burden. The states with the lowest proportion of ELI renters who faced severe housing cost burden were South Dakota (60%), Vermont, Massachusetts, and Rhode Island (61%). At least 80% of renters faced severe housing cost burden in six states: California and Oregon (80%), Arizona (81%), Georgia (82%), Florida (83%), and Nevada (86%). The states with the fewest units of affordable and available housing tended to have a higher percentage of severely cost-burdened renters.

For DLI renters, there were just eight units of affordable and available housing per 100 households in New Hampshire and nine units per 100 households in Nevada. No state had more than 37 units of housing affordable and available to DLI renter households. Thirty-one states had fewer than 20 units affordable and available per 100 DLI renter households.

Extent of the Shortage Varies by Metropolitan Area

To understand the dynamics of the affordable rental housing shortage, it is also necessary to look below state level data. Last year, NLIHC began to analyze the availability of affordable housing at the metropolitan level, focusing on fifty metropolitan areas with the largest renter populations.¹⁰ Renters in metropolitan areas tend to have greater access to services, jobs, and public transit than those in rural or suburban areas, which can drive up rents. In the 50 metropolitan areas with the largest renter household

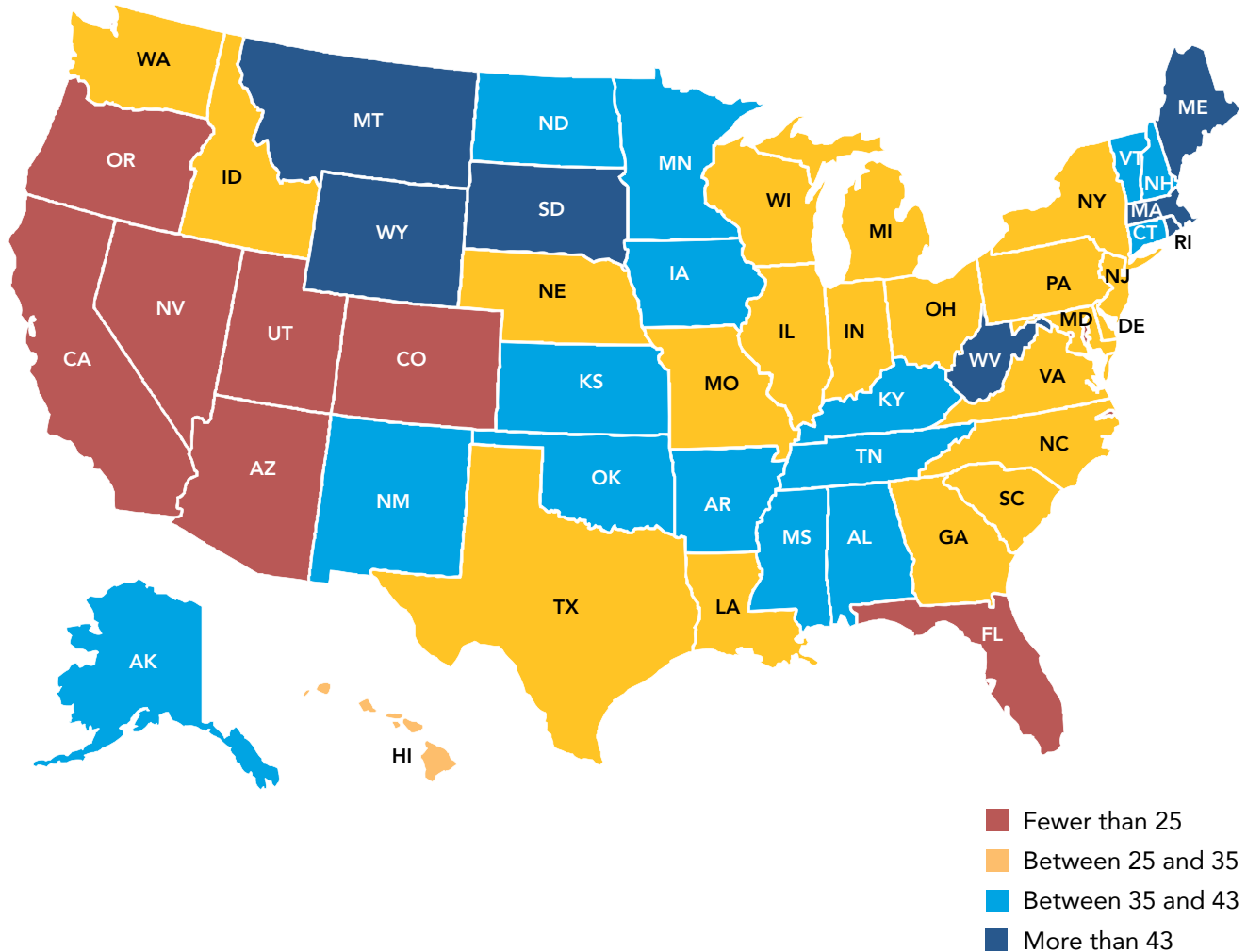
7 MacArthur Foundation. (2014). *How Housing Matters: The Housing Crisis Continues to Loom Large in the Experiences and Attitudes of the American Public*. Chicago, IL: Author. Retrieved from <http://bit.ly/1tYfkj8>.

8 The Pew Charitable Trusts. (2012). *Payday Lending in America*. Retrieved from http://www.pewtrusts.org/~media/legacy/uploadedfiles/pes_assets/2012/PewPaydayLendingReportpdf.pdf.

9 Howard, M. (2014). The Penalty of Poor Housing. *TuftsNow*. Retrieved from <http://now.tufts.edu/articles/penalty-poor-housing>.

10 There was one change to the list of the 50 metropolitan areas with the largest renter populations from 2012 to 2013: Fresno, CA dropped off the list and Honolulu, HI was added to the list. 2013 data for Fresno, CA is available upon request.

FIGURE 3: UNITS AFFORDABLE AND AVAILABLE PER 100 RENTER HOUSEHOLDS WITH INCOMES OF NO MORE THAN 30% AMI, 2013



Source: NLIHC Tabulations of 2013 ACS PUMS data

populations, ELI renters face a severe shortage of affordable housing.

The deficit of rental units affordable and available to ELI households ranged from 18,921 in the Honolulu, HI metropolitan area to 627,196 in the New York City-Newark-Jersey City, NY-NJ-PA metropolitan area ([Appendix B](#)). Of the 50 metropolitan areas, the Las Vegas-Henderson-Paradise metropolitan area in Nevada had the greatest need, with just 10 units affordable and available for every 100 ELI renter households, down from 12 units in 2012. However, no metropolitan area had a sufficient number of affordable rental units to serve all ELI households. The Boston-Cambridge-Newton, MA (47) and Louisville/Jefferson County, KY-IN (46) metropolitan areas had the greatest number of units available and affordable per 100 ELI renter households ([Table 1](#)).

There were 20 metropolitan areas where the shortage of units affordable and available increased from 2012 to 2013, with an average increase of 8.4%. The five metropolitan areas that experienced the biggest increase in this shortage were Richmond, VA (21%), Pittsburgh, PA (20%), Las Vegas-Henderson-Paradise, NV (17%), Washington-Arlington-Alexandria, DC-VA-MD-WV (17%), and New Orleans-Metairie, LA (14%). The remaining 30 metropolitan areas all experienced decreases in the shortage of affordable and available rental units to ELI households, with an average decrease of 7.6%. These decreases can likely be attributed to the rise in median family income from 2012 to 2013, which occurred in 40 of these metropolitan areas. This lifted many households out of the ELI category. The median family income increased by an average of \$1,592 in these 40 metropolitan areas.

TABLE 1: METROPOLITAN AREAS WITH THE HIGHEST AND LOWEST AVAILABILITY OF RENTAL UNITS AFFORDABLE TO HOUSEHOLDS AT OR BELOW 30% OF AMI, 2013

LOWEST		HIGHEST	
Metropolitan Area	Units Affordable and Available per 100 ELI Renter Households	Metropolitan Area	Units Affordable and Available per 100 ELI Renter Households
Las Vegas-Henderson-Paradise, NV	10	Boston-Cambridge-Newton, MA-NH	47
Orlando-Kissimmee-Sanford, FL	12	Louisville/Jefferson County, KY-IN	46
Riverside-San Bernardino-Ontario, CA	17	Providence-Warwick, RI-MA	43
San Diego-Carlsbad, CA	17	Pittsburgh, PA	39
Los Angeles-Long Beach-Anaheim, CA	18	Nashville-Davidson-Murfreesboro-Franklin, TN	39

Source: NLIHC Tabulations of 2013 ACS PUMS data

The Orlando-Kissimmee-Sanford, FL metro area had the highest proportion of severely housing cost-burdened ELI renters (91%), followed by Las-Vegas-Henderson-Paradise, NV (90%), Riverside-San Bernardino-Ontario, CA (85%), Atlanta-Sandy Springs-Roswell, GA (85%), and New Orleans-Metairie, LA (84%).

In metropolitan areas with the largest renter household populations, the situation was grim for DLI renter households. In the Orlando-Kissimmee-Sanford, FL metropolitan area, there were just three units of affordable and available rental housing per 100 of these households. There were seven additional metropolitan areas with fewer than ten units of housing per 100 households affordable and available to this income group: Las Vegas-Henderson-Paradise, NV (7), Memphis, TN-MS-AR (8), Milwaukee-Waukesha-West Allis, WI (8), San Diego-Carlsbad, CA (9), Los Angeles-Long Beach-Anaheim, CA (9), Indianapolis-Carmel-Anderson, IN (9), and New Orleans-Metairie, LA (9).

In nine of America's 11 largest cities, the majority of the population lived in rental housing in 2013.¹¹ This is an increase from just five cities with a majority of renters in

2006. The number of renters grew by more than 20% in five out of the 11 cities. In all but two cities, the rental vacancy rate decreased as a result of this increased demand. These factors drive rents up at a time when incomes remain stagnant. As renting becomes more popular in large cities and elsewhere, it becomes more important to ensure that the lowest income renters can access high quality, affordable housing in areas of opportunity.

Addressing the Need for Affordable Housing

Across all 50 states, the District of Columbia, and the 50 metropolitan areas with the largest renter household populations, there is a need to build and preserve affordable rental housing for the lowest income households.

Since 2000, NLIHC has advocated for the NHTF, which will provide a dedicated source of revenue to preserve and expand the supply of affordable rental housing targeted to ELI households. The NHTF was created to address the shortage of rental housing for ELI households discussed in this report. Established by the Housing and Economic Recovery Act of 2008, the NHTF is a block grant to states that will be capitalized by a dedicated source of revenue not subject to the annual appropriations process. While the NHTF was established in 2008, it was not funded

¹¹ NYU Furman Center. (2015). *Renting in America's Largest Cities*. Retrieved from <http://furmancenter.org/nationalrentallandscape>.

HOUSING SPOTLIGHT is a series of occasional research briefs from the National Low Income Housing Coalition that use data from different sources to highlight a variety of housing issues.

at that time because Fannie Mae and Freddie Mac were taken into conservatorship during the financial crisis, and their federally mandated contributions to the NHTF were suspended. In late 2014, the suspension was finally lifted. Fannie Mae and Freddie Mac were directed by Federal Housing Finance Agency Director Mel Watt to begin setting aside funding for the NHTF in FY2015 and make them available by March, 2016. The source of funding is an annual assessment of 4.2 basis points of the volume of business of Freddie Mac and Fannie Mae, 65% of which is to go to the NHTF. Estimates for the amount of funds to come from this assessment fee range from \$120 million to \$300 million. Unfortunately, these amounts are too small to significantly reduce the current shortage of affordable units for ELI households, which is why it remains critical to continue seeking other avenues of funding.

For more information on the NHTF go to www.nhtf.org.

About the American Community Survey PUMS Data

The American Community Survey (ACS) is a nationwide survey of approximately 3.5 million households conducted annually. It provides timely data on the social, economic, demographic, and housing characteristics of the U.S. population. The ACS replaced the Census “long form” in 2010, eliminating the long waiting period for new data between each decennial census.

Each year the Census Bureau makes Public Use Microdata Sample (PUMS) housing and population files available to the public to allow for deeper analysis of the ACS. The PUMS housing file contains records on a subsample of housing units, while the population file contains records

on a subsample of households. Both contain information from the completed ACS questionnaire and include a serial number that allows for the integration of the two files. This enables users to aggregate and tabulate the data in whatever way is relevant to their research. In order to determine the area median income, NLIHC used the Missouri Data Center’s MABLE/Geocorr12 online application (Version 1.1, 2012) to determine the geographic relationship between Core Based Statistical Areas (CBSAs) and Public Use Microdata Sample Areas (PUMAs) and applied the median family income for a CBSA to the corresponding PUMA if at least 50% of the PUMA was in the CBSA. Otherwise, the PUMA was assigned the statewide nonmetro median family income for the state the PUMA is in. NLIHC has used this methodology since 2009. This analysis should not be compared to NLIHC analyses completed prior to 2009 on the shortage of affordable housing units.

More information about the ACS PUMS files can be found on the U.S. Census Bureau’s webpage at http://www.census.gov/acs/www/data_documentation/public_use_microdata_sample/.

For More Information

If you are interested in looking more closely at the numbers from a particular state, would like a copy of the detailed methodology, or have any other comments or questions on this edition of NLIHC’s *Housing Spotlight*, please contact NLIHC Research Director Megan Bolton, megan@nlihc.org, 202-662-1530 x245



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**NATIONAL LOW INCOME
HOUSING COALITION**

The National Low Income Housing Coalition is dedicated solely to achieving socially just public policy that assures people with the lowest incomes in the United States have affordable and decent homes.

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Appendix A: State Comparisons

States in **RED** have less than the national level of affordable and available units per 100 households at or below the ELI threshold

State	(Deficit) of Affordable and Available Units		Affordable and Available Units per 100 Households at or below Threshold				% Within Each Income Category with Severe Housing Cost Burden			
	At or below 15% AMI	At or below 30% AMI	At or below 15% AMI	At or below 30% AMI	At or below 50% AMI	At or below 80% AMI	At or below 15% AMI	At or below 30% AMI	Between 30% and 50% AMI	Between 50% and 80% AMI
Alabama	(55,881)	(95,294)	19	42	78	111	92%	74%	25%	4%
Alaska	(3,563)	(7,966)	26	40	69	106	86%	71%	26%	6%
Arizona	(66,371)	(142,350)	15	22	49	103	94%	81%	42%	9%
Arkansas	(28,644)	(54,203)	11	35	73	111	96%	75%	30%	4%
California	(417,715)	(981,745)	12	21	30	71	91%	80%	51%	18%
Colorado	(50,381)	(119,969)	16	24	57	99	91%	77%	31%	8%
Connecticut	(43,782)	(86,193)	24	38	65	104	81%	68%	26%	5%
Delaware	(7,286)	(14,436)	21	34	53	109	90%	79%	30%	4%
District of Columbia	(21,038)	(32,752)	34	40	69	93	74%	65%	31%	10%
Florida	(187,423)	(392,746)	12	23	36	84	95%	83%	55%	18%
Georgia	(116,270)	(220,178)	16	29	57	106	95%	82%	37%	7%
Hawaii	(11,613)	(25,394)	26	31	41	72	79%	72%	51%	23%
Idaho	(13,601)	(28,125)	19	29	63	103	88%	76%	27%	4%
Illinois	(160,321)	(318,859)	18	30	62	102	90%	76%	28%	5%
Indiana	(77,303)	(144,766)	13	31	71	108	93%	76%	25%	3%
Iowa	(33,266)	(57,410)	11	40	87	106	95%	69%	16%	6%
Kansas	(27,554)	(53,705)	14	36	78	108	94%	74%	17%	3%
Kentucky	(43,954)	(88,577)	22	39	77	109	91%	72%	23%	3%
Louisiana	(56,466)	(110,522)	17	34	59	103	92%	77%	33%	7%
Maine	(9,909)	(22,041)	20	44	60	102	87%	67%	38%	5%
Maryland	(61,148)	(117,915)	27	34	57	101	83%	74%	32%	7%
Massachusetts	(80,442)	(161,694)	27	46	62	96	78%	61%	33%	8%
Michigan	(109,626)	(221,925)	13	31	64	103	92%	76%	29%	6%
Minnesota	(56,578)	(107,075)	18	37	74	103	84%	67%	20%	4%
Mississippi	(33,904)	(55,842)	17	37	64	103	94%	78%	34%	9%
Missouri	(64,760)	(127,833)	15	34	74	107	91%	74%	23%	3%
Montana	(10,879)	(17,935)	25	47	80	103	81%	72%	25%	7%
Nebraska	(18,917)	(41,693)	11	31	75	105	96%	76%	16%	4%
Nevada	(27,872)	(66,321)	9	15	41	102	96%	86%	44%	10%
New Hampshire	(10,088)	(23,056)	8	37	59	104	91%	69%	28%	4%
New Jersey	(86,020)	(210,481)	21	30	40	91	85%	76%	46%	9%
New Mexico	(20,884)	(40,452)	24	36	62	105	91%	73%	39%	7%
New York	(301,477)	(627,684)	15	32	50	84	89%	74%	41%	11%
North Carolina	(96,872)	(203,191)	18	32	66	103	94%	77%	31%	7%
North Dakota	(8,179)	(16,459)	31	43	85	103	83%	65%	11%	4%
Ohio	(139,417)	(277,439)	20	35	78	107	89%	73%	23%	3%
Oklahoma	(33,445)	(63,082)	22	41	77	111	91%	74%	25%	6%
Oregon	(45,609)	(103,363)	13	22	42	94	92%	80%	39%	10%
Pennsylvania	(136,665)	(281,952)	17	34	68	102	91%	74%	28%	6%
Rhode Island	(11,939)	(25,453)	15	44	63	103	89%	61%	32%	6%
South Carolina	(46,480)	(89,223)	23	34	66	107	92%	76%	33%	6%
South Dakota	(7,240)	(10,226)	19	56	80	103	89%	60%	23%	2%
Tennessee	(67,575)	(129,094)	21	37	68	107	88%	73%	33%	4%
Texas	(251,539)	(549,135)	14	25	59	104	93%	78%	29%	6%
Utah	(20,374)	(46,036)	15	24	60	104	90%	78%	20%	4%
Vermont	(3,403)	(12,444)	37	40	59	104	64%	61%	25%	5%
Virginia	(73,813)	(153,945)	21	33	57	100	88%	74%	38%	7%
Washington	(77,772)	(166,058)	18	28	54	98	87%	75%	31%	7%
West Virginia	(18,395)	(30,429)	23	48	83	109	90%	70%	19%	4%
Wisconsin	(56,763)	(137,766)	12	29	74	106	91%	71%	22%	3%
Wyoming	(4,832)	(7,426)	21	55	103	115	92%	63%	12%	0%
USA Totals	(3,415,248)	(7,119,858)	17	31	57	97	90%	75%	35%	9%

Source: NLIHC Tabulations of 2013 ACS PUMS data

Appendix B: Metropolitan Area Comparisons

Metropolitan areas in **RED** have less than the national level of affordable and available units per 100 households at or below the ELI threshold

Metropolitan Area	(Deficit) of Affordable and Available Units		Affordable and Available Units per 100 Households at or below Threshold				% Within Each Income Category with Severe Housing Cost Burden			
	At or below 15% AMI	At or below 30% AMI	At or below 15% AMI	At or below 30% AMI	At or below 50% AMI	At or below 80% AMI	At or below 15% AMI	At or below 30% AMI	Between 31% and 50% AMI	Between 51% and 80% AMI
Atlanta-Sandy Springs-Roswell, GA	(55,556)	(118,708)	15	24	52	107	96%	85%	37%	7%
Austin-Round Rock, TX	(21,693)	(50,753)	11	19	43	100	94%	82%	31%	6%
Baltimore-Columbia-Towson, MD	(34,310)	(61,373)	28	36	59	98	82%	73%	33%	9%
Boston-Cambridge-Newton, MA-NH	(58,493)	(107,702)	30	47	60	93	75%	60%	33%	8%
Buffalo-Cheektowaga-Niagara Falls, NY	(15,326)	(30,135)	14	36	85	109	92%	74%	18%	3%
Charlotte-Concord-Gastonia, NC-SC	(18,513)	(45,251)	16	24	62	101	93%	77%	26%	8%
Chicago-Naperville-Elgin, IL-IN-WI	(117,909)	(248,940)	18	27	53	99	89%	78%	31%	5%
Cincinnati, OH-KY-IN	(27,125)	(53,404)	16	34	83	108	90%	70%	20%	3%
Cleveland-Elyria, OH	(30,620)	(57,615)	22	36	79	107	90%	74%	21%	7%
Columbus, OH	(22,296)	(46,834)	15	29	75	109	89%	74%	23%	2%
Dallas-Fort Worth-Arlington, TX	(69,155)	(165,404)	10	19	61	104	95%	81%	25%	5%
Denver-Aurora-Lakewood, CO	(26,735)	(68,799)	19	23	56	98	91%	76%	28%	7%
Detroit-Warren-Dearborn, MI	(57,732)	(108,088)	11	30	63	103	96%	78%	31%	7%
Hartford-West Hartford-East Hartford, CT	(14,643)	(28,899)	21	37	72	110	85%	69%	21%	2%
Honolulu, HI	(7,913)	(18,921)	26	29	38	68	77%	71%	51%	25%
Houston-The Woodlands-Sugar Land, TX	(59,899)	(138,768)	11	20	59	106	94%	80%	27%	5%
Indianapolis-Carmel-Anderson, IN	(26,044)	(48,794)	9	24	69	109	93%	80%	23%	4%
Jacksonville, FL	(11,892)	(25,253)	19	29	50	104	95%	82%	44%	9%
Kansas City, MO-KS	(20,112)	(47,839)	20	35	79	108	90%	72%	17%	2%
Las Vegas-Henderson-Paradise, NV	(22,166)	(51,515)	7	10	32	101	96%	90%	51%	11%
Los Angeles-Long Beach-Anaheim, CA	(147,323)	(370,860)	9	18	23	56	94%	82%	59%	23%
Louisville/Jefferson County, KY-IN	(9,629)	(23,001)	27	46	81	113	89%	63%	21%	2%
Memphis, TN-MS-AR	(19,788)	(36,079)	8	25	59	106	96%	82%	38%	6%
Miami-Fort Lauderdale-West Palm Beach, FL	(53,940)	(123,509)	14	23	26	55	94%	82%	71%	30%
Milwaukee-Waukesha-West Allis, WI	(22,561)	(55,827)	8	22	61	102	91%	76%	25%	4%
Minneapolis-St. Paul-Bloomington, MN-WI	(40,899)	(75,365)	19	33	69	102	82%	69%	23%	4%
Nashville-Davidson-Murfreesboro-Franklin, TN	(16,449)	(32,335)	22	39	67	105	85%	71%	29%	3%
New Orleans-Metairie, LA	(18,651)	(41,392)	9	23	37	94	94%	84%	47%	11%
New York-Newark-Jersey City, NY-NJ-PA	(291,403)	(627,196)	17	32	41	80	86%	73%	47%	12%
Oklahoma City, OK	(15,686)	(28,065)	13	31	72	107	87%	78%	28%	7%
Orlando-Kissimmee-Sanford, FL	(23,081)	(47,437)	3	12	24	86	98%	91%	59%	18%
Philadelphia-Camden-Wilmington, PA-NJ-DE-MD	(76,394)	(155,536)	17	31	59	101	91%	77%	34%	7%
Phoenix-Mesa-Scottsdale, AZ	(44,285)	(96,894)	12	19	49	105	96%	82%	40%	9%
Pittsburgh, PA	(27,621)	(55,004)	19	39	80	102	93%	69%	23%	6%
Portland-Vancouver-Hillsboro, OR-WA	(25,976)	(61,691)	11	21	40	96	95%	80%	33%	8%
Providence-Warwick, RI-MA	(18,812)	(41,985)	14	43	67	103	90%	62%	30%	4%
Raleigh, NC	(10,254)	(25,481)	14	21	61	105	96%	79%	24%	3%
Richmond, VA	(13,453)	(29,134)	21	33	59	103	92%	75%	41%	7%
Riverside-San Bernardino-Ontario, CA	(36,300)	(85,627)	13	17	28	73	92%	85%	52%	19%
Sacramento-Roseville-Arden-Arcade, CA	(28,153)	(63,740)	12	21	37	91	92%	80%	42%	11%
San Antonio-New Braunfels, TX	(17,987)	(43,037)	19	31	54	101	92%	73%	29%	7%
San Diego-Carlsbad, CA	(35,728)	(80,523)	9	17	22	70	93%	83%	56%	19%
San Francisco-Oakland-Hayward, CA	(64,623)	(128,328)	20	33	48	87	81%	70%	36%	9%
San Jose-Sunnyvale-Santa Clara, CA	(20,518)	(47,866)	16	22	33	82	85%	79%	41%	8%
Seattle-Tacoma-Bellevue, WA	(47,537)	(95,191)	21	28	54	97	84%	74%	27%	6%
St. Louis, MO-IL	(31,384)	(57,494)	17	37	76	108	92%	74%	21%	2%
Tampa-St. Petersburg-Clearwater, FL	(28,734)	(63,946)	13	24	35	94	95%	81%	47%	12%
Tucson, AZ	(12,418)	(26,534)	12	25	47	98	93%	78%	43%	12%
Virginia Beach-Norfolk-Newport News, VA-NC	(7,913)	(34,783)	26	34	44	97	90%	75%	52%	10%
Washington-Arlington-Alexandria, DC-VA-MD-WV	(14,567)	(120,230)	25	31	52	98	78%	73%	32%	6%
USA Totals	(3,415,248)	(7,119,858)	17	31	57	97	90%	75%	35%	9%

Source: NLIHC Tabulations of 2013 ACS PUMS data



Notes – Agenda for the Sub-Committees of the

Public Health Advisory Committee

June 23, 2015, 6:00 – 8:00 p.m.

Minneapolis City Hall, Room 132 & Room 333

AGENDA

Agenda Item	Presenter	Time	Committee Action
Supper is served!	La Loma Tamales	5:45 – 6:00	
PHAC Logistics and Department Updates			
Update from June 4 meeting with CMs Gordon & Bender re: CHAC proposal	<i>Dan Brady / Peggy Reinhardt</i>	6:00 – 6:15	Informational follow-up
Presentation: <i>Healthy Sleep</i>	<i>Dr. J. Roxanne Prichard</i>	6:15 – 6:45 6:45 – 7:00	Informational presentation Q&A
Notes for Sub-committees: <i>Communications/Operations:</i> <i>(orientation with Jane Auger + ethics training); review new applications</i> <i>Policy & Planning:</i> <i>(Follow up to Mikkel Beckmen presentation and discussion on Homelessness – next steps?</i> <i>Discussion of healthy sleep presentation – does it have PHAC action?</i> <i>For future reference: Review City Council action re: paid leave for birth or adoption of child plus + MDH white paper on Lack of paid sick time as a public health problem?</i> <i>Collaboration & Engagement:</i> <i>(Raising of America planning)</i>	<i>Karen Soderberg</i> <i>Dan Brady</i> <i>Margaret Schuster</i>		Discussion

Next Meeting of the Full Committee: July 28, 2015, Minneapolis City Hall, Room 132

Next Sub-committee meeting: August 25, 2015, Minneapolis City Hall, Rooms 132 & 333

If there are any problems/changes the night of the meeting, please call 612-919-3855

Agenda / Meeting Notes

Title: CHAC Meeting with Council Members Gordon & Bender Date: June 4, 2015

Welcome & Introductions

PHAC background info: How did we get here?

Dan & Peggy

- Homelessness, concentrated poverty, and segregation rose to the top when PHAC set its annual priorities; several presentations informed the PHAC on these issues.
- PHAC became aware of a need: that there seemed to be a lack of citizen involvement and oversight regarding affordable housing & housing development.
- There seemed to be no equivalent Citizen Advisory Committee for Housing like the PHAC is for the Health Department, which led to the proposal before you.
- There is great connectivity around housing: downtown developments, the Mayor's Cradle to K initiative, and the City's Bloomberg Initiative.

CMs reaction:

Gordon & Bender

Next steps?

In Attendance: CMs Bender, Gordon; CMs staff Ben Somogyi and Robin Garwood; PHAC members Dan Brady and Margaret (Peggy) Reinhardt; MHD Health Commissioner Gretchen Musicant and Margaret Schuster (staff); Andrea Brennan (CPED), and Kelly Jones (Regulatory Services).

Summary of meeting:

- CMs were generally supportive of the idea but felt that establishing a new advisory committee could take some time and meet some opposition given the number of committees currently in place.
- CM Bender suggested working this into the Comprehensive Plan which will be forming its own committees later this year. It would be a logical next step to form one focused on housing. Given the current amount of activity around this issue, there may even be a justification for this committee to being its work earlier than other Comp Plan committees. This could lead to a task force that outlasts the Plan phase and ultimately forms an advisory committee.
- CPED is currently in the process of long range planning which includes mapping and analyzing data -- essentially an inventory. Once this work is done, the City will be in a better position to understand where the need is and how such a committee might help.

- Much housing related work is underway between CPED, Regulatory Services, Zoning, the Bloomberg Initiative, and Cradle to K. The group felt that PHAC or MHD should have a greater voice in these activities as public health has not typically been engaged as a stakeholder. All recognized that there are opportunities for better alignment across the initiatives.

Next Steps

- The group that met (including CMs) will reconvene at the end of summer (late August) as the CPED long-range planning work comes to a close.
- CM Gordon suggested that the Comp Plan committee could draw membership from existing advisory committee members who are interested in housing issues.
- CM Gordon also suggested the idea that members of the 53 advisory committees meet (perhaps annually) to discuss the work we do and areas for collaboration.
- PHAC members could reach out to their CM in favor of the formation of a committee on housing to help allay potential opposition to a committee later.

Insufficient Sleep: An Invisible Public Health Concern

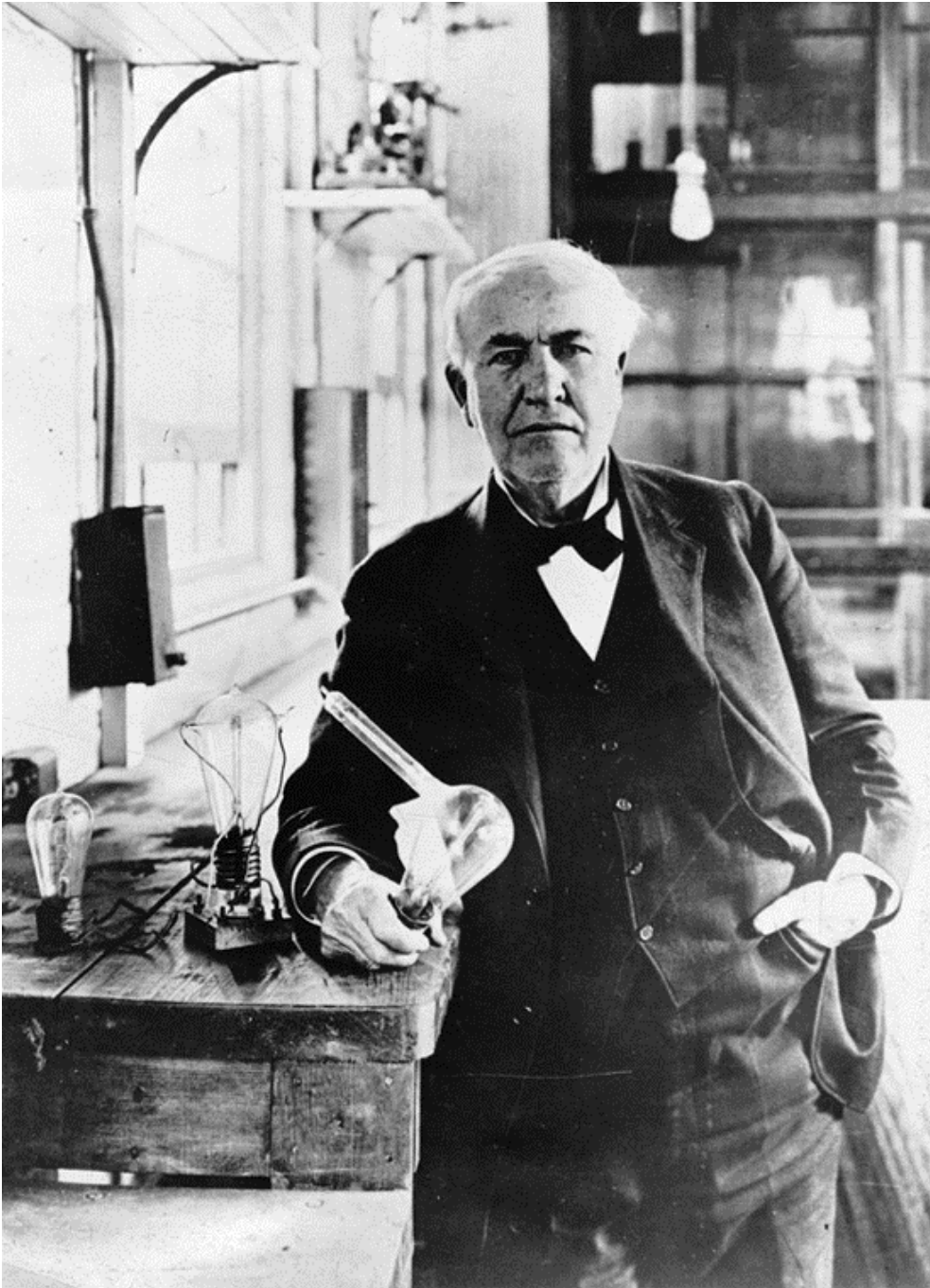
Minneapolis Public Health Advisory Committee Meeting



J. Roxanne Prichard, Ph.D.
Associate Professor of Psychology
University of St. Thomas
jrprichard@stthomas.edu

June 23, 2015





Sleep is an acquired habit.
Cells don't sleep. Fish
swim in the water all
night. Even a horse
doesn't sleep. A man
doesn't need any sleep.

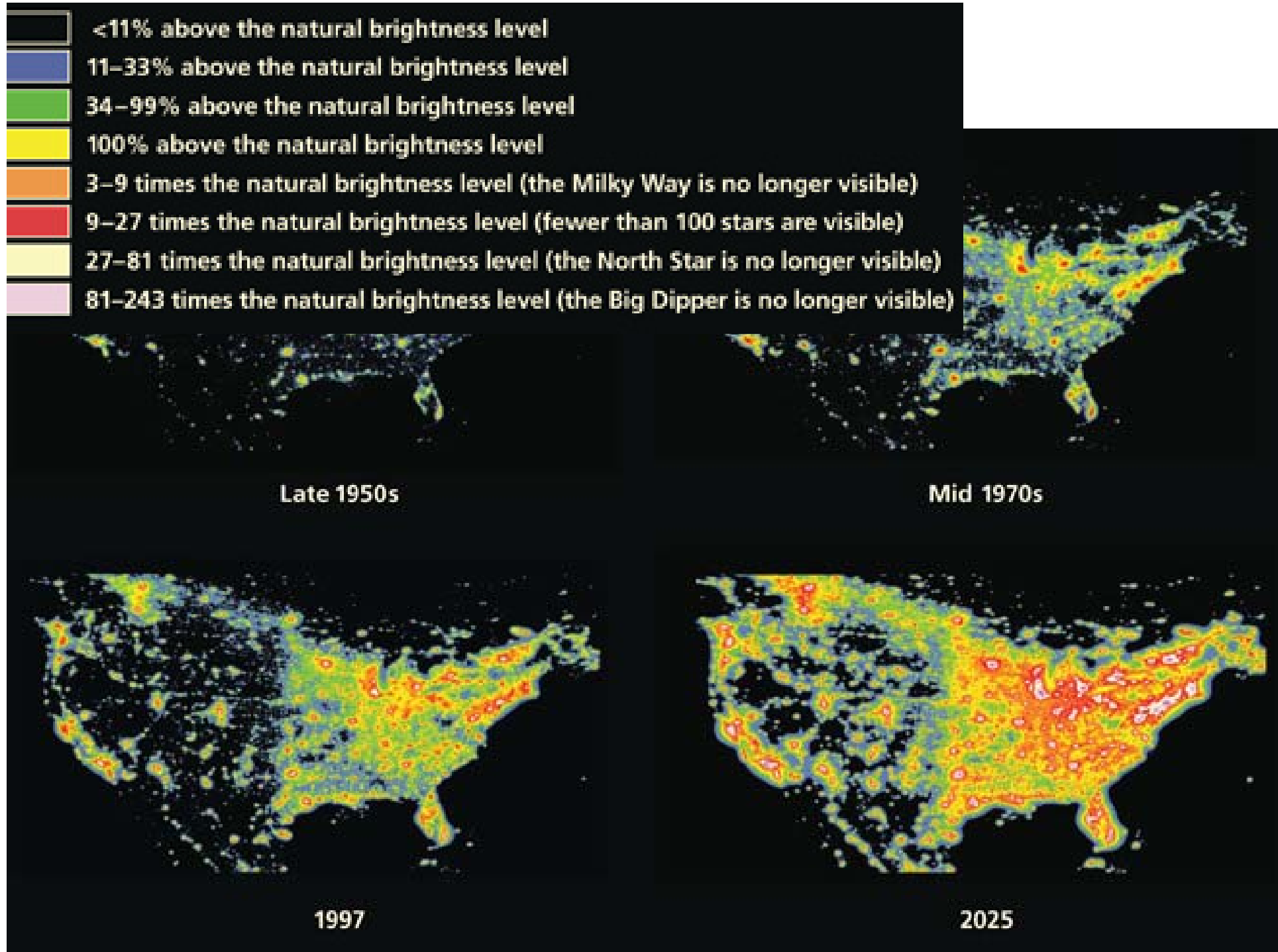
-Thomas Edison

Our culture of Chronic, Insufficient Sleep

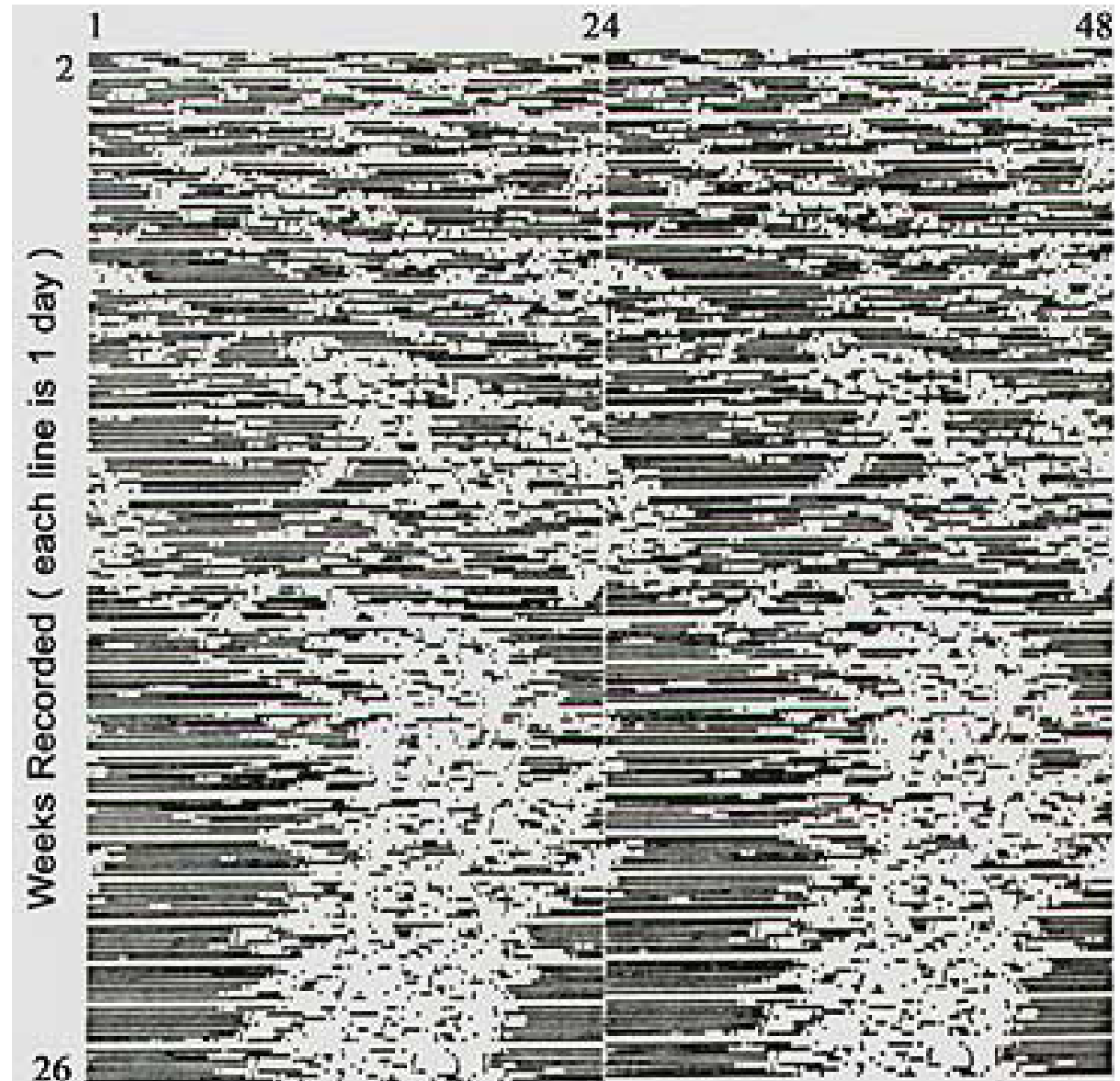
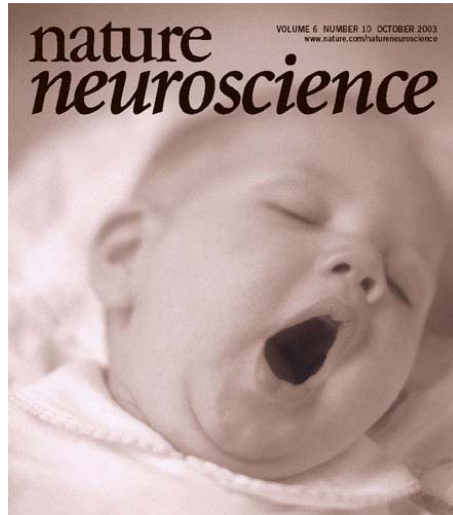


As a society, we get 20% less sleep than our ancestors only 100 years ago.

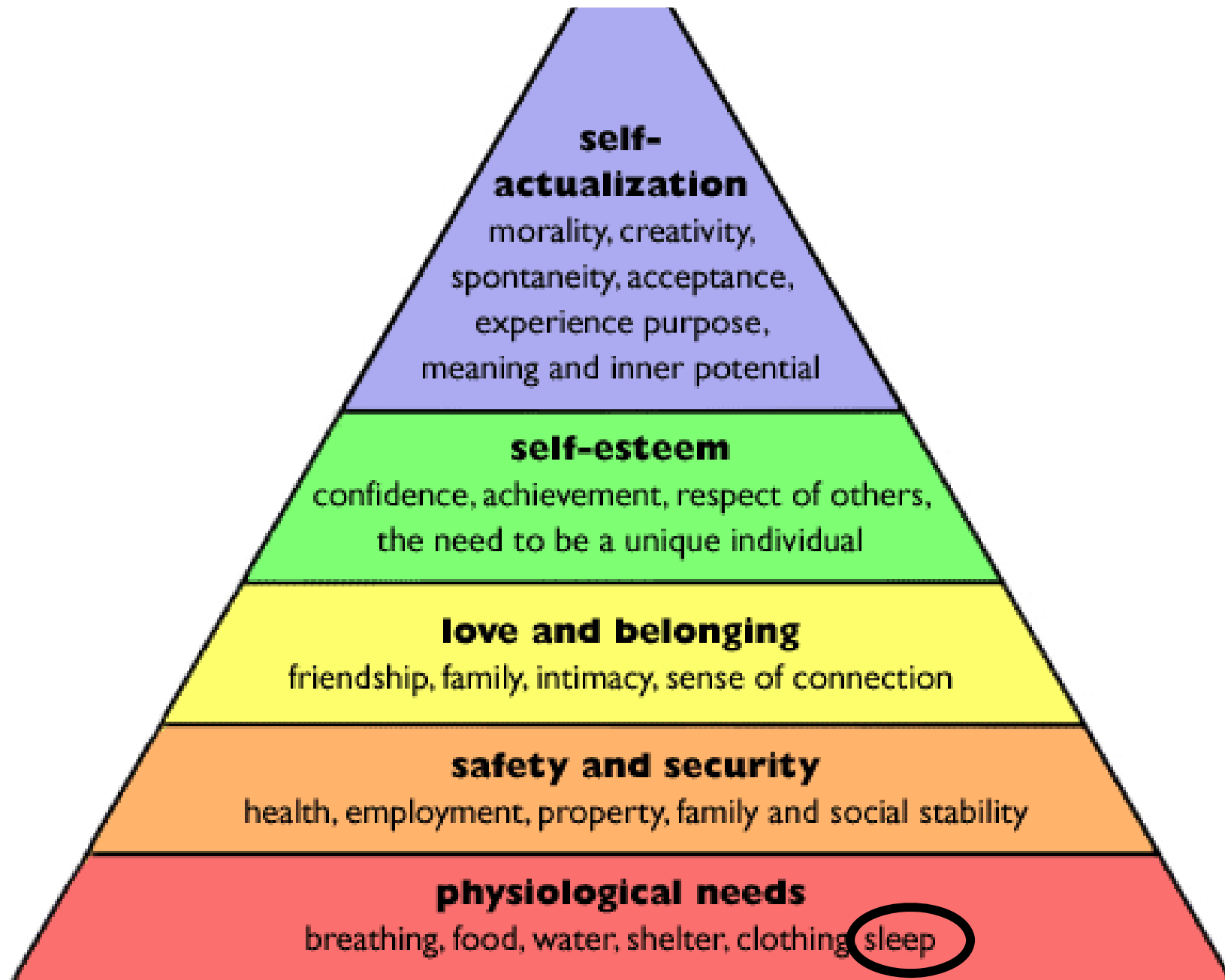




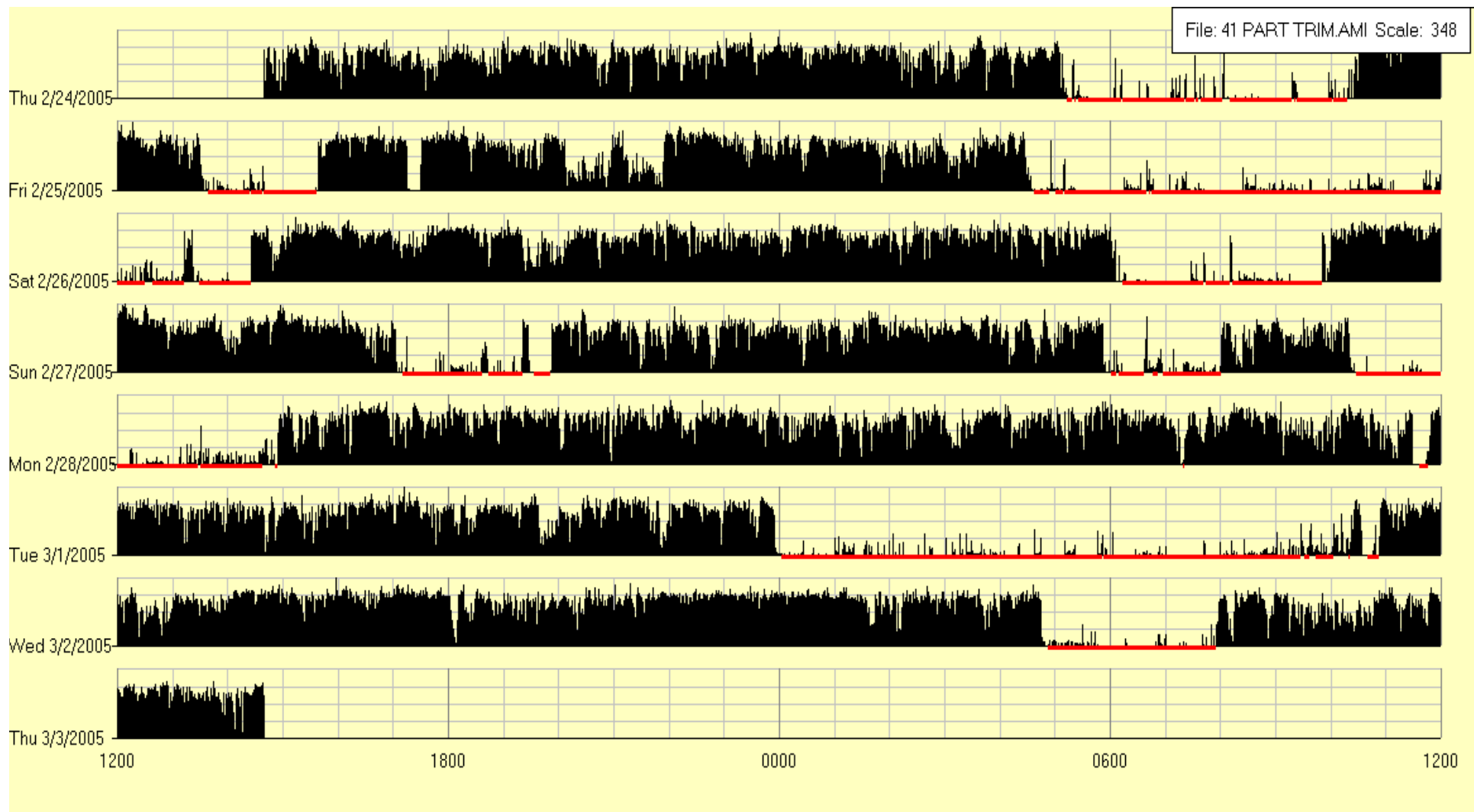
Think back to the worst sleep of your life...



Sleep is at the base of Maslow's Hierarchy of Needs



Sleep is sacrificed for work, family responsibilities, commuter time, and entertainment.



Yet, sleep is
required for life.



Chinese man dies after Euro 2012 viewing marathon

A football-obsessed man from Changsha in south-central China has reportedly died after staying up for 11 successive nights to watch Euro 2012 matches.



Bank of America Intern Dies After Reportedly Working Three Straight Days With Little Sleep



The majority of US children and adults do not get enough sleep.

Newborns/Infants	0 - 2 months: 2 - 12 months:	15-18 hours 14-15 hours
Toddlers/Children	12 mo - 18 mo: 18 mo - 3 years: 3 - 5 years: 5 - 12 years:	13-15 hours 12-14 hours 11-13 hours 10-11 hours
Adolescents	On Average:	9.25 hours
Adults	On Average:	7-9 hours

The Epworth Sleepiness Scale

Use the following scale to choose the most appropriate number for each situation:-

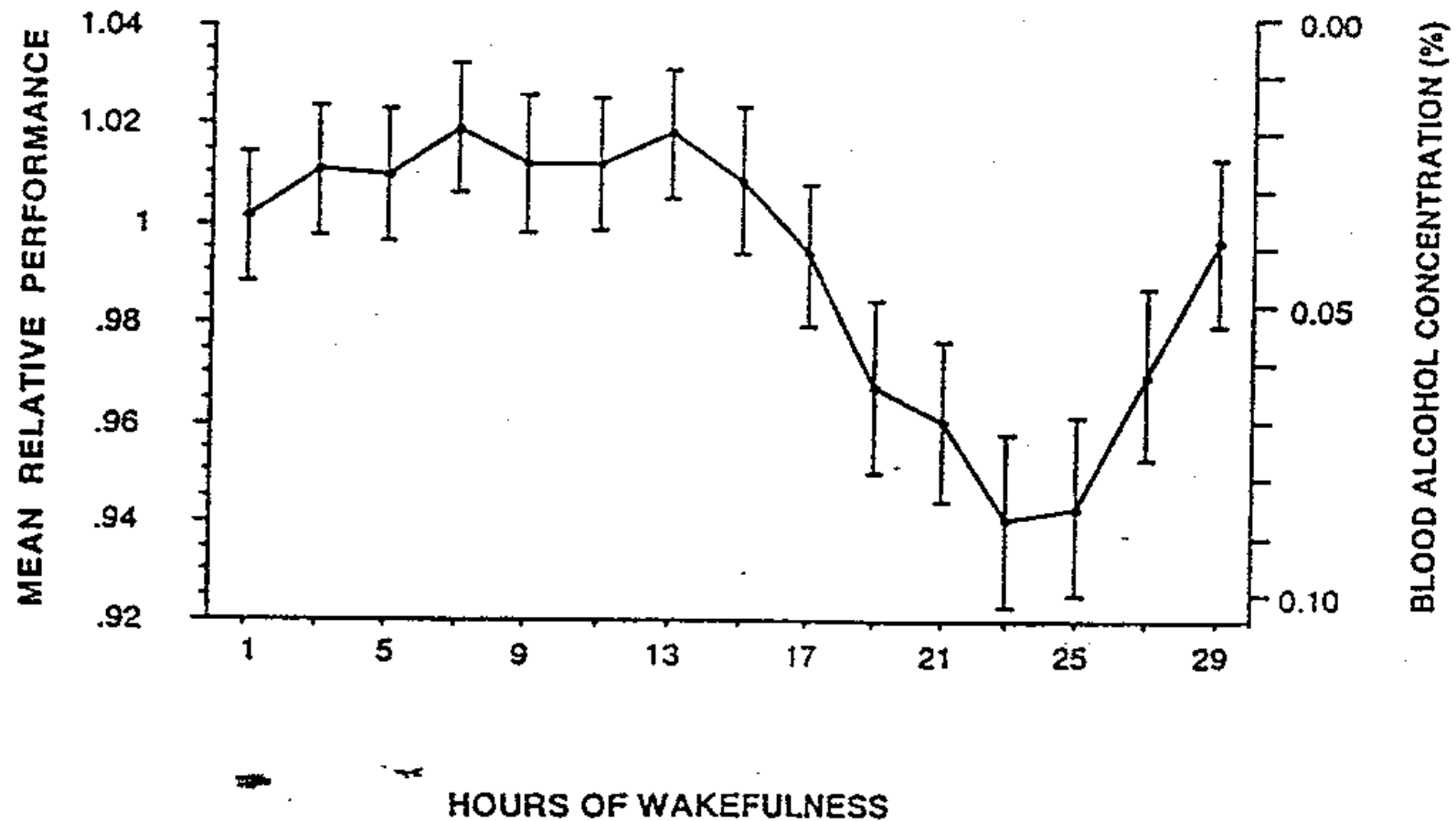
- 0 = would never doze
- 1 = Slight chance of dozing
- 2 = Moderate chance of dozing
- 3 = High chance of dozing

Situation	Chance of dozing
Sitting and reading	<input type="text"/>
Watching TV	<input type="text"/>
Sitting, inactive in a public place (e.g. a theatre or a meeting)	<input type="text"/>
As a passenger in a car for an hour without a break	<input type="text"/>
Lying down to rest in the afternoon when circumstances permit	<input type="text"/>
Sitting and talking to someone	<input type="text"/>
Sitting quietly after a lunch without alcohol	<input type="text"/>
In a car, while stopped for a few minutes in the traffic	<input type="text"/>
Total	<input type="text"/>

Behavioral Risk Factor Surveillance System, CDC 2009

Age (years)	Unintentionally fell asleep during day at least once in the past month	Nodded off or fell asleep while driving in the past month
18 to <25	43.7%	4.5%
25 to <35	36.1%	7.2%
35 to <45	34.0%	5.7%
45 to <55	35.3%	3.9%
55 to <65	36.5%	3.1%
≥65	44.6%	2.0%
Race/Ethnicity		
White non-Hispanic	33.4%	3.2%
Black non-Hispanic	52.4%	6.5%
Hispanic	41.9%	6.3%
Other non-Hispanic	41.0%	7.2%

Sleep deprivation compromises the brain as much as being legally drunk.



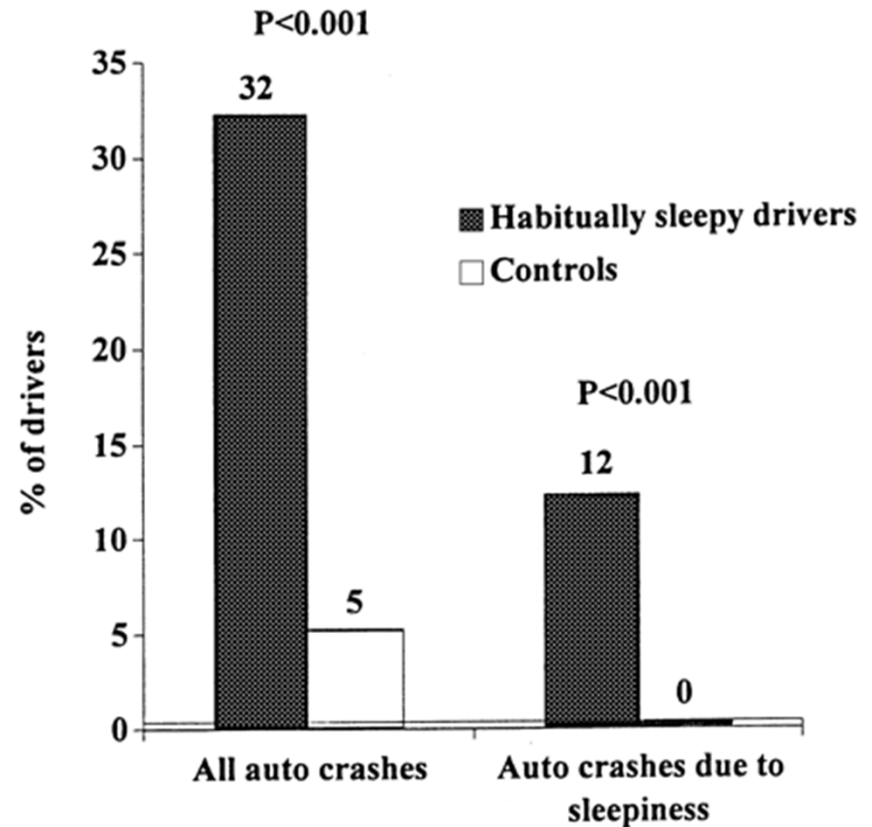
Dawson, D.; Reid, K. 1997

Driving is particularly hazardous for sleepy drivers.



People who drive after being awake for 17 to 19 hours performed worse than those with a blood alcohol level of .05.

Dawson, D.; Reid, K. 1997



100,000 crashes a year are due to drowsy driving.

Masa et al. 2000



25 percent of U.S. adults report insufficient sleep or rest at least 15 out of every 30 days.

The public health burden of chronic sleep loss and sleep disorders, coupled with low awareness of poor sleep health among the general population, health care professionals, and policymakers, necessitates a well-coordinated strategy to improve sleep-related health.



Sleep Objectives

SH-1 Increase the proportion of persons with symptoms of obstructive sleep apnea who seek medical evaluation.

SH-2 Reduce the rate of vehicular crashes per 100 million miles traveled that are due to drowsy driving.

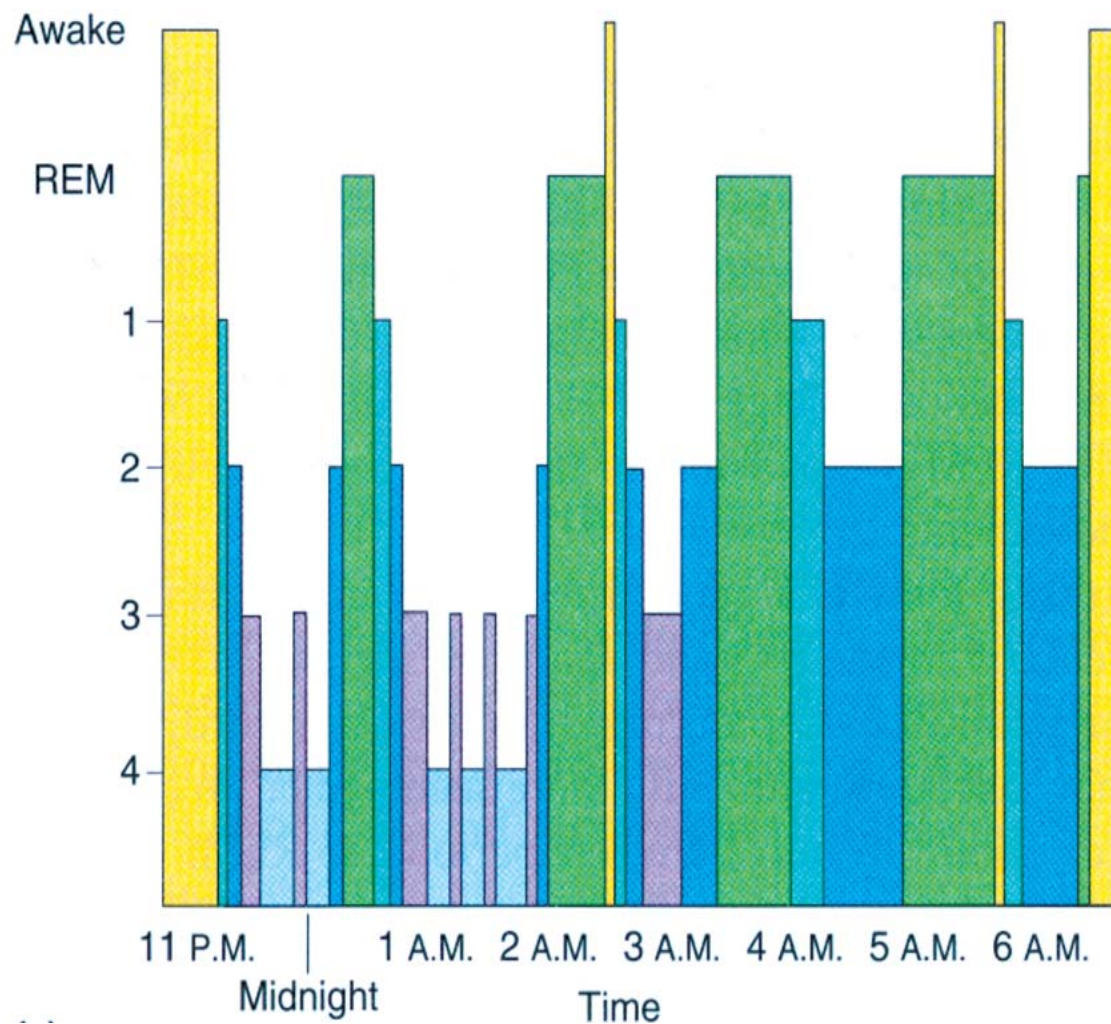
SH-3 Increase the proportion of students in grades 9 through 12 who get sufficient sleep.

SH-4 Increase the proportion of adults who get sufficient sleep.

Racial & Economic Disparities in Sleep

- People who work multiple jobs (15% of the workforce) are 61% more likely to report sleeping 6 hours or less on weekdays.
- 25% of live-in domestic workers had responsibilities that prevented them from getting at least 5 hours of uninterrupted sleep during the week.
- African-Americans are over 3x as likely as whites to report less than 5 hours of sleep, while Asians and non-Mexican Hispanics were 2.5x as likely.

What is Sleep?



Awake

Alpha

REM sleep

Stage 1 non-REM sleep

Theta

Stage 2 non-REM sleep

Spindle

Stage 3 non-REM sleep

Stage 4 non-REM sleep

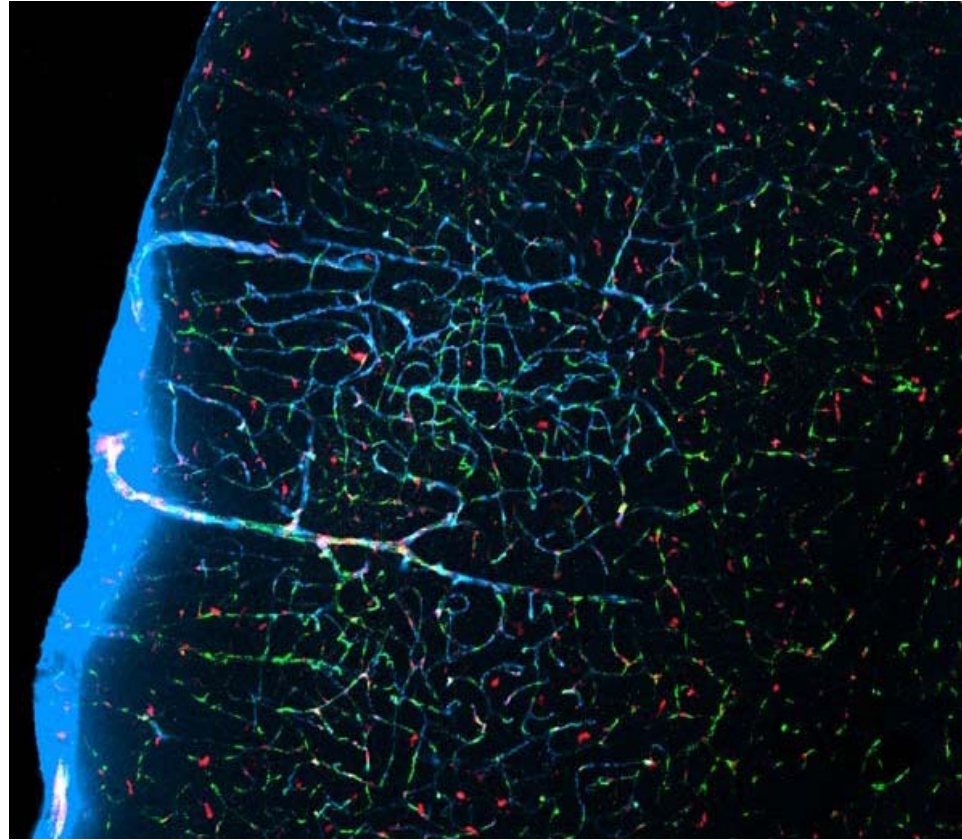
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5

Why do we sleep?

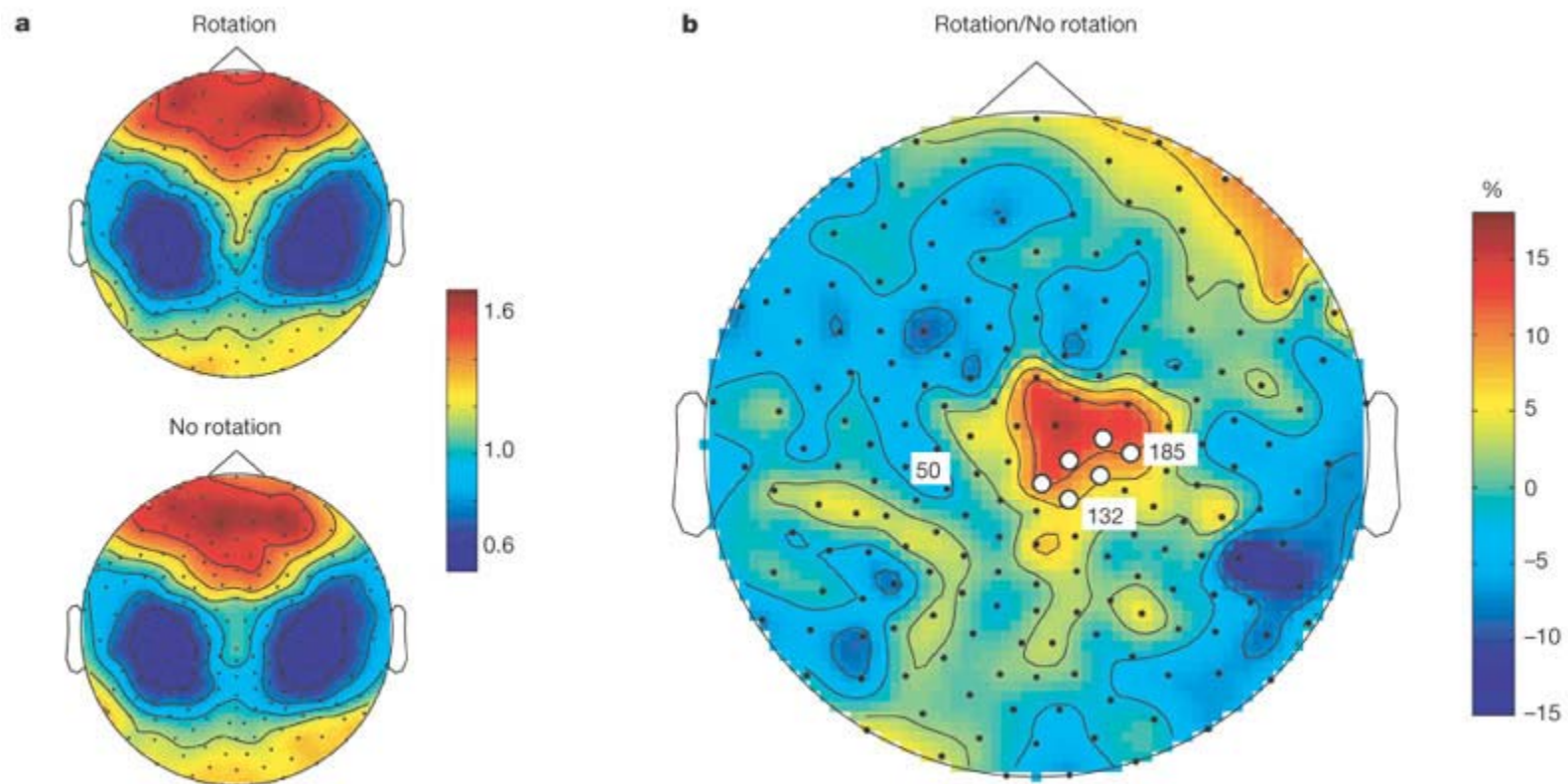


Sleep Rids the Brain of Toxic Cellular Waste.

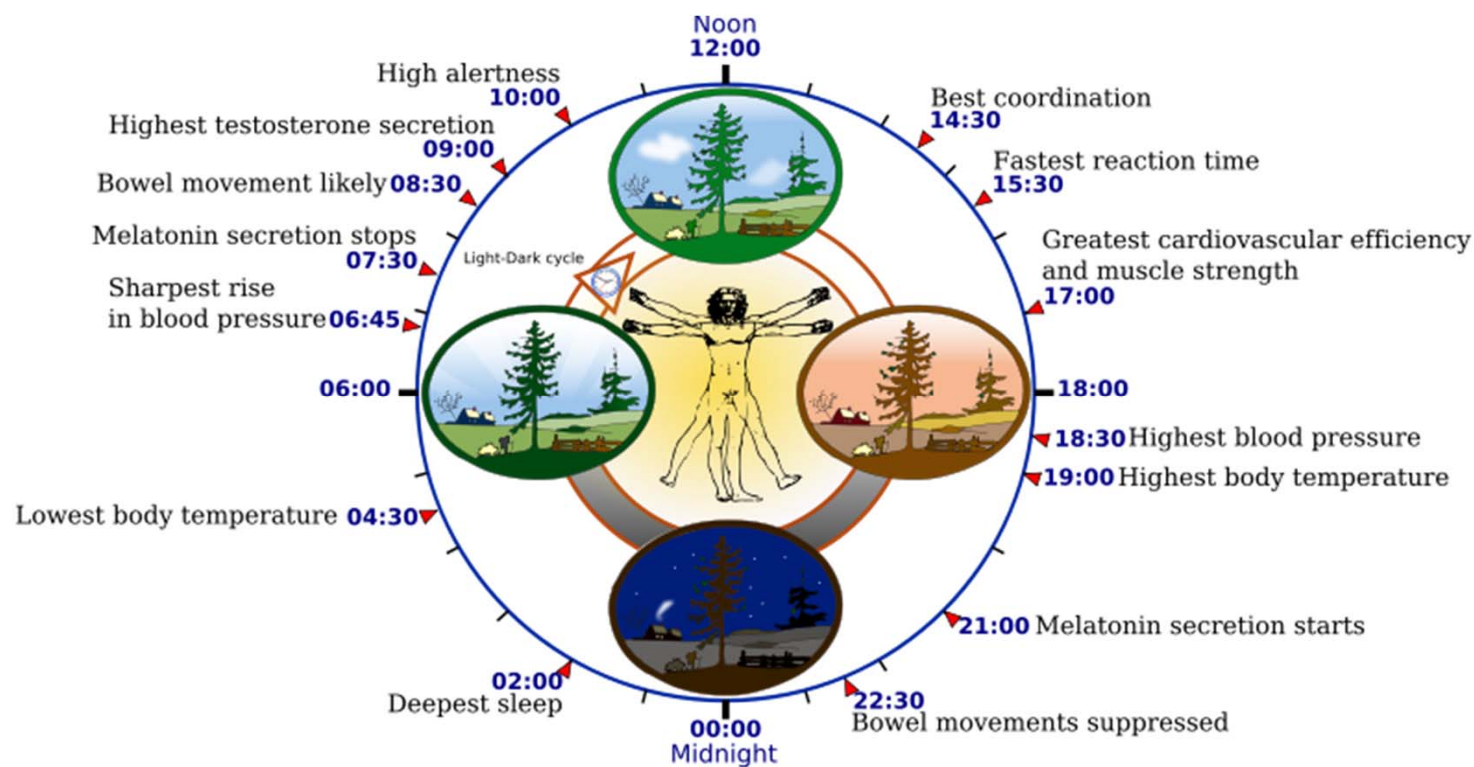


Sleep Drives Metabolite Clearance from the Adult Brain. Xie et al. (2013) *Science*

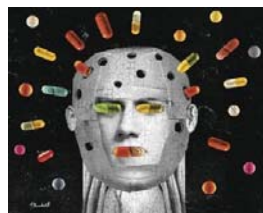
Sleep Allows the Brain to make Structural Changes Necessary for Learning



Modern Lifestyles Flatten or Mask the Circadian Rhythm.



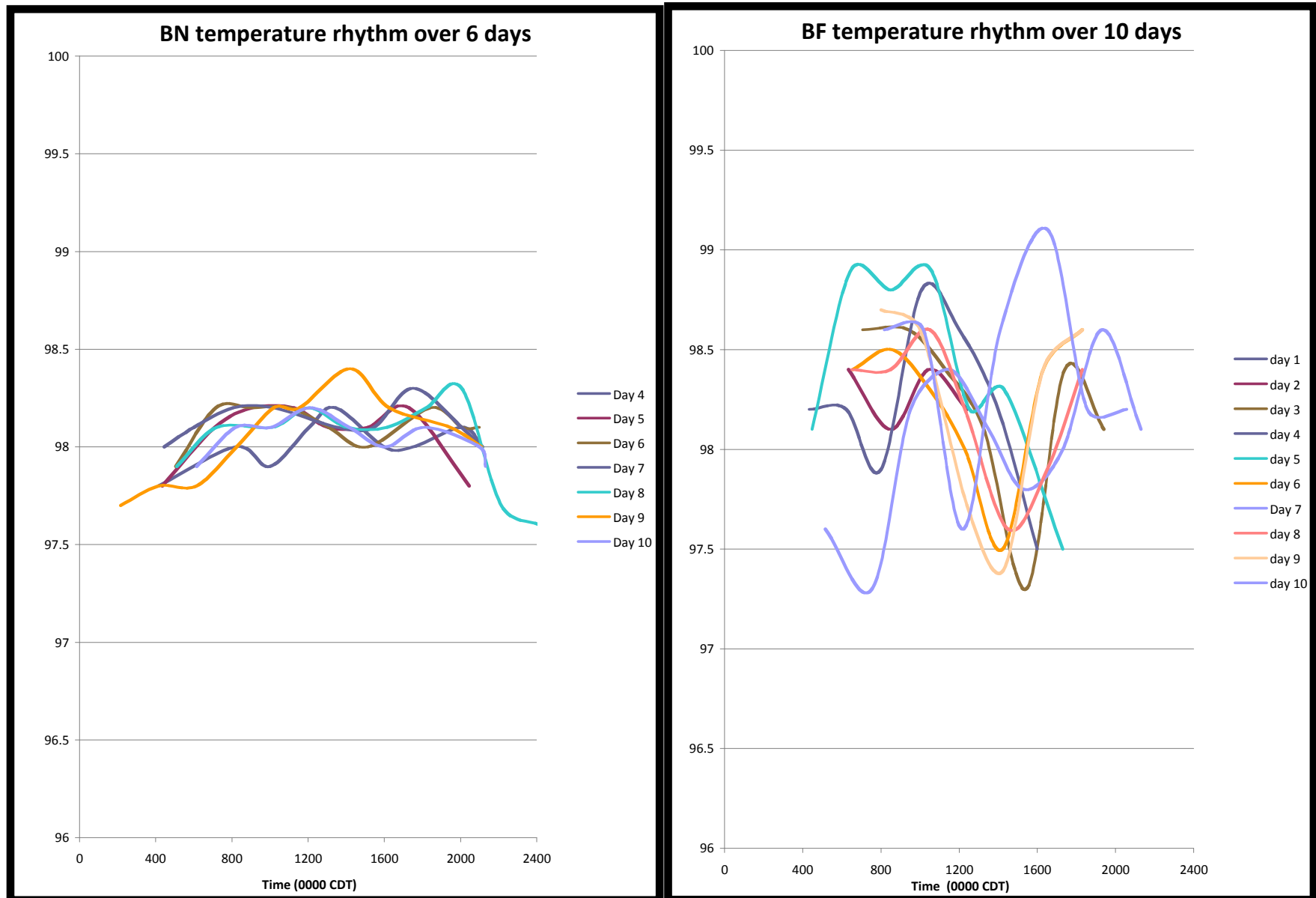
Environmental Signals



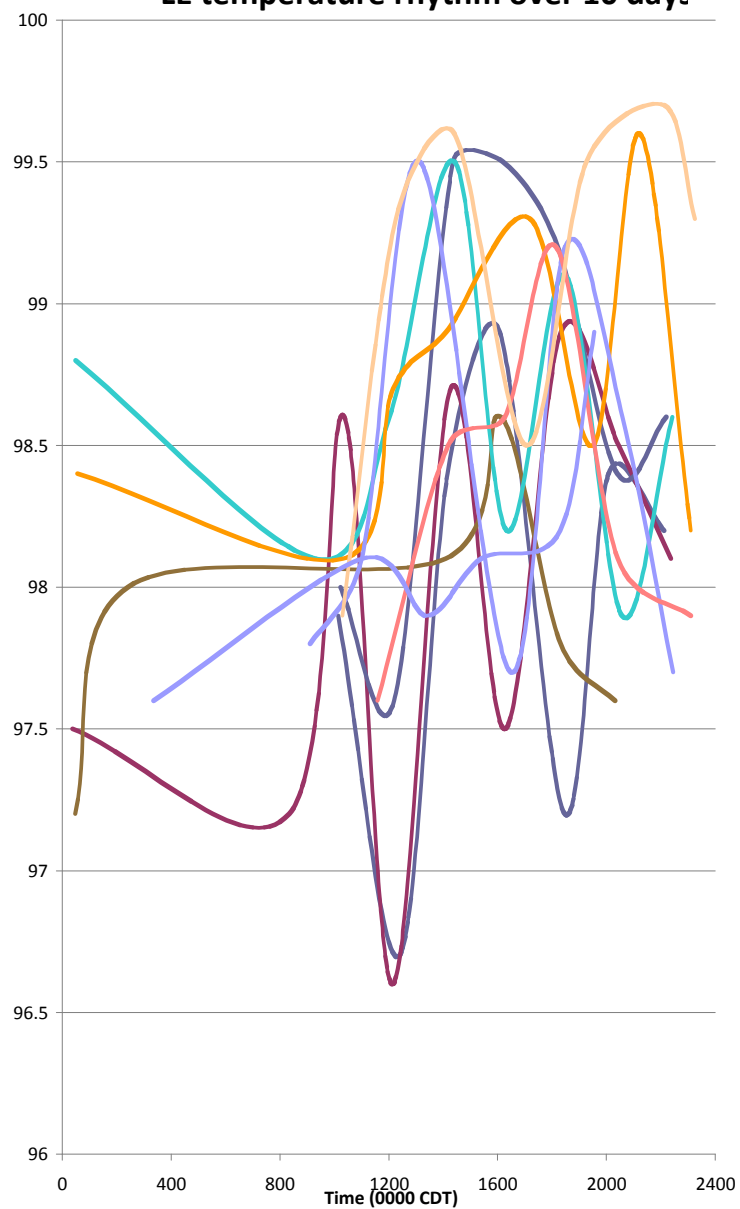
Psychoactive Substances



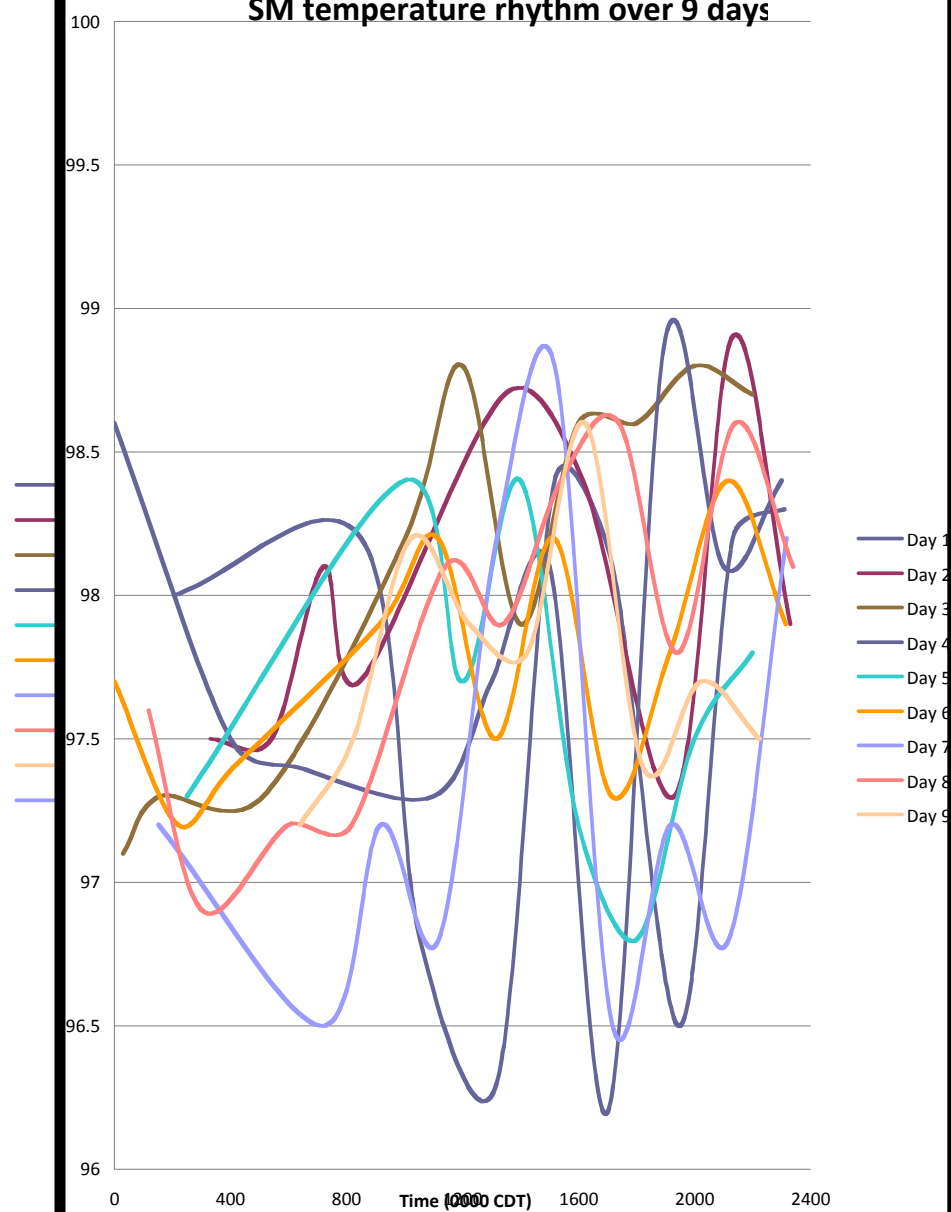
Circadian Temperature Rhythms in Structured vs. Unstructured Schedules



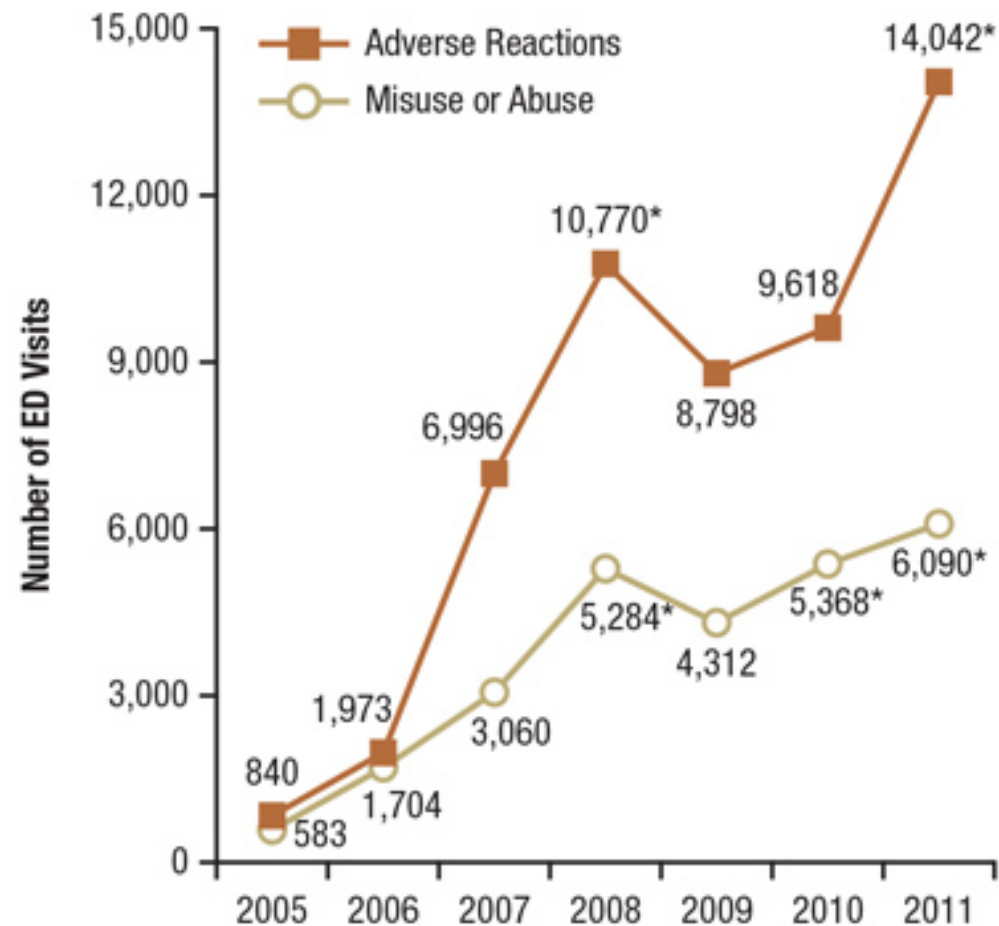
LE temperature rhythm over 10 days



SM temperature rhythm over 9 days



Expansive growth of Energy Drink Sales— And Emergency Room Visits.



<http://www.samhsa.gov/data/2k13/DAWN126/sr126-energy-drinks-use.htm>

Report #	Received Date	Brand/ Product Name	Symptoms	Outcomes
126996	5/14/10	5 HOUR ENERGY	CONVULSION	VISITED AN ER, OTHER SERIOUS (IMPORTANT MEDICAL EVENTS)
128525	7/28/10	5 HOUR ENERGY	DISORIENTATION, DIZZINESS, HEADACHE, CEREBROVASCULAR ACCIDENT, VISUAL ACUITY REDUCED	DISABILITY, OTHER SERIOUS (IMPORTANT MEDICAL EVENTS), HOSPITALIZATION
128651^	7/26/10	5 HOUR ENERGY	CONVULSION, SOMNOLENCE	HOSPITALIZATION
	3/16/11			
129061	8/13/10	5 HOUR ENERGY 5 HOUR ENERGY	VENTRICULAR ARRHYTHMIA, LOSS OF CONSCIOUSNESS, PNEUMONIA, CONVULSION, ACUTE RESPIRATORY FAILURE, ANOXIC ENCEPHALOPATHY	HOSPITALIZATION, DEATH
129370	8/20/10	5 HOUR ENERGY	PALPITATIONS, HYPERTENSION	HOSPITALIZATION
129372	8/26/10	5 HOUR ENERGY	DEATH	DEATH
131692	10/28/10	5 HOUR ENERGY	SOMNOLENCE	DEATH
131693^	10/28/10	5 HOUR ENERGY LEMON LIME	DEHYDRATION, PARALYSIS, FEELING JITTERY, TREMOR, MUSCLE CONTRACTIONS INVOLUNTARY, BLOOD POTASSIUM DECREASED, BLOOD CAFFEINE INCREASED	VISITED AN ER, LIFE THREATENING
	10/28/10	5 HOUR ENERGY EXTRA STRENGTH		
131933^	10/2/10	5 HOUR ENERGY - GRAPE	CONVULSION, BITE	OTHER SERIOUS (IMPORTANT MEDICAL EVENTS)
	10/2/10	5 HOUR ENERGY - BERRY FLAVOR		


“Nutritional Supplement”
available now at many
stores for any age to buy:
Inhalable caffeine.



100mg
OF CAFFEINE.

**THE SAME AS ONE
LARGE CUP OF COFFEE.**

Each AeroShot contains 100 mg. of caffeine—the same as one large cup of coffee. You are puffing in a fine powder that falls out of the air and dissolves instantly in your mouth. It's safe, healthy, and unlike most energy drinks, there are no calories.



Consequences of poor sleep

**Dec. cognitive
performance**

**Increased
Depression**

Insulin Resistance

**Slowed
Reaction Time**

**Increased Stress &
Anxiety**

Increased BP

**Increased
Accident Risk**

**Increased inter-
personal problems**

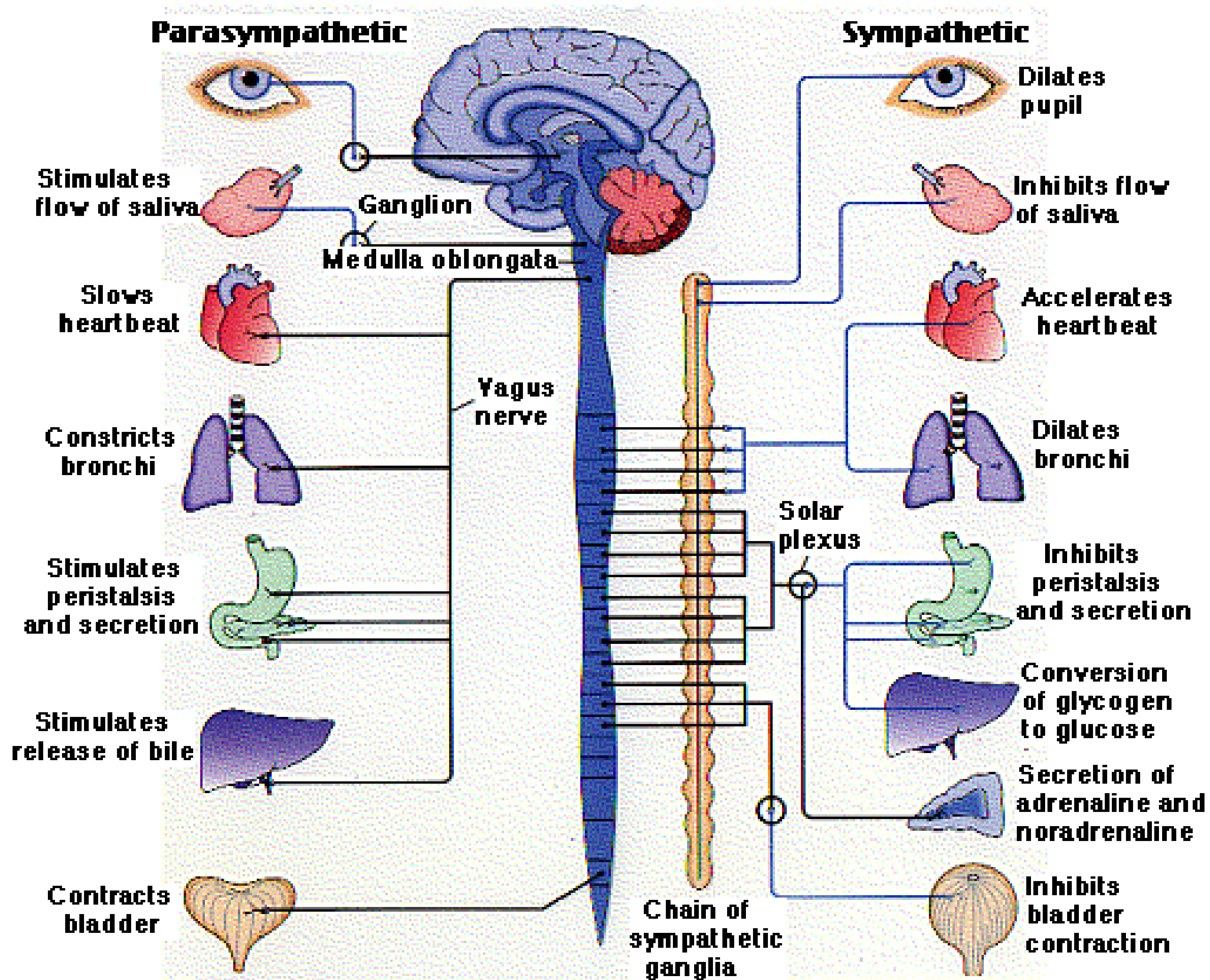
Weight Gain

**Inc. Risk-Taking
Behavior**

Inc. drug abuse

Decreased Immunity

Sleep deprivation is considered a threat by the body.



Sleep deprivation impairs the Immune System

- Sleep deprivation is correlated with a significant reduction in cellular immunity (reductions in T-cells)
- Men who received just four hours of sleep a night for four straight nights after receiving a flu shot produced half the antibodies as the control group (Weintraub, 2004)



Sleep deprivation taxes the Cardiovascular System

- Sleep deprivation increases inflammation can damage the inner walls of the arteries, leading to stroke & heart disease.
- Blood pressure and heart rate are higher following sleep deprived nights.
- Men who sleep 5 hours or less a night have 2x as many heart attacks as men who sleep 8 hours or more.



■(Voelker, 1999)

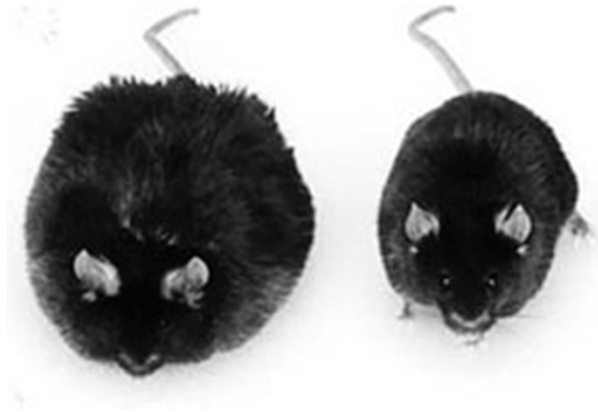
Sleep Deprivation increases Diabetes Risk.

- Chronic sleep deprivation leads to insulin resistance.
- This resistance can result in high blood glucose concentrations, leading to diabetes.
- Young men who sleep 4 hours a night for 6 straight nights lose 30% of their ability to respond to insulin.



Sleep Deprivation enhances hunger and cravings for junk food.

- Healthy young men were forced to sleep 4 hours a night or 9 hours a night for 4 days straight.
- Short sleepers had a 18% drop in leptin, the fat satiety signal (equivalent drop to subtracting 1100 calorie a day diet).
- 25% increase in hunger, 45% in appetite for junk foods.



(Van Cauter, 2004)

Mental Health and Sleep

A Person with inadequate sleep is...

- 9x more likely to have depressive symptoms
- 17x more likely to have anxiety symptoms

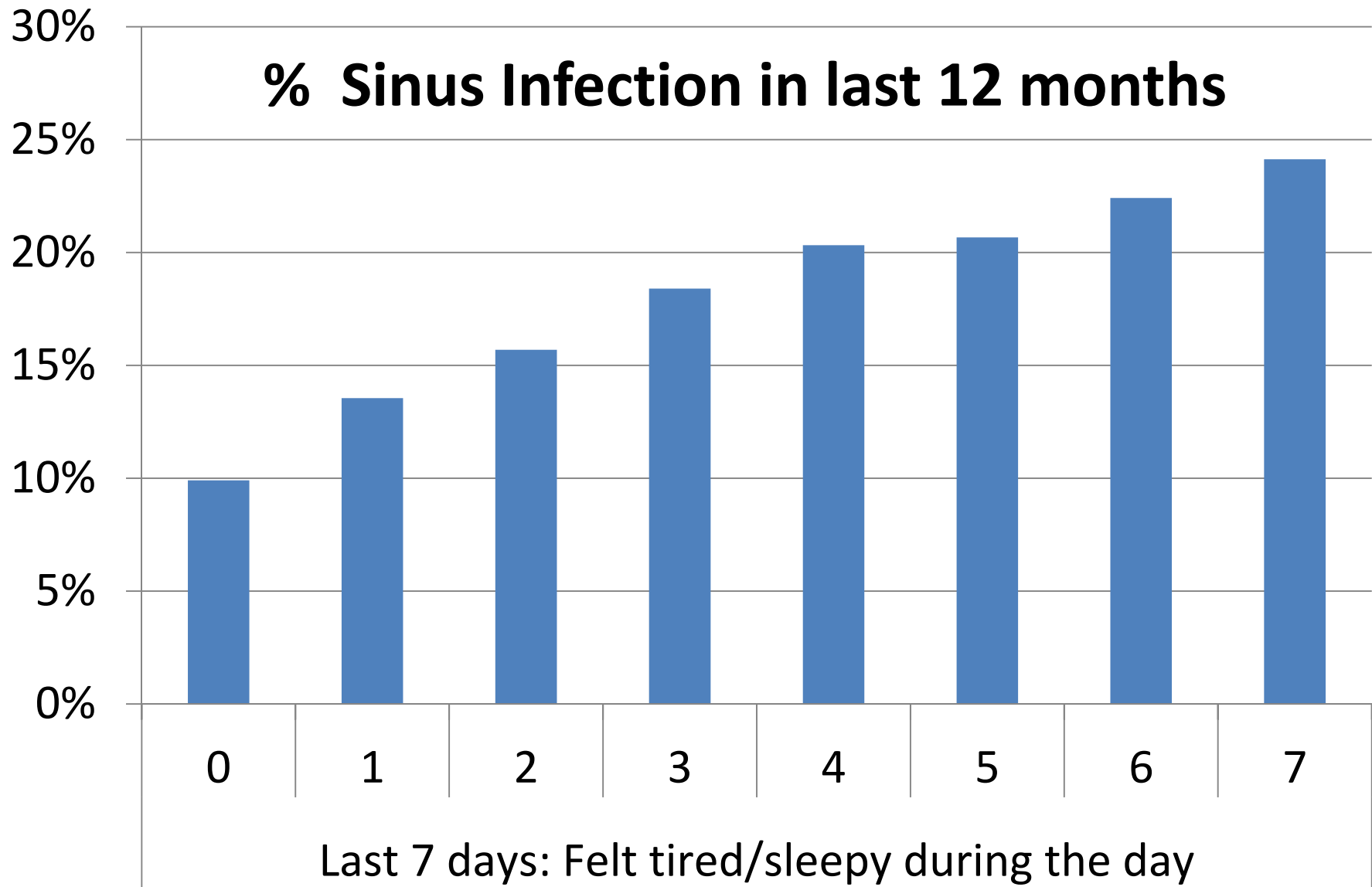


Sleep disruption is predictive of (precedes)

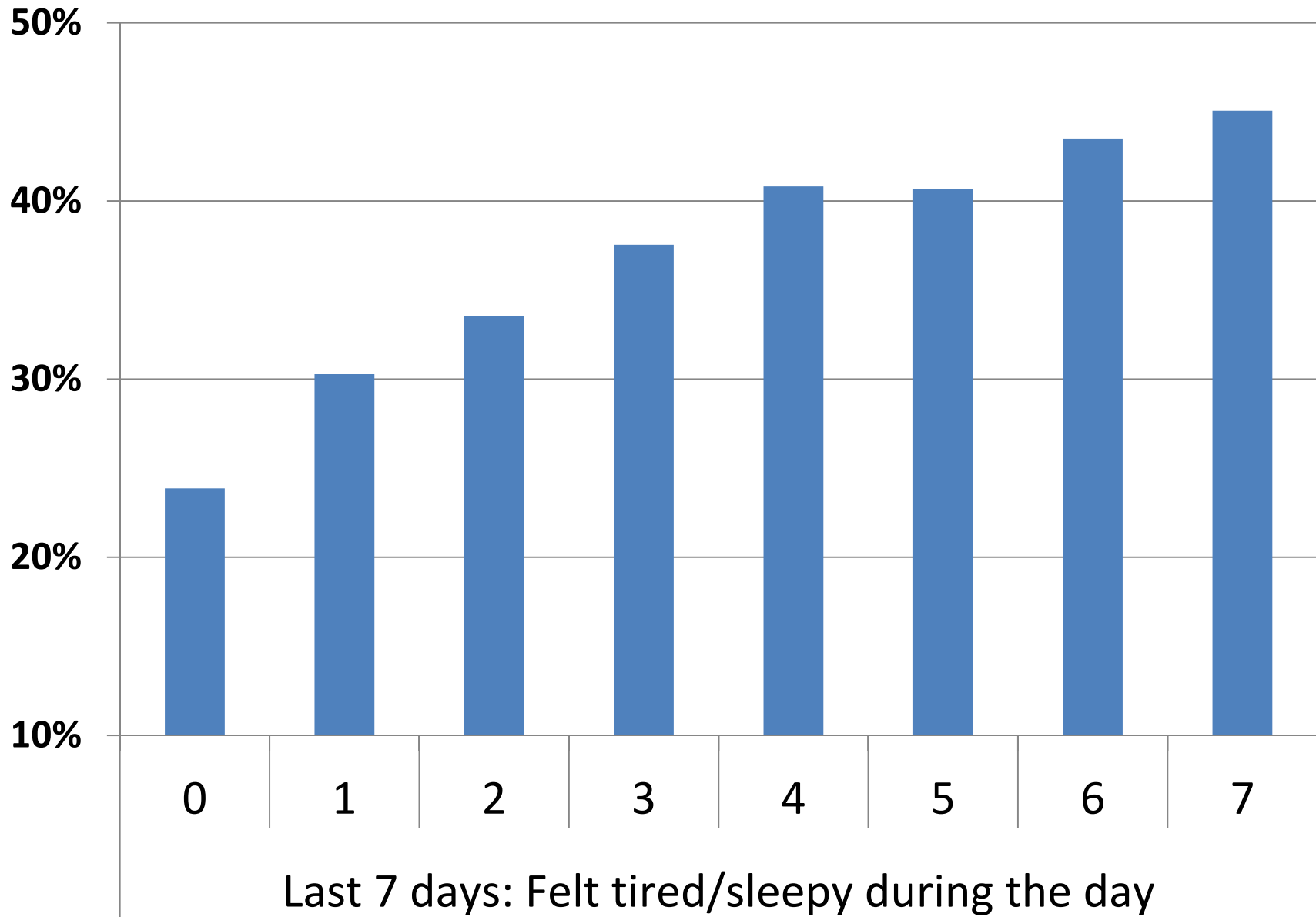
- 50% of depression episodes
- 75% of mania episode
- 90% of suicide attempts

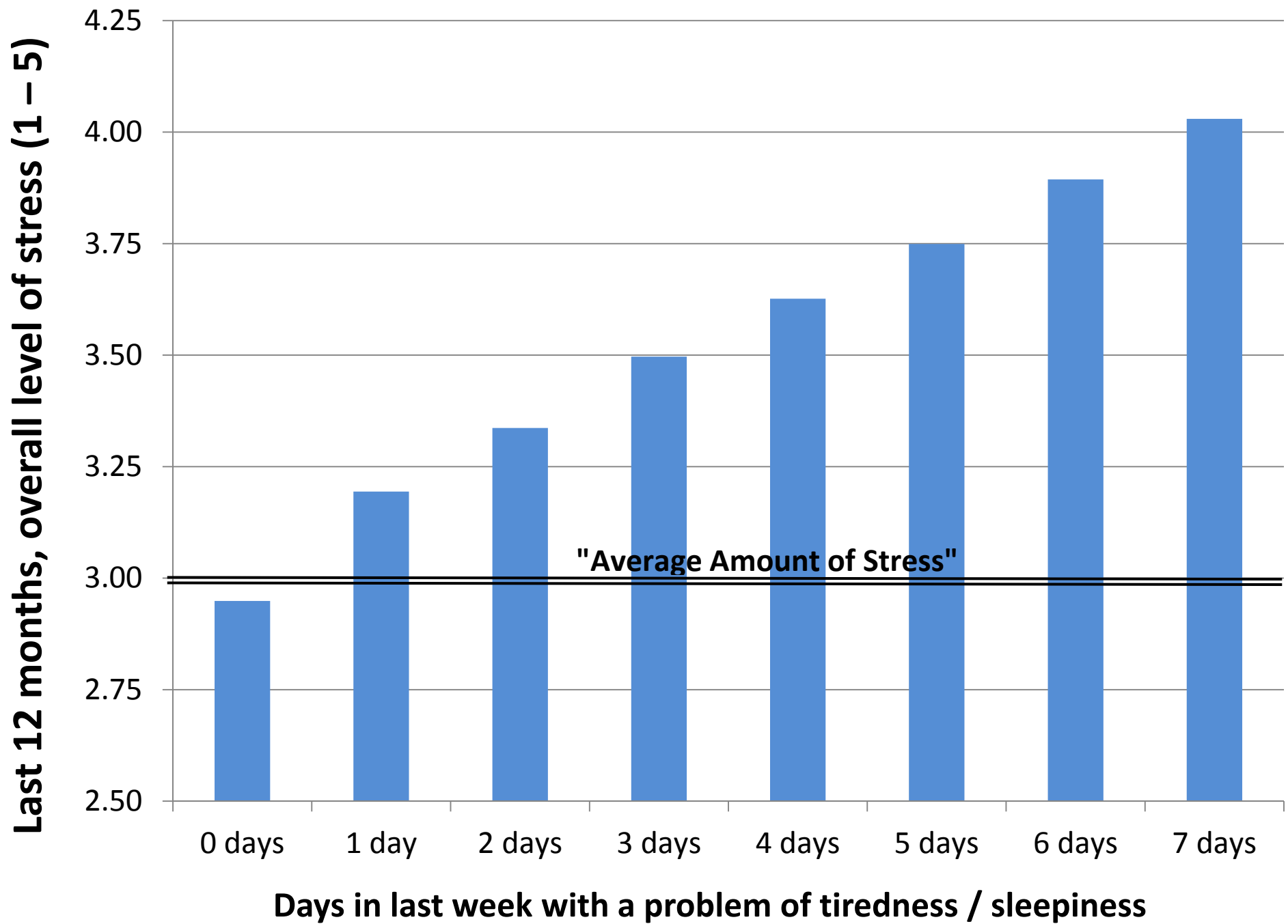
Sateia, M. (2009) Peterson & Benca (2006)

ACHA- National College Health Assessment, n > 80,000

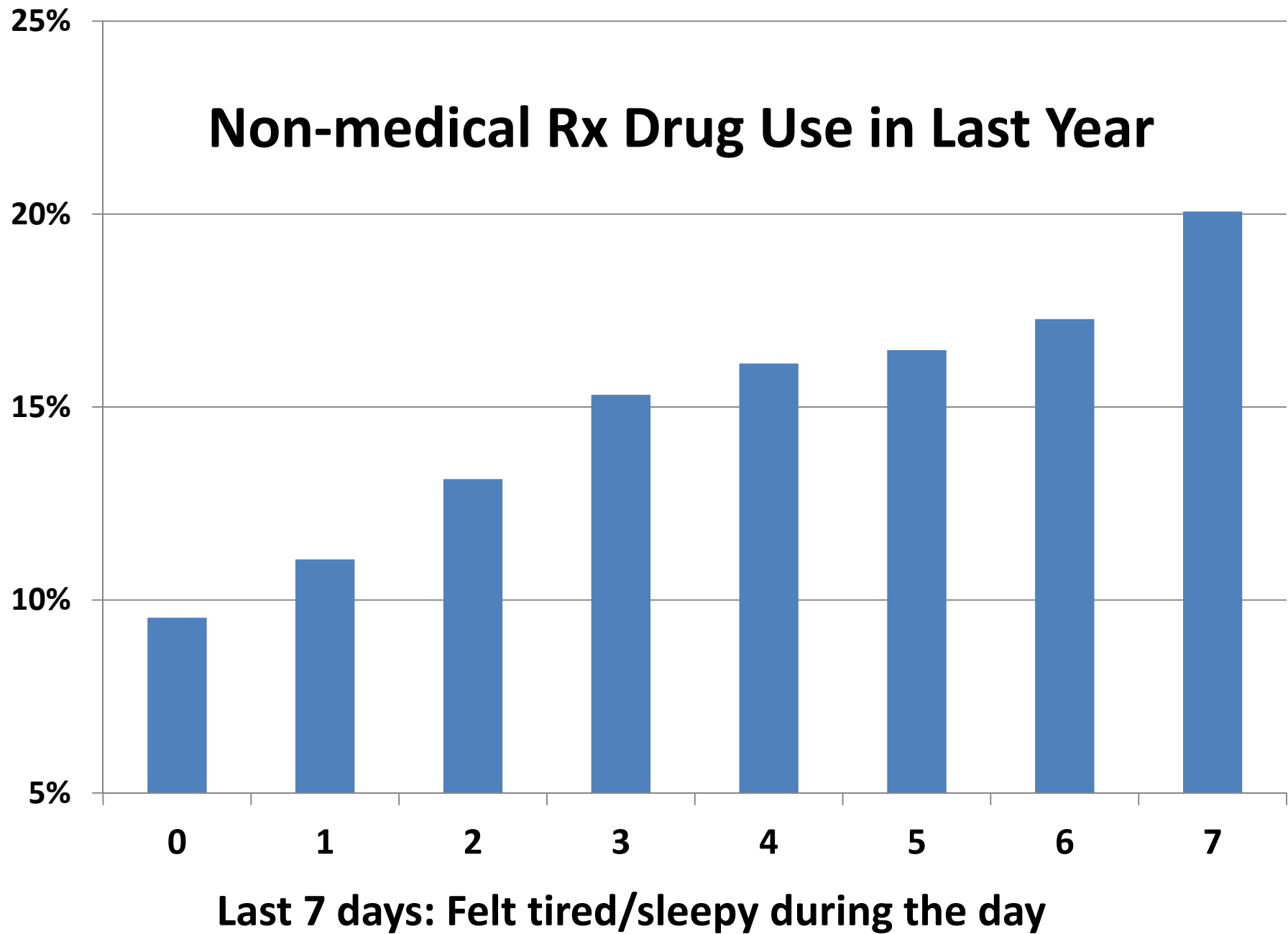


Any infectious illness in last 12 months

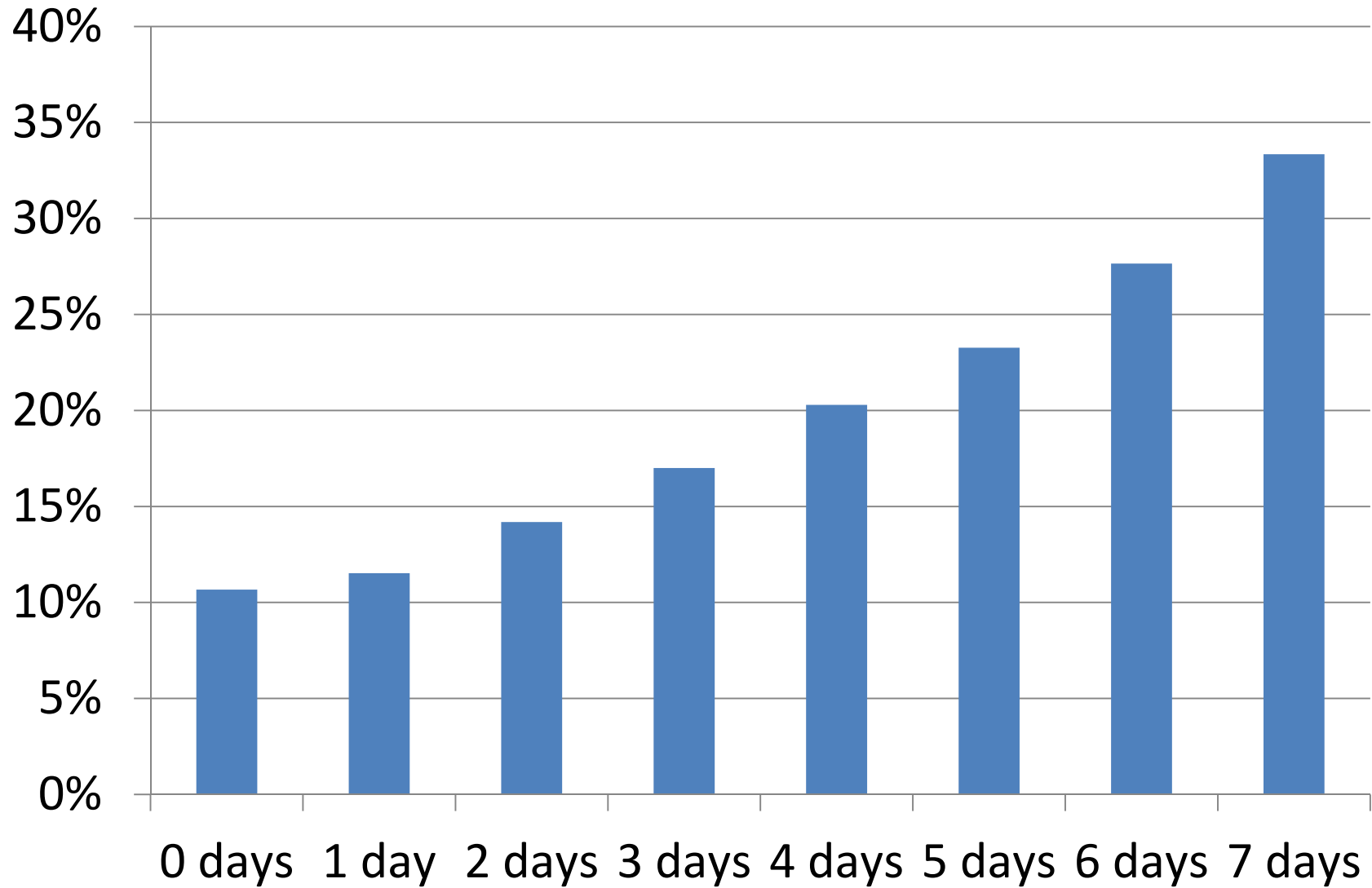




Non-medical Rx Drug Use in Last Year



% Ever Seriously Considered Suicide



Last 7 days: Felt tired/sleepy during the day

Recommendations

- Follow the American Academy of Pediatrics recommendations to start high schools no earlier than 8:30 AM.
- Protect domestic workers' right to sufficient sleep.
- Work to improve sleep environments, especially in lower income neighborhoods, through decreased noise and light pollution.

Get sleep on the radar as a major health concern.

Parent's Top Children's Health Concerns

1. Obesity	6. Alcohol abuse
2. Drug abuse	7. Child abuse
3. Smoking	4. Pregnancy
4. Bullying	9. Internet safety
5. Stress	10. Depression

Additional References

- Lund HG, Reider BL, Whiting AB, Prichard JR. (2010). Sleep Patterns and Predictors of Disturbed Sleep in a Large Population of College Students. *Journal of Adolescent Health* 46: 124-32
- Prichard JR, Hartmann ME. What is the cost of poor sleep for college students? Calculating the contribution to academic failures using a large national sample. SLEEP annual conference. Minneapolis, MN June 2014.
- Boehm MA, Lei QM, Prichard JR. Depression, insomnia, and nicotine: Overlapping impediments to sleep in a national sample of college students. Poster presentation. SLEEP annual conference. Minneapolis, MN June 2014.
- Prichard JR, Kelly CK. Energy drinks on college campuses: Motivations, risky behaviors and health. American College Health Association Annual Meeting. Boston, MA, May, 2013. Benca, R. M., & Peterson, M. J. (2008). Insomnia and depression. *Sleep Medicine*, 9, Supplement 1(0), S3-S9.
- Salo, P., Sivertsen, B., Oksanen, T., Sjösten, N., Pentti, J., Virtanen, M., Vahtera, J. (2012). Insomnia symptoms as a predictor of incident treatment for depression: Prospective cohort study of 40,791 men and women. *Sleep Medicine*, 13(3), 278-284.
- Taylor, D. J., Bramoweth, A.D., Grieser, E. A., Tatum, J. L., & Roane, B. M. (2013). Epidemiology of Insomnia in College Students: Relationship with Mental Health, Quality of Life, and Substance Use Difficulties. *Behavior Therapy*, 44, 339-348.



Public Health Advisory Committee

July 28, 2015, 6:00 – 8:00 pm

Minneapolis City Hall, Room 132

AGENDA

Agenda Item	Presenter	Time	Committee Action
Welcome and Introductions	Jennifer Pelletier	6:00 – 6:05	Approve agenda
PHAC Logistics and Updates Approve Minutes Reports from Sub-committees: <i>Communications/Operations:</i> <i>Policy & Planning:</i> <i>Collaboration & Engagement:</i>	Jennifer Pelletier <i>Karen Soderberg (RSVP'd-not in attendance)</i> <i>Dan Brady</i> <i>Margaret Schuster</i>	6:05 – 6:15	Approve Minutes Any actions?
Update <i>What's new in SHIP 4</i>	<i>Lara Pratt, MHD Manager-Healthy Living Team</i>	6:15 – 6:35	comparison between SHIP 3 & SHIP 4; seek feedback from committee members
Presentation – <i>Adverse Childhood Experiences</i>	<i>Mark Sander, PsyD, LP Senior Clinical Psychologist - Hennepin County; Mental Health Coordinator - Hennepin County and Minneapolis Public Schools, Schools Student Support Services</i>	6:35 – 7:35	Informational session with Q & A
Department Updates	Gretchen Musicant	7:40 – 7:50	Informational / Discussion
Information Sharing Announcements, news to share, upcoming events	All	7:55 – 8:00	Informational

Next Sub-committee meeting: August 25, 2015, Minneapolis City Hall, Rooms 132 & 333

Next meeting of the Full Committee: September 22, 2015, Minneapolis City Hall, Room 132

If there are any problems/changes the night of the meeting, please call 612-919-3855.

Public Health Advisory Committee (PHAC) Minutes

July 28, 2015

Members Present: Julie Ring, Sahra Noor, Akisha Everett, Jahana Berry, Abdullahi Sheikh, Sarah Jane Keaveny, Margaret (Peggy) Reinhardt, Autumn Chmielewski, Dr. Rebecca Thoman, Silvia Perez, Cindy Hillyer, Jane Auger, Jennifer Pelletier

Members Excused: Karen Soderberg, Birdie Cunningham, Daniel Brady, Joseph Colianni

Members Unexcused: Harrison Kelner, Dr. Happy Reynolds-Cook, Tamara Ward,

MHD Staff Present: Gretchen Musicant, Margaret Schuster, Don Moody

Guests: Mark Sander, Lara Pratt, Morgann Fevrier, Kaitlyn Cummings, Yolanda Lee

Jennifer Pelletier called the meeting to order at 6:08 p.m. at City Hall.

Item	Discussion	Outcome
Introduction	Members and guests introduced themselves.	
Agenda/Min Approval	May minutes were reviewed Members had no additions to the July agenda.	motion to approve minutes carried by unanimous consent
Reports from Sub-committees: <i>Operations / Communication</i>	Cindy Hillyer membership was approved by City Council. The sub-committee is contacting absent members and soliciting new applicants for upcoming vacancies.	
<i>Collaboration & Engagement</i>	MHD has ordered a copy of <i>Raising of America</i> documentary. The sub-committee is looking at how to use the documentary to coordinate with other efforts, such as the Community Action Network and the Mayor's Cradle to K initiative.	
<i>Policy & Planning</i>	PHAC's proposal for a Housing Advisory Committee brought to CMs Gordon & Bender in a meeting which included their aides, Kelly Jones (Regulatory Services), and Andrea Brennan (Director of Housing Policy and Development), Dan Brady & Peggy Reinhardt from PHAC, and from the Health Department Gretchen Musicant and Margaret Schuster. CMs were receptive and encouraged PHAC to stay in contact. The City of Minneapolis is updating its comprehensive plan (due every 10 years). CMs thought a housing group as part of the comprehensive planning would be a natural fit for the comprehensive plan given the current level of attention and activity around housing. Generally, introducing a new advisory committee is difficult unless the need is evident and the path paved through other city involvement in the issue.	
Presentation: What's new in SHIP 4? <i>Lara Pratt, MHD Manager- Healthy Living Team</i>	Lara updated members on MHD efforts around the Statewide Health Improvement Program (SHIP) initiatives and plans for the next round of funding (SHIP 4). SHIP 4 has less funding available than SHIP 3 (~\$185K/year less). Criteria for Healthy Living projects is wide reaching - will counter-act social determinants that affect obesity and tobacco use, engage communities most affected by these, foster ongoing relationships,	Request for PHAC input on what should be included in SHIP 4? And, what, if anything, is drastically missing?

Public Health Advisory Committee (PHAC)
Minutes

Item	Discussion	Outcome
	<p>increase capacity of residence and community organizations to implement changes which support healthy living, have a potential for high reach, will be sustainable over time, avoid duplication of efforts which could be implemented by other organizations. SHIP 4 initiatives will include:</p> <p>Tobacco - City of Minneapolis changed an ordinance regulating tobacco products; restricting the sale of flavored tobacco to tobacco product shops with a minimum age of 18 to enter these shops; and establishing a minimum price of \$2.60 per stick for cigar products. MHD will be helping with implementation. Menthol flavored products were an exception to the modified ordinance; MHD will look for ways to address menthol products and the target marketing of menthol products.</p> <p>Healthcare – will continue support clinics efforts to better address pediatric obesity.</p> <p>Healthy Eating – continued implementation and evaluation of the Staple Foods ordinance, ongoing work with food shelves and meal programs, continue the ReThink Your Drink campaign.</p> <p>Active Living - involvement in Minneapolis Comprehensive Planning</p> <p>Comprehensive - partner with cultural communities/geographic areas to assess and pursue residents’ interests & needs related to access to healthy living (physical activity, healthy food, tobacco free living); e.g., North Minneapolis Greenway pilot project was approved</p>	
<p>Presentation: Adverse Childhood Experiences (ACEs) <i>Mark Sander, PsyD, LP</i></p>	<p>The ACE Study counted multiple types of childhood stressors (called Adverse Childhood Experiences, or ACEs) and measured a wide array of health and social problems. Participants self-identified in 10 categories of ACEs, rating each category as 0 (not present in their childhood) or 1 (present, regardless of frequency & severity). The ten category total is the ACE score (from 0 to 10). The number of ACEs show a very strong dose-response relationship; that is, the higher the ACE score, the higher the percentage of health and social problems for individuals with that score (from less than 10% for the group with a 0 ACE score to over 50% for the group with an ACE score of 5 or higher).</p> <p>When combined with new learnings about the effects of toxic stress on the developing brain, ACE researchers concluded that ACEs are the leading cause of health and social problems in our nation. Because many common health and social problems have a common cause - the powerful impact of ACEs throughout the life course - health and social problems are not separate issues, they are a strongly interconnected issue.</p> <p>What about resilience? Individual and community? Three protective systems interact and guide positive adaptation:</p> <ul style="list-style-type: none"> - individual capabilities - attachment and belonging with caring and competent people - protective community, faith, and cultural processes <p>These three protective systems are nested: people do best when they</p>	

**Public Health Advisory Committee (PHAC)
Minutes**

Item	Discussion	Outcome
	<p>are living in thriving families and communities, when they help one another to develop personal attributes, when they have a positive view of one's life and one's capabilities.</p> <p>Building community capacity is about helping people learn, manage and improve their efforts systematically, and about providing flexible funding, state of the art education, and direct supports that help mobilize everyone who wants to help. Because each community is unique, each successful community will travel that journey differently. Hence flexibility in approach is important to building resilience capacity.</p> <p>While the ACE study provides straight-forward information about the consequences of toxic stress during childhood, it is not a detailed roadmap of services or programs. Reducing ACE Scores will reduce the rates of many common health and social problems, yet what initiatives will best reduce ACE Scores will vary by community.</p>	
Department Updates- Gretchen Musicant	<p>Gretchen met with the Mayor and CM Gordon about the Health budget. The Mayor thanked MHD for equity suggestions. The Mayor presents her budget proposal to City Council on August 12 and Gretchen presents to the Ways & Means committee on September 18.</p> <p>City Council voted unanimously to adopt the changes to the ordinance regulating tobacco products; this is the first in the state and only the third in the country.</p>	
Information Sharing – Margaret Schuster	MHD is approaching their documentation submission deadline date for accreditation, which is August 20!	
Silvia Perez	Discussed her recent absences from the committee and expressed she is now back into her routine and is glad to see everyone.	

Meeting adjourned at 8:06 p.m.

Next Sub-Committee Meeting: August 25, 2015, Minneapolis City Hall, Room 132 & 333, 6:00-8:00 p.m.

Next Full Committee Meeting: September 22, 2015, Minneapolis City Hall, Room 132, 6:00-8:00 p.m.

Mpls SHIP 4 Plan

SHIP 4: \$762,820 (~\$185,000/year less than SHIP3)

Criteria for Healthy Living Projects

- Counter-act social determinants that affect obesity and tobacco use—access, language, transportation, affordability, etc.
- Engage communities most affected by obesity and tobacco-related illnesses in identifying and pursuing their priorities.
- Foster ongoing relationships that are capable achieving comprehensive, sustainable improvements and can include complimentary strategies to increase awareness and social connectedness, knowledge and skills.
- Increase the capacity of residents and community organizations to implement changes that support healthy eating, physical activity and tobacco-free living.
- Have the potential to fundamentally change policies, programs, systems to impact health behaviors (vs little tweaks)
- Have potential for high reach.
- Are a true value-added/not duplicative of efforts that are already underway or could be implemented by others.
- Have the ability to be sustained over time.

	Projects that are either required by SHIP or pre-determined to continue	Opportunities for Input
Tobacco	--Assist with implementation of newly passed tobacco ordinance --Represent Mpls in menthol momentum	Extent of involvement in smoke-free housing efforts? --Propose assessment of smoke-free rental property in Mpls to establish baseline, and --Assessment of health department's role smoke-free housing efforts given many organizations already working on it
Worksites	--Continue supporting City of Minneapolis Wellness Committee with specific outcomes	Any involvement in worksite wellness beyond City of Minneapolis? Option: Conduct assessment to determine an approach for Mpls in this work with a specific industry (non-union represented hospitality).

	Projects that are either required by SHIP or pre-determined to continue	Opportunities for Input
Health Care		Continue clinic efforts to better address pediatric obesity? 4 clinics; ~\$50,000
Healthy eating	--Implementation/evaluation of the staple foods ordinance --Ongoing work with food shelves and meal programs --Involvement in Mpls Comprehensive Planning	Extent of our investment? --Connecting cultural communities to gardening --Continuing the ReThink Your Drink campaign ~\$50,000 (potentially expanding to the Somali community) ~\$35,000
Active living	--Involvement in Mpls Comprehensive Planning --Some involvement with seniors and physical activity	Approach for the following work? --Partner with cultural communities/geographic areas to assess and pursue residents' interests and needs related to access to physical activity opportunities. ~\$60,000
Schools	Support biking and walking projects at Minneapolis Public School	Continue/discontinue partnerships with charter schools? --Help charter schools integrate salad bars into their food service ~\$15,000
Comprehensive: Active living + healthy food + tobacco-free living		Approach for the following work? --Partner with cultural communities/geographic areas to assess and pursue residents' interests and needs related to access to active living + physical activity + tobacco-free living. ~\$60,000

Discontinued

- Worksite wellness initiatives for community-based employers
- Corner store make-over efforts
- Community gardening support unless connected to public housing or community-driven initiatives
- Healthy restaurant program
- Physical activity activities in charter schools

UNDERSTANDING

Adverse Childhood Experiences

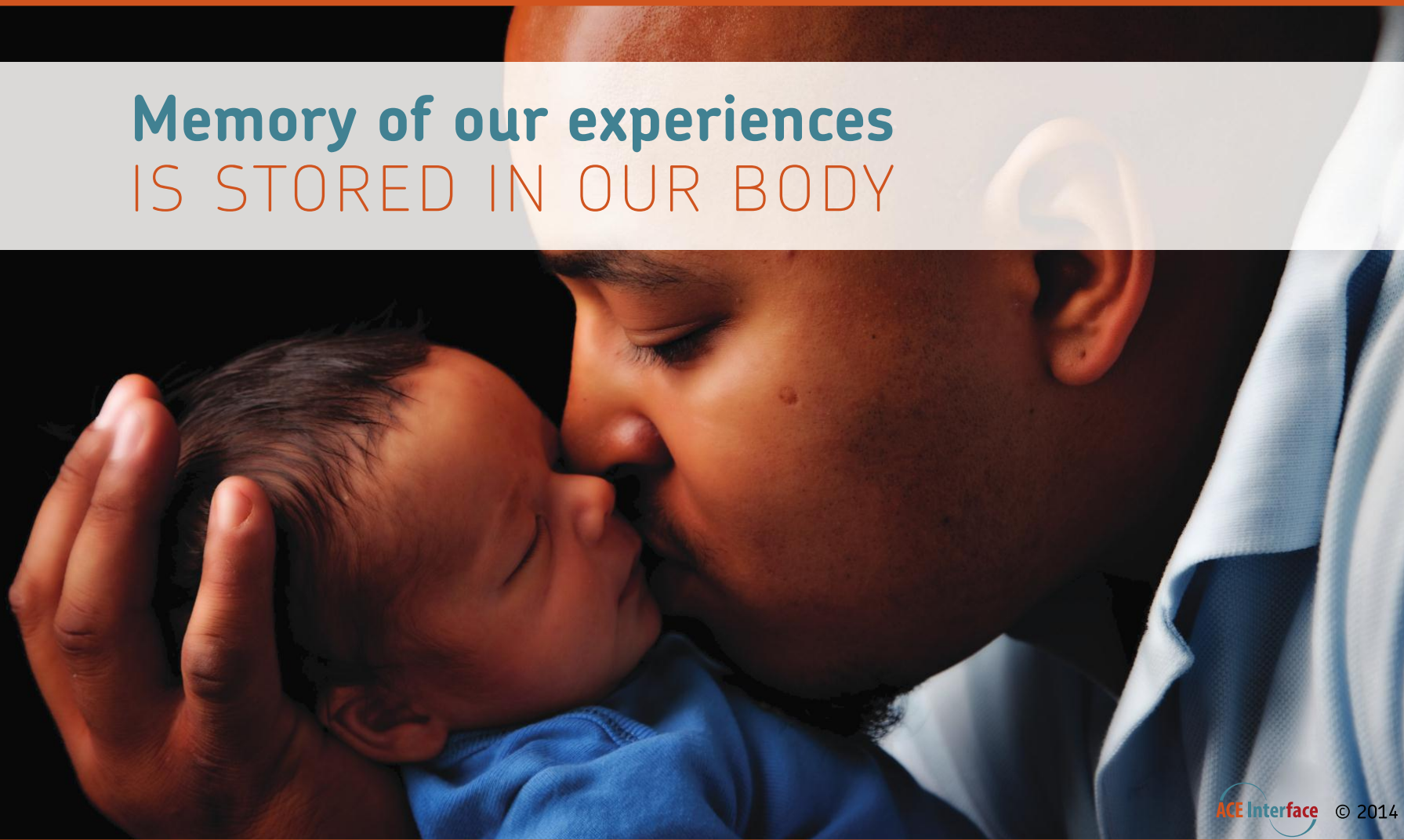
Building Self-Healing Communities



History of ACEs Work in MN

- In 2005 MN Communities Caring for Children invited Dr. Robert Anda to Minnesota for an annual conference
- In 2012, Anda and Porter completed the first iteration of their ACE Interface curriculum, MCCC was selected as the first entity to train with the curriculum. Now, 12 states are using the curriculum
- In 2013, Anda and Porter came to Minnesota to train a cohort of 25 ACE Interface Trainers using the new curriculum at a 2-day retreat
- Within 18 months of their training, the first group of ACE Interface Trainers presented to more than 10,000 Minnesotans with important information
- Since then 3 more cohorts have been trained, resulting in 90 trainers in MN.

Memory of our experiences IS STORED IN OUR BODY



01/12/14

NEWS

Early Adversity Increases Physical, Mental, Behavioral Problems, Scientists Report



Dr. Robert Anda & Dr. Vincent Felitti
Investigators

Centers for Disease Control & Prevention,
Kaiser Permanente Study

Over 17,000 study participants

The ACE Study confirms, with scientific evidence, that adversity early in life increases physical, mental and behavioral problems later in life.

HUMAN NERVOUS SYSTEM

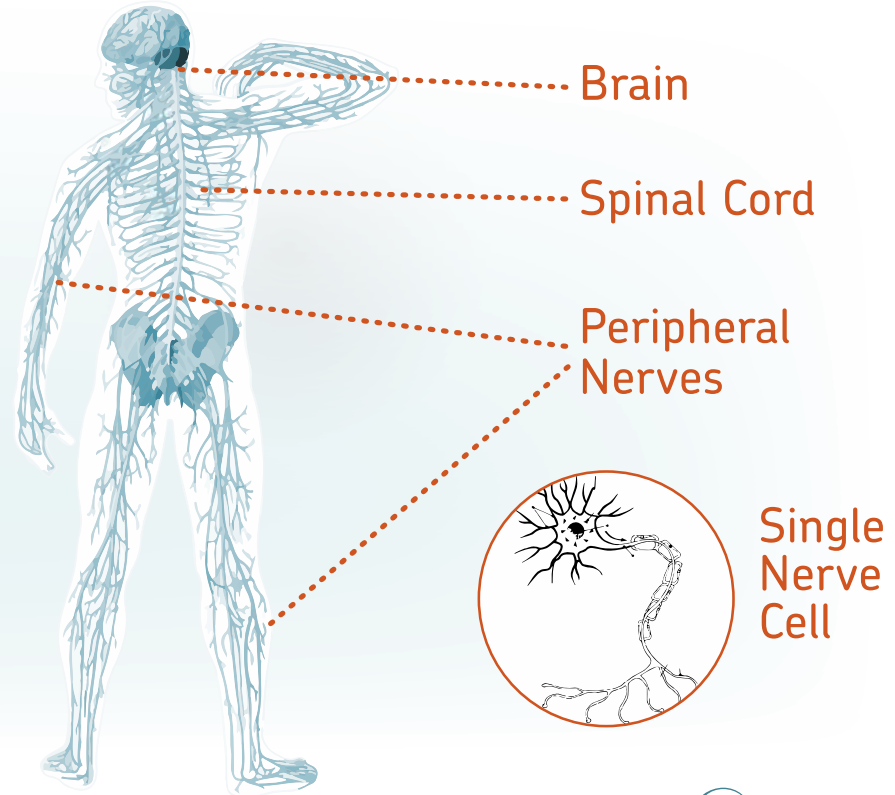
Nervous system

ORCHESTRATES BODY
FUNCTIONS & PERCEPTIONS

Neuroscience

HELPS US UNDERSTAND WHY

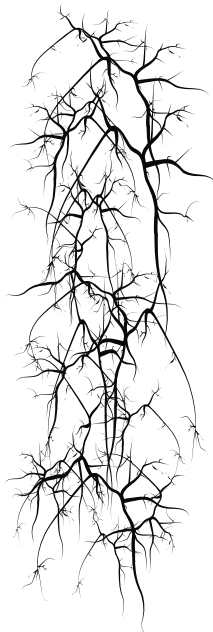
A C E s
ARE SO POWERFUL



SYNAPTIC DENSITY



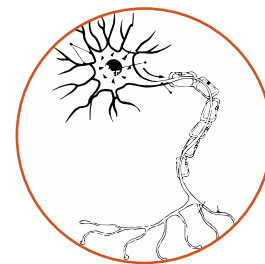
At Birth



Elementary Age



Puberty



Single
Neuron

Different Stress Responses

▶ Positive stress response

- Normal and essential part of health development
- Brief increases in heart rate and mild elevations in hormone levels

▶ Tolerable stress response

- Activates body's alert system to greater degree
- If activation is time-limited and buffered by relationships with adults who can help child adapt – this can be ok

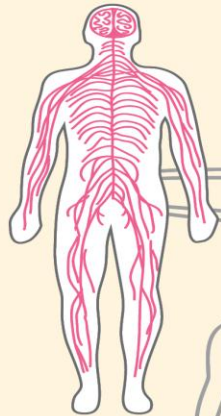
▶ Toxic stress response

- Strong, frequent and/or prolonged adversity
- This type of response can disrupt typical brain and neural development

PREDICTABLE PATTERNS



MALEVOLENT WORLD



- emotion processing regions smaller, less efficient
- efficient production of stress-related chemicals
- dysregulated hormones
- less calming receptors
- less white matter

- competitive
- hot tempered
- impulsive
- hyper vigilant or withdrawn
- dissociated
- numb

Unpredictable, continuous stress, dangerous world


20 min

BENEVOLENT WORLD

- emotion processing regions robust and efficient
- abundant happy hormones
- high density white matter, especially in mid-brain

- laid back
- relationship oriented
- reflective
- "process over power"

Predictable, moderate stress world



What kind of situations might be a good match for a person who tends to be edgy, hypervigilant, emotionally detached, or quick to act?

ADAPTATIONS VS EXPECTATIONS

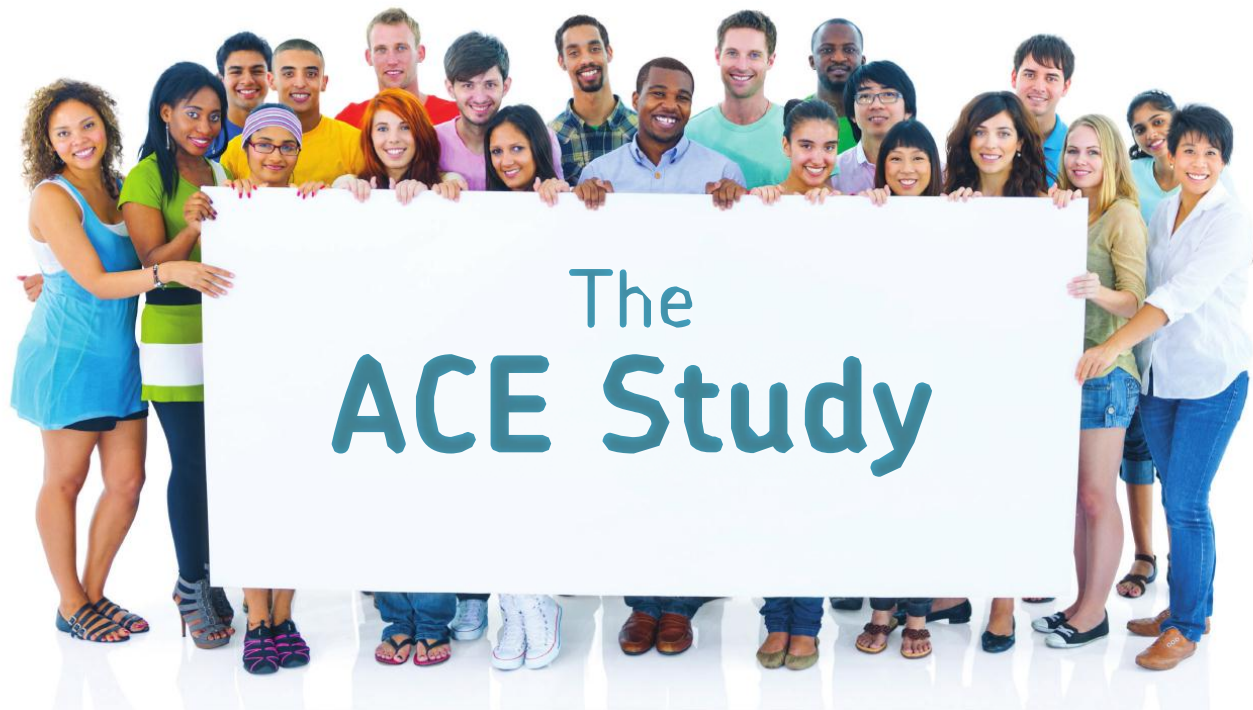
WHEN BIOLOGY

collides

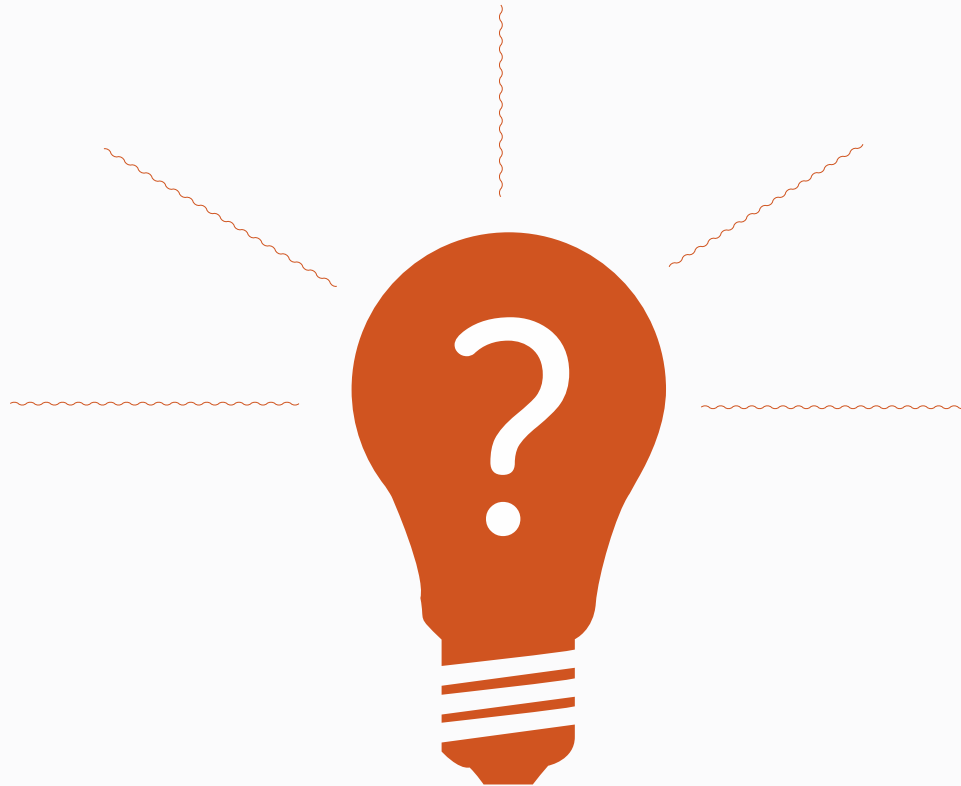
WITH SOCIAL
EXPECTATIONS
we run into

TROUBLE





Does the Risk for Chronic Health Problems Originate in Childhood?





FINDING MORE CONNECTIONS

how multiple forms of **childhood adversity** can affect many important **PUBLIC HEALTH PROBLEMS**

Adverse Childhood Experiences ARE COMMON

Household Dysfunction

Substance Abuse	27%
Parental Sep/Divorce	23%
Mental Illness	17%
Battered Mothers	13%
Criminal Behavior	6%

Neglect

Emotional	15%
Physical	10%

Abuse

Emotional	11%
Physical	28%
Sexual	21%

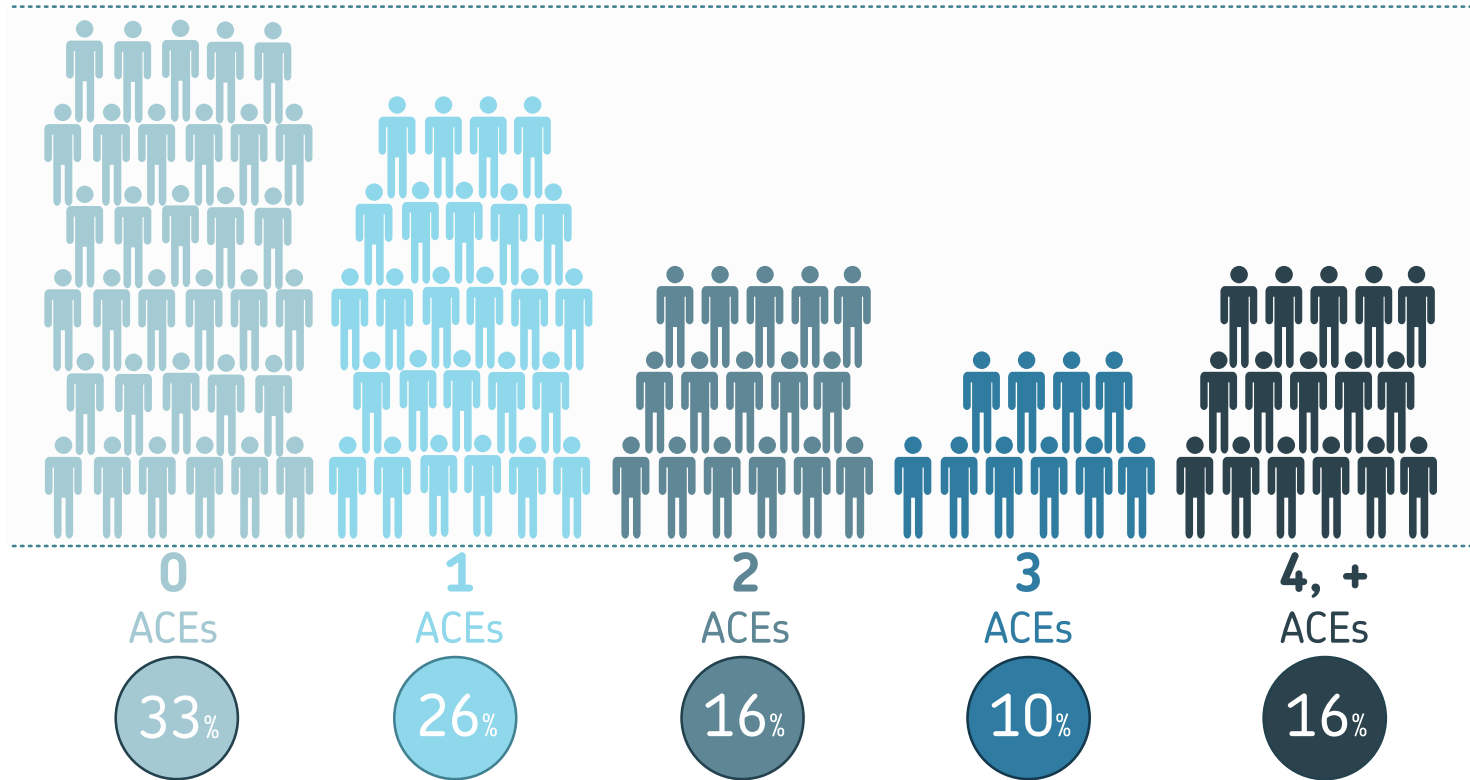
5

2

3

TOTAL 10 ACEs

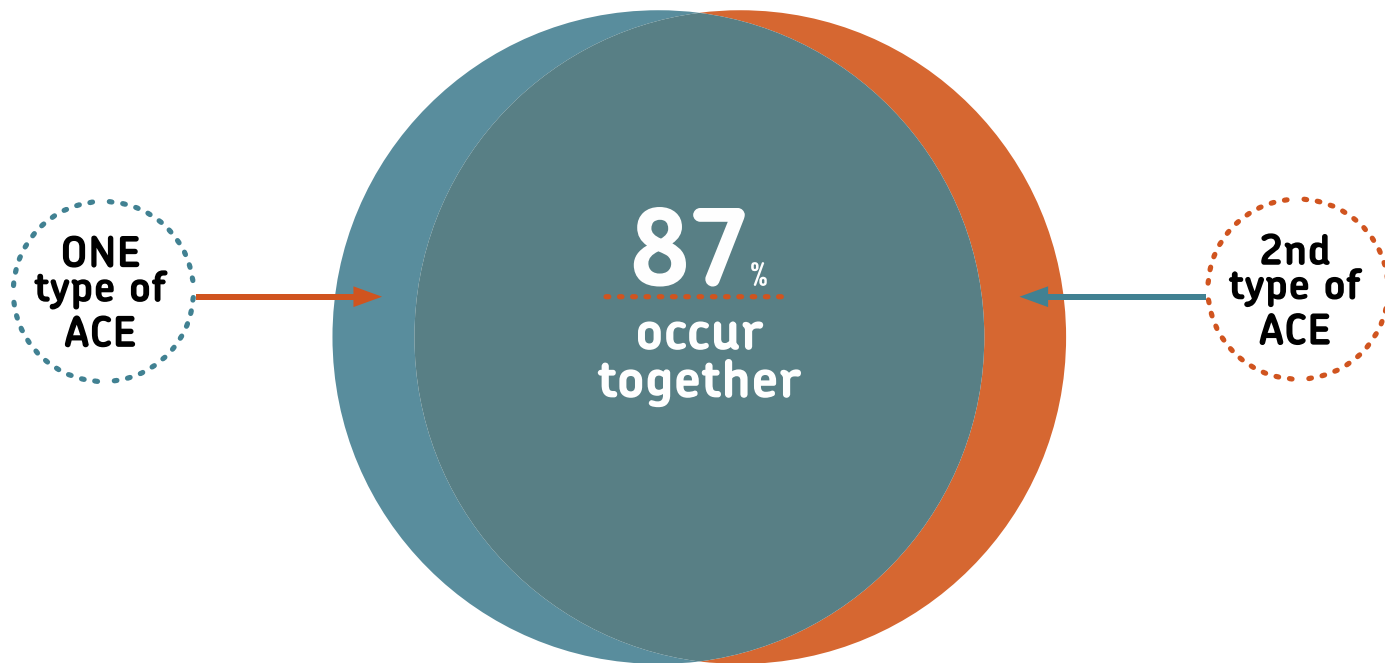
ACE Score = Number of ACE Categories



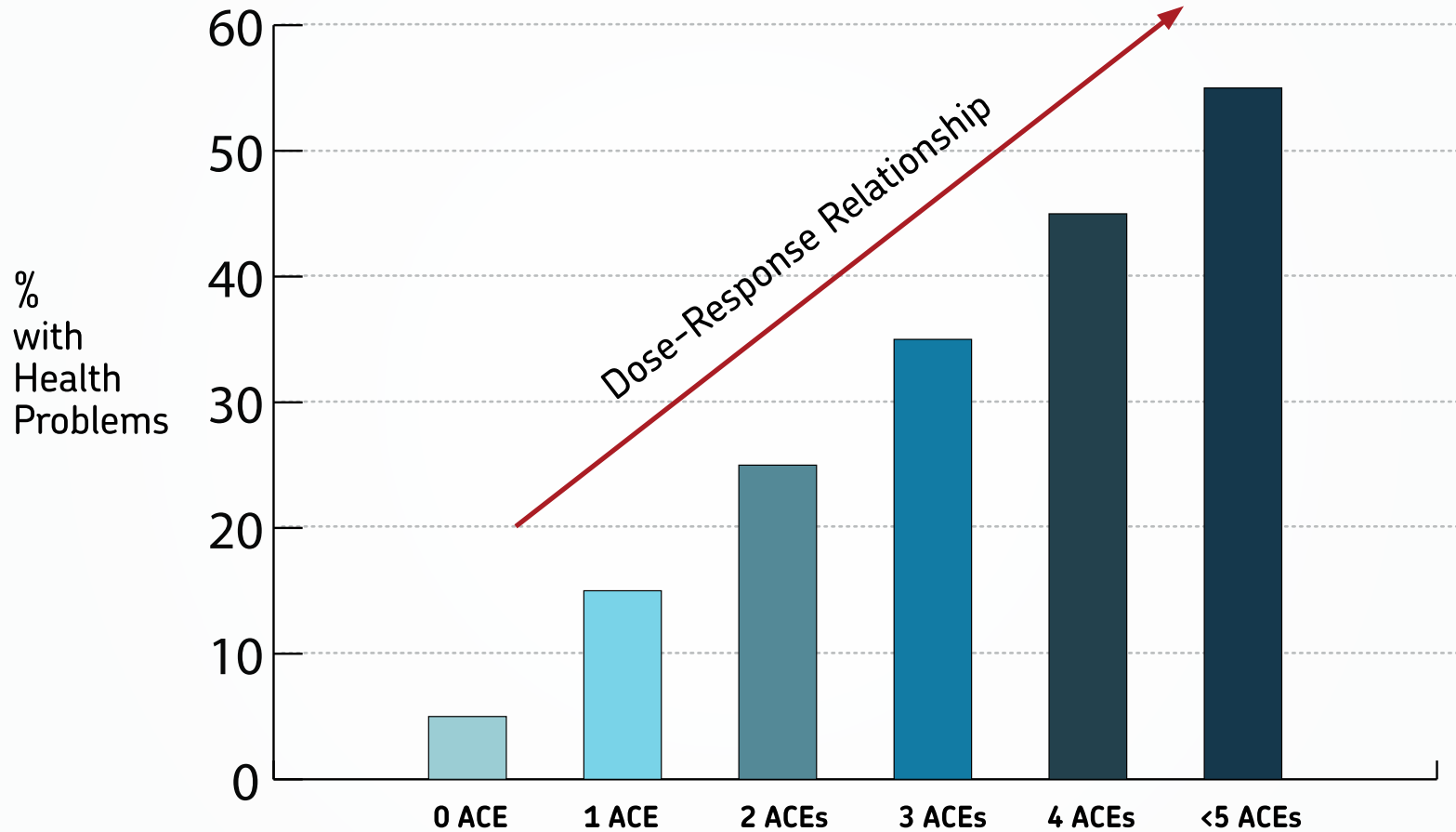
ACE Scores Reliably Predict Challenges During the Life Course

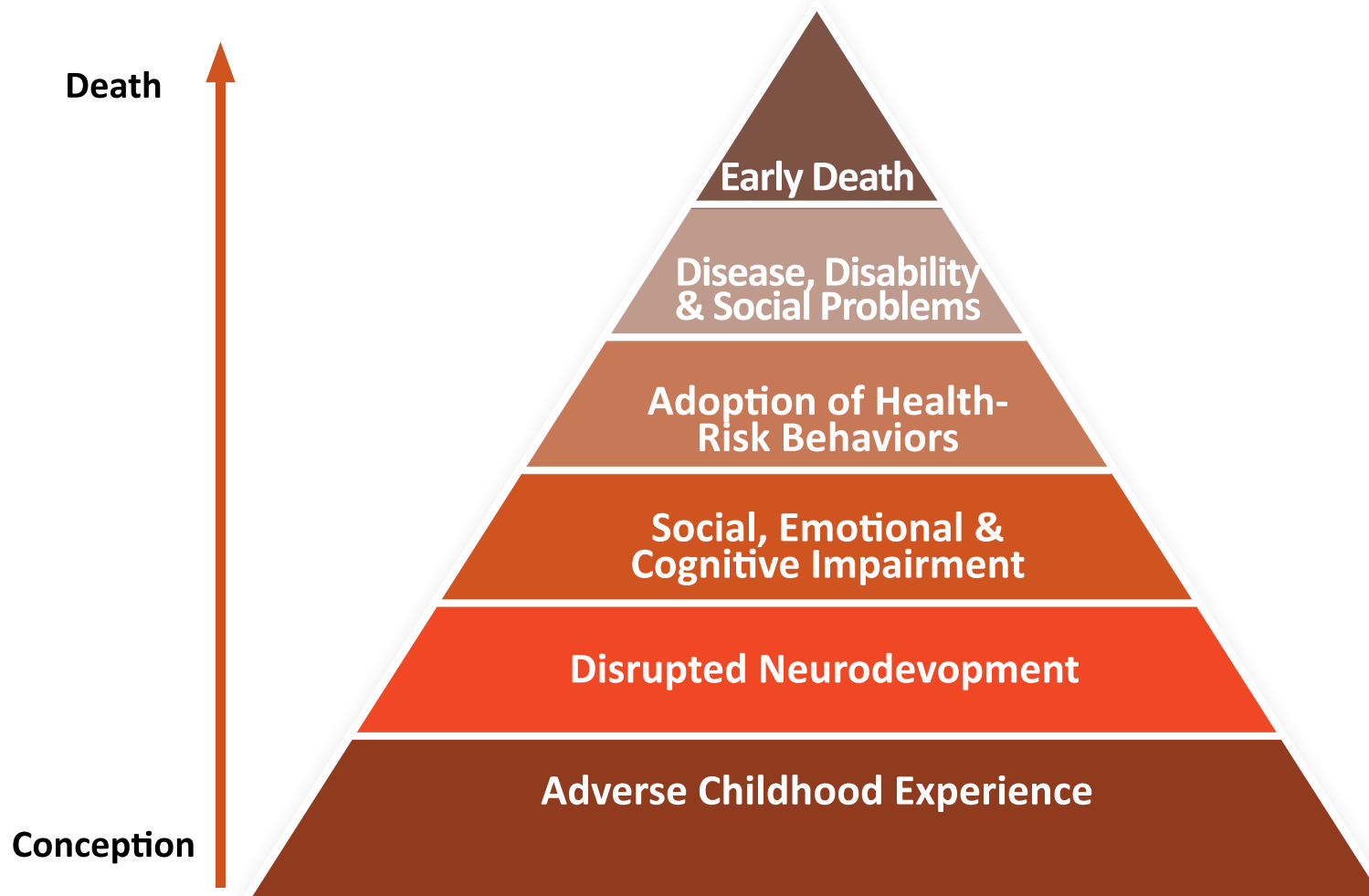
ACEs are Highly Interrelated:

Where One ACE Occurs,
There are Usually Others

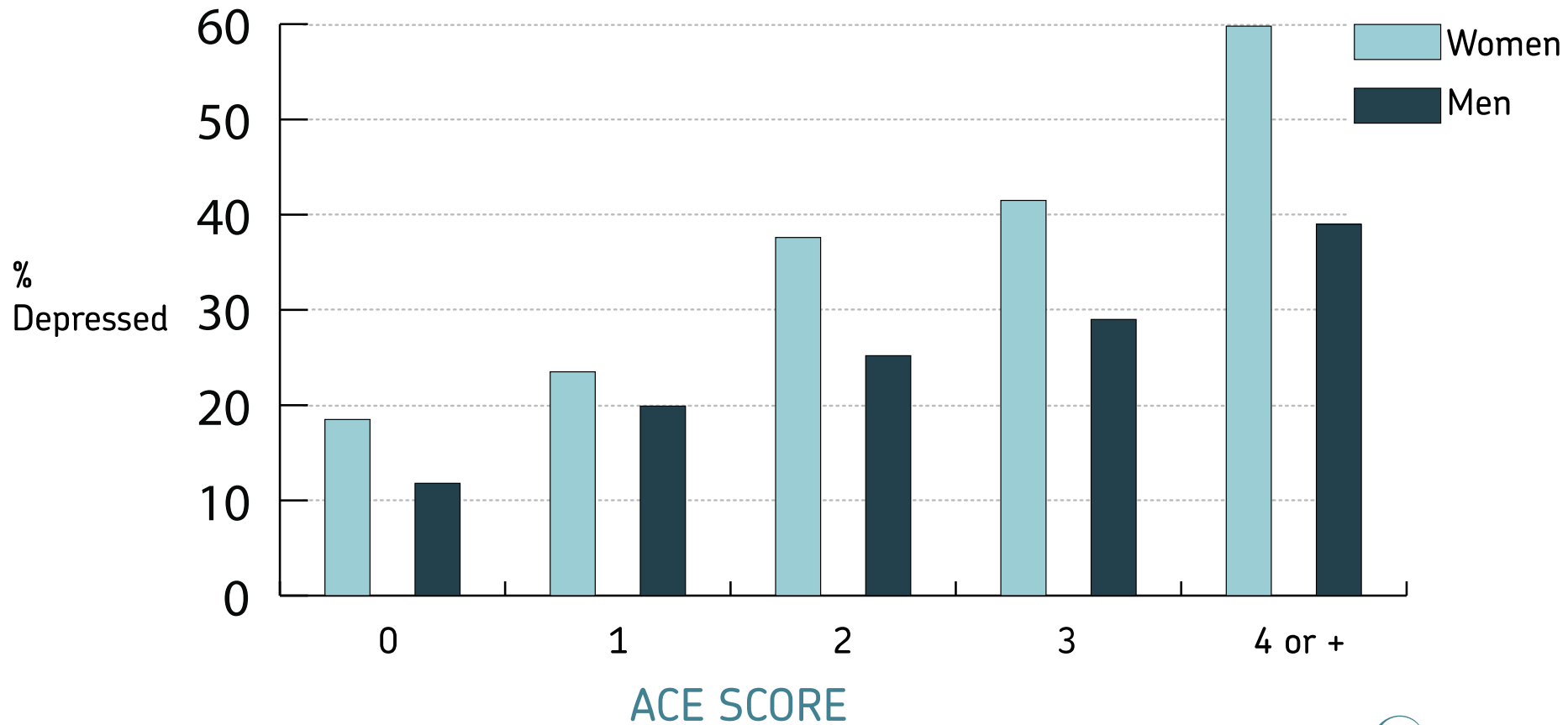


ACE Score and Health Problems

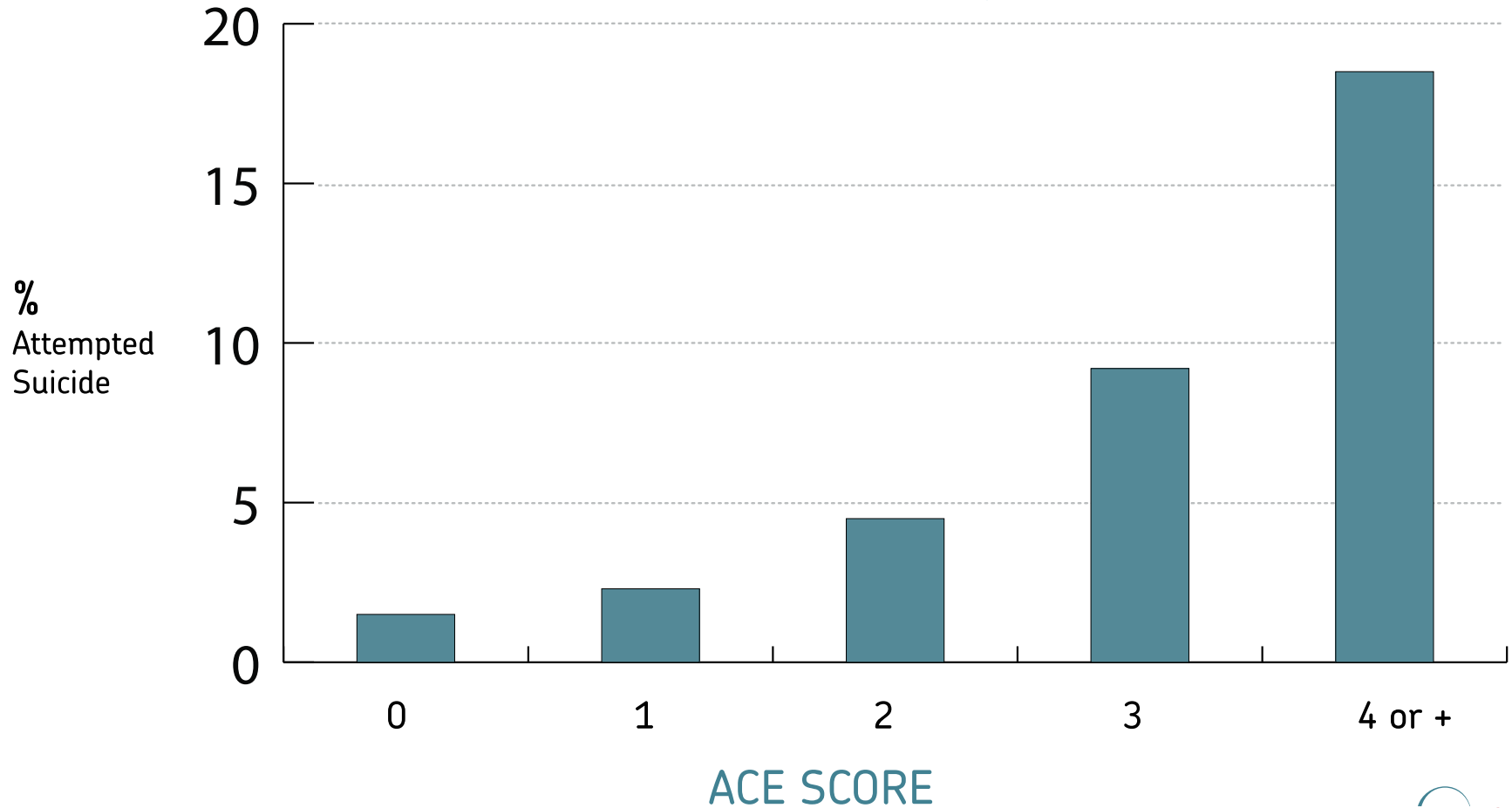




ACEs & Depression



ACEs & Suicide Attempt



EXAMPLES OF ACE-ATTRIBUTABLE PROBLEMS

Alcoholism & Alcohol Abuse

Chronic Obstructive

Lung Disease

Coronary Heart Disease

Depression

Drug Abuse & Illicit Drug Use

Fetal Death

Intimate Partner Violence

Liver Disease

Mental Health Problems

Obesity

Sexual Behavior Problems

Smoking

Unintended Pregnancy

Violence

Workplace Problems

Knocking Down ACE Scores ———— will prevent ————



3

homelessness, unemployment, incarceration

2

disability, learning problems

1

poverty

0

ACEs are Common, Interrelated, Powerful



High ACE Scores
in Population



Increased Risk of Multiple
Health and Social Problems



Intergenerational
Transmission of ACEs



COMMON CAUSE

everyone can contribute
prevent accumulation

of ACEs



we

**have the power to
shift the dynamics
that lead to high
ACE scores.**

Core Protective Systems

Capabilities

Attachment
&
Belonging

Community
Culture
Spirituality

“Nurturing the healthy development of these protective systems affords the most important preparation or ‘inoculation’ for overcoming potential threats and adversities in human development. Similarly, damage or destruction of these systems has dire consequences for the positive adaptive capacity of individuals.”

Ann Masten, 2009

Individual Capabilities



Positive

view lets me know I am
important and valuable

Attachment & Belonging

RELATIONSHIPS

with caring and competent

people are

—VITAL—

contributors to
resilience & recovery





Community, Faith & Cultural Processes

WE

foster
thriving
communities

Community Capacity Development

Leadership Expansion

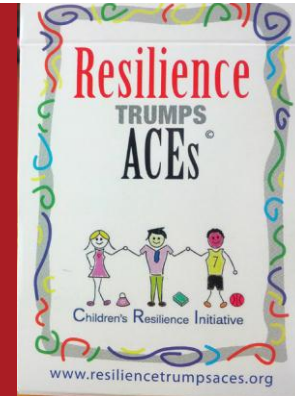
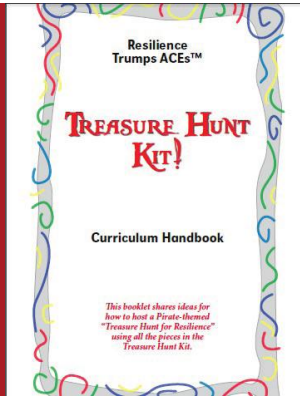
Coming Together

Shared Learning

Results-Oriented Decisions



Leadership Expansion: Children's Resilience Initiative



<http://resiliencetrumpsaces.org/>

Shared Learning: Public Health Process



www.jeffersoncountypublichealth.org/index.php?family-health-services

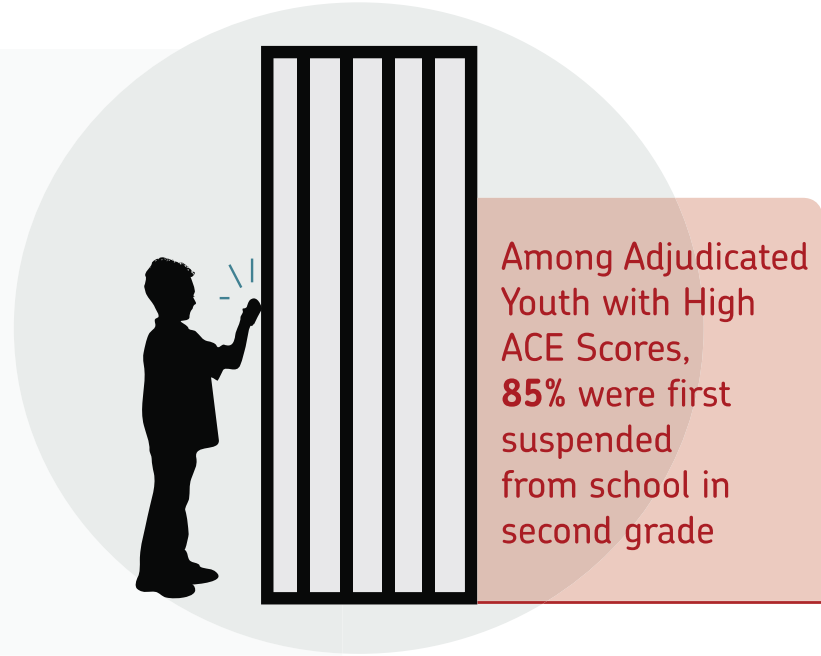
Results Oriented Decision Making: Data



Not Safe at Home



Not Welcome at School





Building Self-Healing Communities

Thank YOU!

www.aceinterface.com

ACE Business Solutions - ALASKA Stock Photos - Theresa Barila - Victoria Bigelow - Jani Bryson Photography - Children's Resilience Initiative - Lina Cramer - Bonnie Duran - Krista Goldstine-Cole, KEN! - Kevin Kowalewski - iStock Photos - Jane Kretsmann - Community Leaders - Ellen Lepinski - Dario Longhi - Kimberly Martin - Susan Miller - Minnesota Communities Caring for Children - Heather Paul - SaintA - Sasha Silveanu - Jim Sporeader - Martin Teicher - Wisconsin Children's Trust - Photographs of people in these slides are of models; none should be interpreted as victims or perpetrators.

Minnesota Communities Caring for Children

Trauma-Informed Care Technical Assistance Center (TICTAC)



Overview

Evidence shows that adverse childhood experiences (ACEs) are common in Minnesota, and that these adversities have strong and cumulative health and social implications. In order to heal our adult population and prevent ACEs from occurring in the next generation, it is critical that all Minnesotans, from parents to providers, be aware of trauma and integrate strategies for healing and building resilience into their lives and work.

Approach

The Trauma-Informed Care Technical Assistance Center (TICTAC) is a grassroots effort to build the capacity of communities to address challenging health and social issues related to childhood trauma. To do this:

1. MCCC develops the capacity of individuals as Presenters and Trainers so that they can use their knowledge and skills to be champions for trauma-informed policy, systems, and environmental changes in their sectors.
2. MCCC coordinates a statewide network of trauma-informed Presenters and Trainers to raise awareness about the impacts of trauma on the health of individuals and communities, and to help communities self-identify and implement strategies for healing and building resilience.
3. MCCC contracts directly with communities and agencies to provide ongoing technical assistance throughout the process of embedding trauma-informed approaches into an environment.

History

For more than a decade Minnesota Communities Caring for Children (MCCC) has been working to break cycles of trauma by raising awareness of the impacts of childhood adversity on the life course. In 2005 MCCC invited Dr. Robert Anda, Co-Principal Investigator of the Adverse Childhood Experiences (ACE) Study, to Minnesota for an annual conference. Following the conference, MCCC continued to educate parents and community members about the neurobiology of childhood adversity while maintaining relationships with Dr. Anda as well Laura Porter of the Washington Family Policy Council and Office of ACE Partnerships.

In 2011, Anda and Porter were developing the ACE Interface curriculum – a narrative that weaves neuroscience, the ACE Study, and resilience research into a comprehensive training package. In 2012, when Anda and Porter completed the first iteration of their ACE Interface curriculum, MCCC was selected as the first entity to train with the curriculum. Each state can have one entity licensed to use the curriculum, and through MCCC Minnesota was the first state to do so. Today nearly a dozen states are licensed.



In 2013, Anda and Porter came to Minnesota to train a cohort of 25 ACE Interface Trainers using the new curriculum at a 2-day retreat. Over the next year, MCCC held two more retreats to support Trainers in gaining presentation and coaching skills for enhancing their delivery of the curriculum and facilitating community responses to the information. Trainers were asked to attend all retreats, present the curriculum in pairs at least two times, and submit evaluations in order to become certified. The feedback from this group of Trainers informed the second iteration of the ACE Interface curriculum, which was released in 2014.

Within 18 months of their training, the first group of ACE Interface Trainers reached more than 10,000 Minnesotans statewide with the ACE Interface content. As a result, there was high demand for a second ACE Interface Training. In the fall of 2014 MCCC held a series of trainings of ACE Interface Presenters (who can present the curriculum but not train others to do so) – two in the Twin Cities and one in Bemidji. Like Trainers, Presenters are required to co-present the curriculum at least two times and submit evaluations to be certified.

MCCC continues to nurture this network of nearly 90 Trainers and Presenters as a learning community. Because Trainers/Presenters are sharing the curriculum with a wide range of audiences (such as parents, human services professionals, teachers, mental health workers, criminal justice workers, etc.), they need to be adaptable and have a breadth of knowledge. Over the past year MCCC has offered intensive workshops to this network on topics including historical trauma, resilience, and how communities can respond to ACEs (a workshop led by Laura Porter, who is now the Senior Director of The ACEs Learning Institute at the Foundation for Healthy Generations).

Over the past two years more than 17,000 Minnesotans been reached with an ACE Interface presentation. Today several cross-sector workgroups are forming to not only raise awareness but to create responses that prevent trauma and foster resilience in children, families, and whole communities.

For more information, please contact Kate Bailey at kbailey@pcamn.org or 651.523.0099, or visit pcamn.org.

Minnesota Communities Caring for Children
Home of Prevent Child Abuse America and Circle of Parents National
709 University Avenue West, Suite 234 | St. Paul, MN 55104
Phone: 651.523.0099 | Fax: 651.523.0380



Public Health Advisory Committee

August 25, 2015, 6:00 – 8:00 pm

Minneapolis City Hall, Room 132 & Room 333

AGENDA

Agenda Item	Presenter	Time	Committee Action
Supper is served!	<i>La Loma Tamales</i>	5:45 – 6:00	
PHAC Logistics and Department Updates Notes for Sub-committees: <i>Communications/Operations:</i> <i>Policy & Planning:</i> <i>Review & discuss breastfeeding report rough draft</i> <i>Update on MN School Survey</i> <i>Revisit subjects from June & July:</i> <i>Healthy Sleep</i> <i>Mental Health panel discussion</i> <i>Adverse Childhood Events</i> <i>Collaboration & Engagement:</i> <i>(Raising of America planning)</i>	<i>Margaret Schuster</i> <i>Karen Soderberg</i> <i>Dan Brady</i> <i>Jennie Meinz</i> <i>Pat Harrison-MHD /</i> <i>Ann DeGroot-YCB</i> <i>Margaret Schuster</i>	6:00 – 6:05	

Next Meeting of the Full Committee: September 22, 2015, Minneapolis City Hall, Room 132

Next Sub-committee meeting: October 27, 2015, Minneapolis City Hall, Rooms 132 & 333

If there are any problems/changes the night of the meeting, please call 612-919-3855



Public Health Advisory Committee

September 22, 2015, 6:00 – 8:00 pm

Minneapolis City Hall, Room 132

AGENDA

Agenda Item	Presenter	Time	Committee Action
Welcome and Introductions	Karen Soderberg	6:00	Approve agenda
PHAC Logistics and Updates Approve meeting minutes Reports from Sub-committees: <i>Communications/Operations:</i> Update on member terms At large seat candidate vote <i>Policy & Planning:</i> <i>Collaboration & Engagement:</i> Raising of America update	Karen Soderberg Karen Soderberg Dan Brady Margaret Schuster	6:05 – 6:15	Approve Minutes Any actions?
Presentation <i>Structural and Cultural Supports and Barriers for Breastfeeding in Minneapolis Cultural Communities</i>	Jennie Meinz, U of MN School of Public Health	6:15 – 7:15 7:15 – 7:30	Breastfeeding research report Questions/discussion
Department Updates	Gretchen Musicant	7:35 – 7:50	Informational / Discussion
Information Sharing Announcements, news to share, upcoming events	All	7:50 – 8:00	Informational

Next Sub-committee meeting: October 27, 2015, Minneapolis City Hall, Rooms 132 & 333

Last meeting of the Year*: December 1, 2015, Minneapolis City Hall, Room 132

*Please note: There is NO meeting in November. December 1 is the last meeting of the year. The PHAC voted to combine November and December meetings and meet only once in those two months. The date of the meeting was changed to reflect that interest and due to the proximity of regular meeting dates to national holidays.

If there are any problems/changes the night of the meeting, please call 612-919-3855.

**Public Health Advisory Committee (PHAC)
Minutes**

September 22, 2015

Members Present: Julie Ring, Jahana Berry, Dr. Happy Reynolds-Cook, Karen Soderberg, Sarah Jane Keaveny, Margaret (Peggy) Reinhardt, Autumn Chmielewski, Dr. Rebecca Thoman, Silvia Perez, Jane Auger, Jennifer Pelletier, Tamara Ward, Daniel Brady, Joseph Colianni

Members Excused: Sahra Noor, Akisha Everett, Abdullahi Sheikh, Cindy Hillyer

Members Unexcused: Harrison Kelner, Birdie Cunningham

MHD Staff Present: Gretchen Musicant, Margaret Schuster, Don Moody

Guests: Jennie Meinz, Yolanda Lee, Amy Goodhue, Chris Eaton, Kathy Czedn

Karen Soderberg called the meeting to order at 6:08 p.m. at City Hall.

Item	Discussion	Outcome
Introduction	Members and guests introduced themselves.	
Agenda/Min Approval	July minutes were reviewed. Approval of the 2016 meeting schedule was moved to the October agenda.	Motion to approve minutes carried by unanimous consent
Sub-committee Reports: <i>Operations / Communication</i>	Peggy Reinhardt joined this sub-committee. A summary of member terms expiration dates were reviewed. Those members with terms expiring on 12/31/2015 will receive an email from Margaret regarding re-application, if interested in another term. Karen Soderberg presented information about Yolanda Adams-Lee as a replacement for Tamara Ward who resigned her Member at Large seat. Yolanda spoke to the committee about her experience and interest in serving. As requested, she left the room for continued discussion.	Julie Ring made a motion nominating Yolanda Lee for the vacant Member at Large position. Peggy Reinhardt seconded; motion carried. Margaret Schuster will submit a request for Council Action to approve this appointment.
<i>Collaboration & Engagement</i>	The sub-committee watched an episode of the <i>Raising of America</i> documentary. The sub-committee has reached out to the Mayor's Cradle to K initiative and other interested parties. Details of local planned events will be provided at the October meeting.	
<i>Policy & Planning</i>	Jennie Meinz presented to the sub-committee in August; tonight is her full presentation. The PHAC has requested follow up on the June 4 meeting with Council Members Gordon & Bender regarding the recommendation for a Citizen's Housing Advisory committee. Margaret emailed both CMs and their staff to inquire about a follow up meeting.	

**Public Health Advisory Committee (PHAC)
Minutes**

Item	Discussion	Outcome
<p>Presentation: Structural and Cultural Supports and Barriers for Breastfeeding in Minneapolis Cultural Communities <i>Jennie Meinz, U of MN School of Public Health</i></p>	<p>Jennie Meinz presented her report of health care professionals' perspectives of practices, protective factors and barriers for breastfeeding in the African American, American Indian, Hispanic and Latino, Hmong and Somali communities with the identified goal of generating ideas for how the City of Minneapolis can create a more supportive breastfeeding environment.</p> <p>Using a qualitative research design with chain referral recruitment, she recruited 55 individuals and compiled the details from 40 interviews in her reported findings.</p> <p>In general, the State of Minnesota breastfeeding initiation and continuation rates are higher than the national average and close to or exceeding the Healthy People 2020 Goals for breastfeeding. However, racial and ethnic disparities exist in breastfeeding rates between the Minneapolis communities and within the communities included in the study (e.g., in the African American community, breastfeeding initiation rate was 90% at a southside clinic, which predominantly serves east African immigrant population, while at a northside clinic which predominantly serves US born residence the rate was 63%).</p> <p>Some key themes emerged across the communities:</p> <ol style="list-style-type: none"> 1. Breastfeeding is known to be good for babies, but specifics of the benefits were unknown and there was a general lack of knowledge on the benefits to the breastfeeding mom. There is a misperception that breast milk and formula are equivalent. 2. Post-partum support when women return home is critical, as is support from extended family, partner and friends. Although supports are available, not everyone can take advantage of those supports as some require health insurance, other supports are paid for out of pocket. 3. Education is available (Echo video, pre-natal checkups, some culture- and language-specific support) and there are some good policies in place such as breast pumps through ACA, Minnesota Healthy Baby Act, and laws for nursing in public. <p>There are also many barriers in common:</p> <ol style="list-style-type: none"> 1. Lack of family, partner, peer, and community support. 2. Negative public perception of breastfeeding. 3. Within the health care system, presumptions among staff that some groups 'always do this' or 'never do that'; staff are not equally informed, provide inconsistent information and practice; Doctors' time with mom/baby is too short; and, implementing Baby Friendly policies can be costly. 4. Lack of workplace and school support: maternity leave is often unavailable or too short; on-site locations and allowed time for breastfeeding or pumping are often inadequate or inconsistent. 5. Insufficient credentialing of lactation consultants to meet insurance reimbursement criteria; education/appointments are at a different location; gaps in language and culture-specific support and lack of ethnic diversity of healthcare providers. 	<p>This study was commissioned by the PHAC to identify current breastfeeding practices, supports currently in place to help promote and encourage breastfeeding, existing barriers to the same, and intervention ideas which would increase support and reduce barriers.</p>

**Public Health Advisory Committee (PHAC)
Minutes**

Item	Discussion	Outcome
	<p>Interviewed participants had these key recommendations:</p> <ol style="list-style-type: none"> 1. Launch a public awareness campaign to normalize breastfeeding 2. Identify and recognize breastfeeding friendly organizations; create obvious places to breastfeed 3. Improve coordination of breastfeeding resources 4. Enhance support for peer-to-peer programs through community health workers 5. Make lactation services readily available, accessible and culturally specific <p>From these, Jennie generated these potential next steps:</p> <ol style="list-style-type: none"> 1. Engage mothers/families in cultural communities for assistance in developing a public awareness campaign, with special effort to engage the American Indian community 2. Identify best practices from cities (some identified in her presentation) with successful programs; reach out to program staff for lessons learned and advice 3. Ask mayor/health department to publicly recognize organizations (health care organizations, employers, childcare facilities) who are Breastfeeding Friendly 4. Have the Health Department reach out to existing coalitions/partners (identified in her presentation) and begin a dialog on how the city can partner with them to better support breastfeeding 5. Expand home visiting/lactation services as part of the Mayor's Cradle to K initiative 6. Increase public lactation spaces 	<p>Good discussion during and after the presentation. It was suggested that Jennie make this presentation to interested City and department staff as several who were invited were unable to attend tonight. Margaret will facilitate this.</p>
<p>Department Updates- Gretchen Musicant</p>	<p>Gretchen shared the Health Department budget presentation. There was awareness and interest among City Council on the value and long-term benefit of investing in Public Health and how the PHAC serves as a resource in these areas.</p> <p>The Mayor and City Council are looking at ways to support working families. In April, the City Council passed a resolution to establish a workplace policies workgroup to consider state, regional, and city policy support for earned safe and sick time, fair scheduling, preventing wage theft, and living wages. City Council will have a study session on October 6 on this. Currently, proposal drafts are available for review and comments can be submitted minneapolismn.gov/workingfamiliesagenda through October 16.</p>	

**Public Health Advisory Committee (PHAC)
Minutes**

Item	Discussion	Outcome
Information Sharing – Dr. Happy Reynolds- Cook	The Phillips Indoor Pool has received funding; this is a great benefit to the City of Minneapolis. The PHAC wrote a letter of support several years ago supporting this effort. With the Super Bowl and other high profile events coming to Minneapolis, Happy recommended the PAC look at a plan to identify trafficking, reporting ‘how to’, and PSA for different locations such as hotels, restaurants, bars and residents (renters, home owners).	
Dan Brady	On September 24, the Connecting Housing and Health: A Regional Forum in Minnesota will be held at the University of Minnesota, Humphrey School of Public Affairs.	
Julie Ring	The new Vikings stadium will have dedicated lactation rooms.	

Meeting adjourned at 8:00 p.m.

Next Sub-Committee Meeting: October 27, 2015, Minneapolis City Hall, Room 132 & 333, 6:00-8:00 p.m.

Next Full Committee Meeting: December 01, 2015, Minneapolis City Hall, Room 132, 6:00-8:00 p.m.

Structural and Cultural Supports and Barriers for Breastfeeding in Minneapolis Cultural Communities

Jennie Meinz

MPH Candidate, Maternal and Child Health
School of Public Health
September 22, 2015

Project adviser: Zobeida E. Bonilla, PhD, MPH

Committee members: Eileen M. Harwood, PhD & Katy B. Kozhimannil, PhD, MPA



UNIVERSITY OF MINNESOTA
Driven to DiscoverSM

Agenda

- Project summary
- Background and significance
- Conceptual framework
- Design, methodology and analysis
- Findings
- Recommendations and discussion



Project summary

“In recognition of the Health Department’s goal to support ‘A Healthy Start to Life and Learning,’ The Minneapolis Public Health Advisory Committee requested this study to support PHAC’s work identifying policy and systems-level opportunities to support breastfeeding.”

The goals of this study were to understand from the perspective of health professionals:

Research questions

1. The perceived practices, protective factors and barriers for breastfeeding in the African American, American Indian, Hispanic and Latino, Hmong and Somali communities; and
2. Generate ideas for how the city of Minneapolis can create a more supportive breastfeeding environment



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Background and significance: Local racial/ethnic disparities

Table 2. Healthy People 2020 Goals, Centers For Disease Control And Prevention Breastfeeding Report Card 2014, And Minnesota WIC Information System 2012 On Breastfeeding Initiation And Continuation By Race/Ethnicity

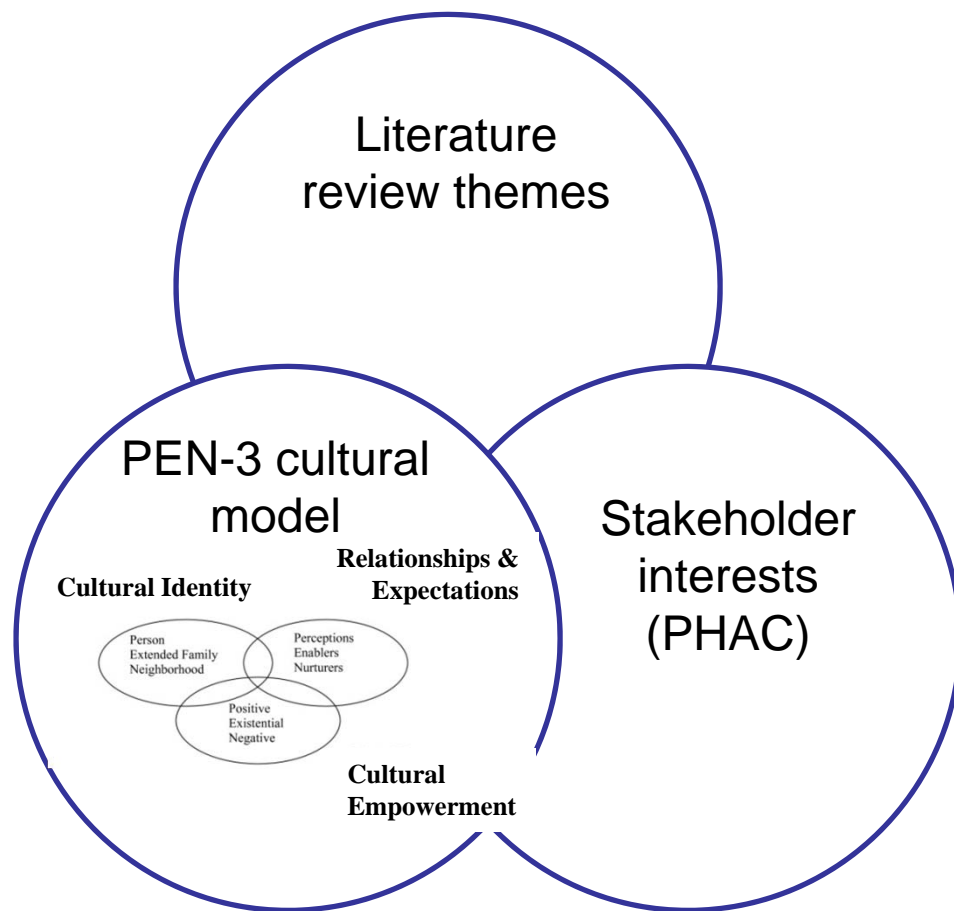
<i>Race/ethnicity</i>	<i>Breastfeeding</i>		
	<i>Initiation</i>	<i>At 6 months</i>	<i>At 12 months</i>
HealthyPeople 2020	81.9%	60.6%	34.1%
U.S. National 2014	79.2%	49.4%	26.7%
Minnesota 2014	89.2%	59.2%	34.6%
Minnesota WIC 2012	76.0%	32.1%	13.6%
American Indian, non-Hispanic	62.4%	16.5%	6.6%
Asian, non-Hispanic	61.3%	21.4%	9.9%
Black/African American, non-Hispanic	76.9%	38.8%	15.4%
White, non-Hispanic	75.9%	27.7%	11.2%
American Indian, Hispanic	87.9%	50.0%	29.0%
Other, Hispanic	75.8%	29.2%	9.8%
White, Hispanic	84.8%	40.8%	20.5%



Conceptual framework derived from 3 sources

4 key concepts identified to design interview questions and guide analysis:

1. Breastfeeding practices
2. Supports
3. Barriers
4. Intervention ideas



(24) Iwelunmor J, Newsome V, Airhihenbuwa CO. Framing the impact of culture on health: a systematic review of the PEN-3 cultural model and its application in public health research and interventions. *Ethnicity & health* 2014;19(1):20-46.



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Design, methodology and analysis

- Qualitative research design
- Semi-structured, in-depth interviews with key informants (healthcare providers, doulas, community leaders)
- 11 initial contacts – snowball sampling – 55 recruited, 40 included in findings
- Coded interview data based on conceptual framework (practices, supports, barriers, ideas)

Participants included in findings

Total #	Occupation/Role	Race - Self-identified cultural community	Cultural Community Served				
			<i>African American</i>	<i>American Indian</i>	<i>Hispanic/Latino</i>	<i>Hmong</i>	<i>Somali</i>
n=21	Healthcare Providers	White, African American	18	3	20	16	16
	Midwife, n=2						
	Hospital Lactation Consultant, IBCLC, n=2						
	Visiting Nurse, n=10						
	Hospital Nurse, n=2						
	MD (Pediatrician, Family Medicine, Med-Peds Hospitalist, Obstetrician), n=5						
n=2	Doulas	White	2	1	1	1	1
n=17	Community Leaders - work in organization that serves pregnant women and children, either directly interact with families or supervise staff who do. (e.g. Case Manager, Program Manager, Educator, Nutritionist)	White, African American, African, Asian, Somali, Filipina, Guatemalan, Peruvian, Hmong	10	4	7	7	10
n=40			n=30	n=8	n=28	n=24	n=27



Breastfeeding practices - Somali

Key findings reported:

- Want to breastfeed and believe it's good for their baby
- Supplement with formula
- Value larger sized babies
- Lack of knowledge of value of colostrum
- Experience different post-partum practices in the United States compared to Somalia

- N=27 participants provided information about breastfeeding (16 healthcare providers, 1 doula, 10 community leaders)
- Professionals from different roles reported similar observations

"In our culture and our faith it is recommended. It is intertwined in our faith to breastfeed up to 2 years. So the majority of the women are willing to breastfeed and they do try it...to breastfeed."

Somali Community Leader

"Some of the challenges that I try to address is they like to do both. So they like to breastfeed and they like to also bottle feed, supplement with formula. And that is, I think, a belief that kids are going to thrive more, grow more, when you do both and that just breast milk is not enough. And, I don't know where that myth kind of comes from that breast milk is not enough..."

Somali Community Leader

"In Somalia women had a lot of help. Like a mom would come, or mother-in-law or sister would come. And you know she wouldn't have to cook, and somebody would help take care of other children in the home, and somebody would help with the baby through the night. So there was a lot more help. And here there isn't that help."

Somali Community Leader



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Breastfeeding practices - African American

Key findings reported:

- Resurgence in initiation among teens
- Lack of support from mothers and grandmothers
- Partners believe breasts are sexual and not for feeding
- Perception that Black women don't breastfeed in public

"I also hear that my mom didn't do it, so it wasn't something that I really thought of...they don't have, a lot of them don't have, kind of, that mother figure person that kind of helps them with..."

African American community leader

"...this is more teens. Breasts are for their boyfriends, not for their baby. I've heard that. I've been told that. They are sexual, they are sexualized...so they can't serve dual purposes."

African American midwife

"...the Black community, they're not doing it in public, they can't, you know, they forget that people wear a cover up, or that your breasts are not really exposed when you're nursing your baby...They just don't."

African American midwife

- N=30 participants provided information about breastfeeding (18 healthcare providers, 2 doulas, 10 community leaders)
- Professionals from different roles reported similar observations



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Breastfeeding practices - Hispanic/Latino

Key findings reported:

- Perceived family and cultural support
- Breastfeed for longer durations, know breastfeeding is good
- Experience different practices for breastfeeding in public compared to home country
- Supplement with formula

- N=28 participants provided information about breastfeeding (20 healthcare providers, 1 doula, 7 community leaders)
- Professionals from different roles reported similar observations

“They know. For our culture they know that breastfeeding is really good. They know that moms and grandmas, they did. And they want...they want to breastfeed.”

Peruvian community leader

“...in my culture...mom works with the baby on the back, hugging the back...every time the baby wants to nurse just go somewhere...and breastfeed, and work or sit down on the street and breastfeed it. That’s normal, you know. And moms here change, when they came here they change all what they know, all what they think, all the beautiful, beautiful culture they got they lose here because of the difference.”

Peruvian community leader

“Within that 10 days after post-partum...so when I see them they’re already, some are giving formula already, they do breastfeed, but they do supplement a little bit...”

Filipina community leader



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Breastfeeding practices - Hmong

Key findings reported:

- Younger moms breastfeeding
- Low breastfeeding initiation and duration
- Cultural belief that other people should not handle a woman's breast milk
- Supplement with formula, perceive formula as healthy
- Perceive that Americans don't breastfeed

- N=24 participants provided information about breastfeeding (16 healthcare providers, 1 doula, 7 community leaders)
- Professionals from different roles reported similar observations

"Our Asian community is probably pretty low in initiation. Or they are quick to move to formula if they start. They'll probably do it [breastfeeding] for the first 6-8 weeks but then they...return to work or to school..."

Caucasian visiting nurse

"Some Hmong families believe that no one else should touch or handle a woman's breast milk except for herself or they will have bad luck...with this you will find grandparents or relatives who care for a breastfed infant request formula so they can help care for baby."

Hmong community leader

"Originally I saw mostly Hmong women who were fairly recent immigrants and...almost none of them breastfed originally... they had ...kids overseas and breastfed all of them but...viewed coming to America as wanting to do what Americans do...and so one of the barriers that jumped out is that of course in some countries breastfeeding your baby in public, for example, is common place...I think their perception was that people just didn't do it because they didn't see it happening."

Caucasian midwife



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Breastfeeding practices - American Indian

Key findings reported:

- Low initiation and duration of breastfeeding
- Lack of support from family and their culture
- Lack of knowledge about whether substances are passed to the baby through breast milk

"Not a lot of breastfeeding happening from everything that I hear, unfortunately. There is from what I can get a sense of, a younger new generation that's interested in it and wants to try, and what I heard over and over is 'no support, no support'. Surprisingly, to me, from mom, a lot of time, or older families members, aunts and whomever, and not a lot of support from husbands or from partner or from the child's father."

Caucasian community leader

"...The women knew that substances would get into baby via breastfeeding. And some of the agencies even were hesitant to promote breastfeeding at all because of the high substance use and the risk there."

Caucasian community leader

- N=8 participants provided information about breastfeeding (3 healthcare providers, 1 doula, 4 community leaders)
- 3 community leaders and 1 midwife roles reported similar observations



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Breastfeeding practices – across communities

Key findings reported:

- Know breastfeeding is healthy for babies but don't cite specific health benefits
- Perceive breast milk and formula as equivalent
- Maternal benefits less known

"So, when Baby Friendly was here they audit the mothers, so one of the things they say is 'tell us the health benefits of breastfeeding'. And most of the moms, like when we first started, they could all say it was healthy for babies but they couldn't really give you any health benefits...they know it's healthy, I don't think people have a good understanding about the risks of formula..."

Caucasian doctor

"I think in general, most women have heard that breastfeeding is good, that it's good for babies. I would say that many women don't know the benefits of breastfeeding for themselves. The maternal benefits are less known. Many women think that breast milk...still believe that breast milk and formula are kind of equivalent, that it's calories no matter what."

Caucasian doctor

- N=40 participants provided information about breastfeeding (21 healthcare providers, 2 doula, 17 community leaders)
- Professionals from different roles reported similar observations



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Supports

6 key themes emerged:

1. Post-partum support when women return home is critical
2. Extended family, partner and friends
3. Other mothers
 - WIC Peer Counseling, doulas (Everyday Miracles, Somali Doula Program), Baby Cafes
4. Within the healthcare system
 - Lactation consultants, Baby-Friendly Hospital Initiative (7), training healthcare staff, donor milk depot
5. Education
 - Echo video, pre-natal checkups, some culture- and language-specific support
6. Policies
 - Breast pumps through ACA, Minnesota Healthy Baby Act, laws for nursing in public

- N=40 participants provided information about breastfeeding (21 healthcare providers, 2 doula, 17 community leaders)
- Professionals from different roles reported similar observations

*“I see babies in the hospital and then **one of the key times of care would be within the first week, or that first post-partum visit in the clinic with the baby...**those are the times when moms have the most number of questions and the most trouble. Because often it’s the milk, secondary milk with her milk supply has come in, they’re engorged at 4-5 days, maybe baby’s not latching...within the first week.*

Caucasian doctor

“There is a certain level of support women can get informally from their moms, their grandmas, whoever is around them, a lot of times their peers, their best friends.”

Caucasian doula

“People talk about WIC, and the breastfeeding support through WIC...peer educators...being able to talk to a lactation consultant, or a doula...”

-African community leader

“The Healthy Baby Act is what’s being proposed...the bill is to license IBCLCs”

Caucasian doctor



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Barriers

6 key themes emerged:

1. Lack of family, partner, peer and community support
2. Negative public perception, especially about breastfeeding in public
3. Barriers within the health system, health policies and with health providers
 - Racism, discrimination, assumptions of staff
 - Lack of staff knowledge
 - Lack of coordination of care
 - Doctors short on time
 - Baby Friendly costly

- N=40 participants provided information about breastfeeding (21 healthcare providers, 2 doula, 17 community leaders)
- Professionals from different roles reported similar observations

“Lack of support for breastfeeding from spouse, partner, grandparents, employers”

Caucasian doctor

*“The DJs need to talk about breastfeeding in a positive way. And **even the women DJs feed into it. They need to not talk about how disgusting it is for a woman to be breastfeeding her baby at a restaurant.** Everyone is driving in their car listening...there’s like 50 thousand – a 100 thousand people listening to them talk about how breastfeeding is disgusting.”*

Caucasian hospital nurse

“I’ve seen...a number of Somali women it’s been, you know, their third baby and now they’re exclusively breastfeeding when they weren’t before because they really didn’t know...there are biases and stereotypes that if you have a staff that says ‘oh, Somali women always supplement’ and a Somali woman asks for formula, ‘oh, yeah they always do that...’”

Caucasian doctor

“...the baby has low blood sugar and formula is given pretty quickly ...I think nurses don’t know or don’t have the confidence that you can breastfeed...or that you can use colostrum...a number of our sites have started using pasteurized human milk.”

Caucasian doctor

“And so if there isn’t the support for moms right then and there, like in the setting where they are, that’s where a lot of missed opportunities are. Because I think that a lot of times if moms are then referred to lactation...then they have to schlep across town to go to another place to get the lactation care...”

Caucasian doctor



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Barriers

6 key themes emerged:

4. Lack of workplace and school support

- Short maternity leave, time and space to pump, type of job

5. Inconsistent messages and disconnected resources

- Inconsistent access to lactation
- Variability in lactation training credentials
- Lack of connectedness between OB and Pediatrician
- Prenatal education moved to Amma Parenting Center

6. Gap in language- and culture-specific support

- Lack of information and visuals
- Lack of ethnic diversity of healthcare providers

- N=40 participants provided information about breastfeeding (21 healthcare providers, 2 doula, 17 community leaders)
- Professionals from different roles reported similar observations

“Lack of time off from work, workplace support and legal protection for pumping”

Caucasian doctor

“there are IBCLCs out there in the community, they’re not particularly accessible I think depending on who you are and the ability to pay for those services, because, you know, IBCLCs aren’t licensed right now...”

Asian community leader

“Connectedness between your OB and your pediatrician...your OB person takes care of mom, and the Pediatrician is the baby’s with the breastfeeding...but they don’t really always support the same thing in breastfeeding, or talk to the mom about the same thing...but I still hear there’s a disconnect between...or even medications...like if you have a cesarean or something, you hear this, the doctor said, oh you have to stop breastfeeding because...”

Caucasian community leader

“if we’re using an interpreter then there’s no sense to ask whether they’ve taken a class because the class is only offered in English...I mean that [our hospital] offers.”

Caucasian doctor

“not everyone needs an IBCLC to help them breastfeed, but there are very few, if any, very few IBCLCs of different cultures...Native American...Hmong...African American...”

Asian community leader



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Ideas

Q: What are your ideas for ways the city of Minneapolis could better support breastfeeding families?

5 key themes emerged:

1. Launch a public awareness campaign to normalize breastfeeding
 - Positive
 - Visuals in maternity facilities, stories, cultural birth art, nursing cover-ups from beautiful fabric
 - Tag-lines
 - Cultural champions (Imams)
2. Recognize breastfeeding friendly organizations and create obvious places to breastfeed

- N=40 participants provided information about breastfeeding (21 healthcare providers, 2 doula, 17 community leaders)
- Professionals from different roles reported similar observations

“public perception is something I think the city of Minneapolis could do a little more about.”

Caucasian doula

“Get at the young women. Young women do nurse and the decision to do that really needs to be celebrated. The girl from the hood – 16-, 17-years-old nursing her baby, that’s a proud image.”

African American community leader

“People like me breastfeed”

“I breastfeed because...”

“Let’s normalize breastfeeding”

“Help people ‘see’ breastfeeding.”

“We are a breastfeeding friendly city”

African American and Caucasian community leaders, doctors, visiting nurses

“Feature and recognize Minneapolis businesses, healthcare providers, childcare providers that do a great job supporting breastfeeding families...if you can get one big company...on board...and then Minneapolis saying, we’ll give you a certificate, we’ll feature you in our newsletters...”

Asian community leader

“mobile lactation units...they’re like little pods... when you go to something at a convention center, there’s no place to nurse...places can buy or rent these...it’s a room on wheels basically...”

Caucasian community leader



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Ideas

Q: What are your ideas for ways the city of Minneapolis could better support breastfeeding families?

5 key themes emerged:

3. Make lactation services more available, accessible and culturally specific

- More on-site
- Home visiting lactation
- Diversify IBCLCs

4. Enhance support for peer-to-peer programs through community health workers

- peer counseling and doulas

- N=40 participants provided information about breastfeeding (21 healthcare providers, 2 doula, 17 community leaders)
- Professionals from different roles reported similar observations

"I would really recommend on-site lactation support in every single pediatric and family practice clinic in the city of Minneapolis..."

Caucasian doctor

"lactation consultant home visiting...I think that would be wonderful from our perspective...someone to come to your home..."

Caucasian visiting nurse

"Encourage clinics/hospitals to have community health workers who are trained as a peer breastfeeding counselor"

Asian community leader

"Hospitals are interested in having their own peer program...WIC could provide the training...this is where I think partnerships...partnerships where there is this model [peer counseling]"

Asian community leader

"I would really work with more of the community health workers. I think they know the cultures way better than any of us. I know my culture, but I don't know other people's culture and what's important and how to impact them the most. So I think if we could put more money into the community health workers, getting people into their homes, meeting people where they're at, giving them the information about what is impactful for them. I think we could really do a lot more."

Caucasian hospital nurse



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Ideas

Q: What are your ideas for ways the city of Minneapolis could better support breastfeeding families?

5 key themes emerged:

5. Improve coordination of breastfeeding resources
 - Partner on existing coalitions
 - Breastfeeding support centers in the community

- N=40 participants provided information about breastfeeding (21 healthcare providers, 2 doula, 17 community leaders)
- Professionals from different roles reported similar observations

*“the importance of breast milk and breastfeeding is a public health issue and not a lifestyle issue. **And that we need to promote healthy infant feeding in the state of Minnesota or in the City of Minneapolis and create a web of support to help moms reach their infant feeding goals throughout the entire lactation continuum** - from preconception, prenatal, immediate post partum and pediatric care.”*

Caucasian doctor

“I would say... just having a coordinated group effort that targets all walks of life, all pregnant moms, to make sure they have the right education to make informed choices. And support them, support their breastfeeding.”

Caucasian doctor

“Hennepin County breastfeeding coalition...the city would be a great partner...”

Caucasian community leader

*“I would definitely... **it would be great if the city of Minneapolis and the Minnesota Department of Health, and the Minnesota Hospital Association, or whoever, would work together and make a year-long support program that was available to all people regardless of payments**... they could have little community centers throughout...North Minneapolis...not WIC, but...they could have a lactation consultant, a scale to weigh kids, and make something more available to the community...so in their community...kind of like a birth center, but a breastfeeding support center”*

Caucasian doctor



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Summary of participants' key recommendations

1. Launch a public awareness campaign to normalize breastfeeding
2. Identify and recognize breastfeeding friendly organizations and create obvious places to breastfeed
3. Improve coordination of breastfeeding resources
4. Enhance support for peer-to-peer programs through community health workers
5. Make lactation services more available, accessible and culturally specific



Potential next steps

1. Engage mothers/families in cultural communities for assistance in developing a public awareness campaign, with special effort to engage the American Indian community
2. Identify best practices from cities with successful programming and reach out to program staff for lessons learned and advice
 - [Latch On NYC](#)
 - [HealthConnectOne](#) (Chicago)
 - [MOMobile concept](#) of Maternity Care Coalition in Philadelphia
 - Brookings, South Dakota [Baby-Friendly Brookings project](#)
3. Ask mayor/health department to publicly recognize organizations (health care organizations, employers, childcare facilities) who are Breastfeeding Friendly
 - [Minnesota Department of Health – Breastfeeding Friendly](#)



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Potential next steps

4. Have the Health Department reach out to existing coalitions/partners to begin dialog on how the city can partner with them to better support breastfeeding
 - [Minnesota Breastfeeding Coalition](#)
 - [Hennepin County Breastfeeding Coalition](#)
 - [Minnesota Hospital Association](#)
 - [Minnesota Community Health Worker Alliance](#)
5. Expand home visiting/lactation services as part of the Mayor's Cradle to K initiative
6. Increase public lactation spaces
 - [Mamava Lactation Suite](#)



Thank you to the participating organizations!

- Abbott Northwestern and Children's Hospitals and Clinics of Minnesota
- Allina Home Health-Mother and Newborn/Abbott Northwestern Campus
- Central Pediatrics, St. Paul and Woodbury
- Cultural Wellness Center
- Everyday Miracles
- Fairview Clinics – Riverside
- Hennepin County Medical Center
- Hennepin County Medical Center Richfield Clinic
- Hennepin County WIC
- Indian Health Board
- Minneapolis Health Department
- Minnesota Breastfeeding Coalition
- Minnesota Department of Health
- MVNA
- North Memorial Medical Center
- North Memorial Midwifery Care
- Northside Achievement Zone
- The Peoples Center Health Services
- The Family Partnership
- University of Minnesota Masonic Children's Hospital
- University of Minnesota Medical Center - Fairview Riverside
- Women's Health Consultants, PA, a Member of the Allina Integrated Medical Network/Abbott



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QUESTIONS?

DISCUSSION!



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**FOLLOWING SLIDES NOT FOR
PUBLIC PRESENTATION ON
9/22 – ONLY IF QUESTIONS**



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Background and significance: Importance of breastfeeding

- Breastfeeding is important for the healthy development of infants and the health outcomes of mothers
- National and international health organizations advocate for exclusive breastfeeding through 6 months and continued breastfeeding with complementary foods through 1+ years

American Academy of Pediatrics

“exclusive breastfeeding for about six months, followed by continued breastfeeding as complementary foods are introduced, with continuation of breastfeeding for 1 year or longer as mutually desired by mother and infant” and emphasizes that **“infant nutrition should be considered a public health issue and not only a lifestyle choice.”** (1,4,11,16,17)

World Health Organization

“exclusive breastfeeding through six months and continued breastfeeding with complementary foods until up to two years of age or beyond” (4,7)

In **2011 the U.S. Surgeon General** issued a special call to action to support breastfeeding.(6)



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Background and significance: Current breastfeeding rates

Table 1. Healthy People 2020 Goals, Centers For Disease Control And Prevention Breastfeeding Report Card 2014, And Minnesota WIC Information System 2013 On Breastfeeding Initiation And Continuation(5,18,19)

<i>U.S./Minnesota/Minneapolis</i>	<i>Breastfeeding</i>				
	<i>Ever</i>	<i>At 6 months</i>	<i>At 12 months</i>	<i>Exclusive at 3 months</i>	<i>Exclusive at 6 months</i>
HealthyPeople 2020	81.9%	60.6%	34.1%	46.2%	25.5%
U.S. National 2014	79.2%	49.4%	26.7%	40.7%	18.8%
Minnesota 2014	89.2%	59.2%	34.6%	48.5%	23.5%
Minnesota WIC 2013	77.6%	37.0%	27.2%		
Minneapolis WIC 2013	79.3%	48.1%	38.4%		

Key Takeaways

- Most national, Minnesota and Minneapolis breastfeeding rates lag behind the HealthyPeople 2020 targets
- Good news – Minnesota overall rates higher than national rates in all categories
- Focus on improving breastfeeding continuation and exclusive breastfeeding among state and local WIC populations



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Background and significance: Racial/ethnic disparities in U.S.

Significant differences exist in breastfeeding rates

- **No racial or ethnic group – including White, non-Hispanic** – is meeting HealthyPeople 2020 goals for continued breastfeeding at 6 months and 12 months and exclusive breastfeeding at 3 months and 6 months;(15)
- **African American** women consistently have lowest rates of breastfeeding initiation and continuation at 6 and 12 months;(1,15,16,20,21)
- At 6 months and 12 months post partum **Asian** women have highest rates of any breastfeeding;(16,21)
- **Hispanic** mothers have among the highest rates of breastfeeding initiation and continuation among all U.S. women, but they also are more likely than other racial/ethnic groups to supplement with formula in the first two days of life;(15,16)
- There is a **gap in the literature** on breastfeeding practices among **American Indian and Native American** women.(15,16)
- U.S. national data do not report breastfeeding outcomes for racial/ethnic subgroups, which hides **variability in practices among ethnic subgroups** (e.g. Somali, Hmong, Puerto Rican, Dominican, Mexican);(15,16)



Conceptual framework: Literature review themes

- Breastfeeding practices
 - Predictors of intention to feed (10)
 - Mother's income associated with whether she breastfeeds as long as desired (10,15,17)
- Structural supports
 - CDC measures for all women(5,18)
 - Supports for racial/ethnic minority women (15,16,30)
- Barriers to breastfeeding
 - Well-documented for all women (6,15)
 - Some barriers may disproportionately impact ethnic minority and low income women
- Selected community actions
 - Best Fed Beginnings and Baby-Friendly, Latch on NYC, Peer Counseling, Minnesota Healthy Baby Act

‘Latch On NYC’ hospital poster



Source: <http://www.nyc.gov/html/doh/pregnancy/html/after/latchonnyc-hospital-posters.shtml>

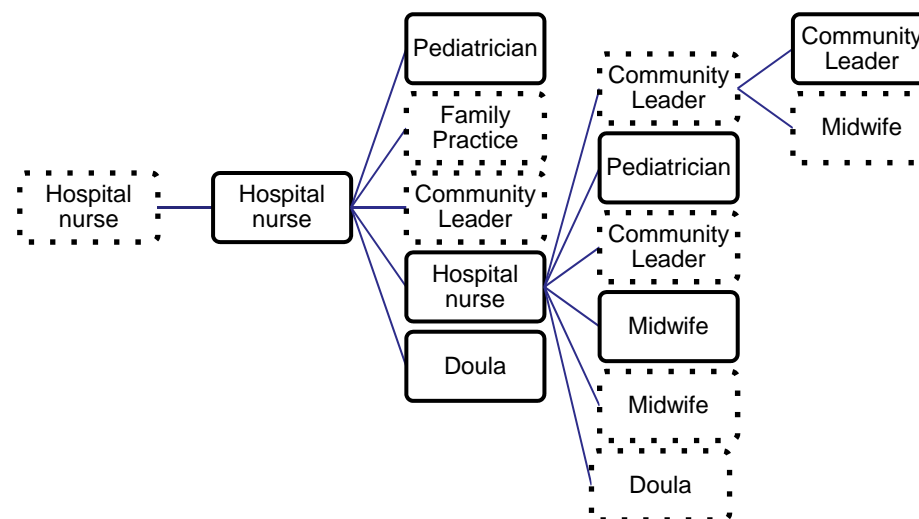


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Study design and methodology

- Qualitative research design
- Semi-structured, in-depth interviews with key informants
 - Used free-listing technique for barriers question #5
- Selection criteria
 - Served pregnant and post-partum mothers, children and families in Minneapolis
 - Professional role – healthcare providers, doulas, community leaders
 - Served a cultural community of interest, most worked with multiple communities
- Sampling procedures
 - Purposeful, non-random
 - Snowball sampling, with chain-referral recruitment
 - 11 initial contacts from PHAC classified per primary role – Healthcare provider, community leader, doula
 - Process started 9 snowballs

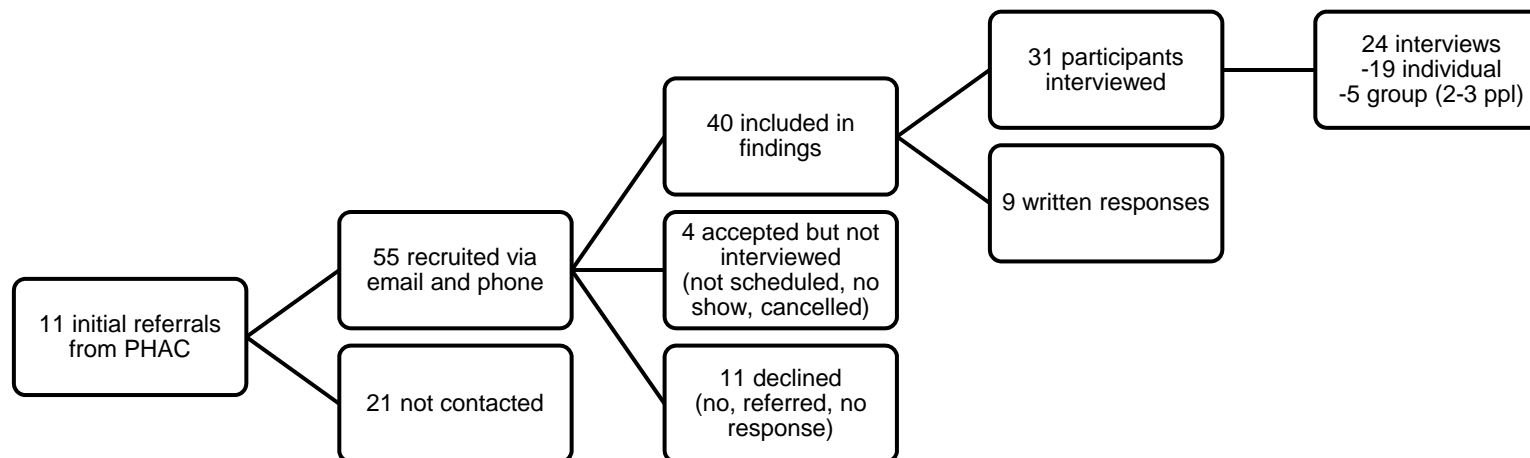
1 of the 9 snowballs started



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Study design and methodology

- Recruitment flow



- Data collection tools: interview guide, barriers sheet, interview guide advance copy, recruitment emails
- Data recorded by notes and digital audio recordings of interview



Analysis

- Conceptual framework and 4 key concepts guided analysis
- Typed notes and expanded by listening to audio recording
 - Quotes obtained verbatim from audio recording
- NVivo used for data management, organization and analysis
- First coding cycle
 - Data analyzed using initial set of codes derived from conceptual framework (practices, supports, barriers, and ideas)
 - 1 additional coded added (advice) and linked to question #7
 - Open coding revealed 71 additional sub-themes
- Second coding cycle
 - Grouped similar sub-themes into categories
- Final codebook developed – consisted of 4 initial main categories, each with 5-6 sub-themes



References

- (1) Breastfeeding and the use of human milk. *Pediatrics* 2012;129(3):e827-e841.
- (2) Stuebe AM, Bonuck K. What predicts intent to breastfeed exclusively? Breastfeeding knowledge, attitudes, and beliefs in a diverse urban population. *Breastfeeding medicine* 2011;6(6):413-420.
- (3) Stuebe AM, Schwarz EB. The risks and benefits of infant feeding practices for women and their children. *Journal of perinatology* 2010;30(3):155-162.
- (4) Ip S, Chung M, Raman G, Chew P, Magula N, DeVine D, et al. Breastfeeding and maternal and infant health outcomes in developed countries. *Evid Rep Technol Assess (Full Rep)* 2007 Apr;(153)(153):1-186.
- (5) Bartick M, Reinhold A. The burden of suboptimal breastfeeding in the United States: a pediatric cost analysis. *Pediatrics* 2010;125(5):e1048-e1056.
- (6) Gurka KK, Hornsby PP, Drake E, Mulvihill EM, Kinsey EN, Yitayew MS, et al. Exploring intended infant feeding decisions among low-income women. *Breastfeeding medicine* 2014;9(8):377-384.
- (7) Ware JL, Webb L, Levy M. Barriers to breastfeeding in the African American population of Shelby County, Tennessee. *Breastfeeding medicine* 2014;9(8):385-392.
- (8) Stuebe AM. Enabling women to achieve their breastfeeding goals. *Obstet Gynecol* 2014 Mar;123(3):643-652.
- (9) Bartick MC, Stuebe AM, Schwarz EB, Luongo C, Reinhold AG, Foster EM. Cost analysis of maternal disease associated with suboptimal breastfeeding. *Obstetrics and gynecology* 2013;122(1):111-119.
- (10) World Health Organization. Health Topics: Breastfeeding. 2015; Available at: <http://www.who.int/topics/breastfeeding/en/>. Accessed July 18, 2015.
- (11) Centers for Disease Control and Prevention. Breastfeeding Report Card, 2014. 2014.
- (12) Minnesota WIC Information System. Breastfeeding Initiation and Duration at Three, Six and Twelve Months for Infants Participating in Minnesota WIC Born During Calendar Year 2013 by City of Residence. Minnesota WIC Program: 2015. 2015.
- (13) Minnesota WIC Information System. Breastfeeding Initiation and Duration at Three, Six and Twelve Months for Minnesota WIC Infants Born During Calendar Year 2012 by City of Residence and by Race/Ethnicity Alone Or In Combination (AOIC) with Other Races. 2014.
- (14) Airhihenbuwa CO, Ford CL, Iwelunmor JI. Why culture matters in health interventions: lessons from HIV/AIDS stigma and NCDs. *Health education & behavior* 2014;41(1):78-84.
- (15) Airhihenbuwa CO. *Health and Culture: Beyond the Western Paradigm*. California: Sage Publications; 1995.
- (16) Minnesota House of Representatives. HF 2322. 2015; Available at: <https://www.revisor.mn.gov/bills/bill.php?f=HF2322&y=2015&ssn=0&b=house>. Accessed July 23, 2015.
- (17) Minnesota Senate. SF 2154. 2015; Available at: http://www.senate.leg.state.mn.us/bills/billinf.php?billnum=SF2154&ls=89&special_session=20150. Accessed July 23, 2015.



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References

- (18) Gartner LM, Morton J, Lawrence RA, Naylor AJ, O'Hare D, Schanler RJ, et al. Breastfeeding and the use of human milk. *Pediatrics* 2005 Feb;115(2):496-506.
- (19) U.S. Department of Health and Human Services. HealthyPeople 2020 Topics and Objectives: Maternal, Infant, and Child Health. 2015; Available at: <http://www.healthypeople.gov/2020/topics-objectives/topic/maternal-infant-and-child-health/objectives>. Accessed July 18, 2015.
- (20) Executive summary: The Surgeon General's call to action to support breastfeeding. *Breastfeeding medicine* 2011;6(1):3-5.
- (21) Bartick MC, Stuebe AM, Schwarz EB, Luongo C, Reinhold AG, Foster EM. Cost analysis of maternal disease associated with suboptimal breastfeeding. *Obstetrics and gynecology* 2013;122(1):111-119.
- (22) Jones KM, Power ML, Queenan JT, Schulkin J. Racial and ethnic disparities in breastfeeding. *Breastfeeding medicine* 2015;10(4):186-196.
- (23) Chapman DJ, Perez-Escamilla R. Breastfeeding among minority women: moving from risk factors to interventions. *Adv Nutr* 2012 Jan;3(1):95-104.
- (24) Declercq ER, Sakala C, Corry MP, Applebaum S, Herrlich A. Listening to Mothers III: New Mothers Speak Out. *Childbirth Connection* 2013(June).
- (25) Baby-Friendly USA. Baby-Friendly Hospital Initiative. 2015; Available at: <https://www.babyfriendlyusa.org/about-us/baby-friendly-hospital-initiative>. Accessed September 19, 2015.
- (26) United States Department of Agriculture Food and Nutrition Services. Women, Infants, and Children (WIC). 2015; Available at: <http://www.fns.usda.gov/wic/women-infants-and-children-wic>. Accessed September 19, 2015.
- (27) Progress in increasing breastfeeding and reducing racial/ethnic differences - United States, 2000-2008 births. *Morbidity and mortality weekly report* 2013;62(5):77-80.
- (28) Racial and ethnic differences in breastfeeding initiation and duration, by state - National Immunization Survey, United States, 2004-2008. *Morbidity and mortality weekly report* 2010;59(11):327-334.
- (29) Shafai T, Mustafa M, Hild T. Promotion of exclusive breastfeeding in low-income families by improving the WIC food package for breastfeeding mothers. *Breastfeeding medicine* 2014;9(8):375-376.
- (30) Iwelunmor J, Newsome V, Airhihenbuwa CO. Framing the impact of culture on health: a systematic review of the PEN-3 cultural model and its application in public health research and interventions. *Ethnicity & health* 2014;19(1):20-46.
- (31) Declercq ER, Sakala C, Corry MP, Applebaum S, Herrlich A. Listening to Mothers III: Pregnancy and Birth. *Childbirth Connection* 2013(May).
- (32) Eckhardt CL, Lutz T, Karanja N, Jobe JB, Maupomé G, Ritenbaugh C. Knowledge, attitudes, and beliefs that can influence infant feeding practices in American Indian mothers. *Journal of the Academy of Nutrition and Dietetics* 2014;114(10):1587-1593.
- (33) Centers for Disease Control and Prevention. Action Guides: Communities in Action. 2015; Available at: http://www.cdc.gov/breastfeeding/pdf/actionguides/Communities_in_Action.pdf. Accessed July 23, 2015.



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References

- (34) Pérez-Escamilla R. Breastfeeding social marketing: lessons learned from USDA's "Loving Support" campaign. *Breastfeeding medicine* 2012;7(5):358-363.
- (35) Anderson AK, Damio G, Young S, Chapman DJ, Perez-Escamilla R. A randomized trial assessing the efficacy of peer counseling on exclusive breastfeeding in a predominantly Latina low-income community. *Arch Pediatr Adolesc Med* 2005 Sep;159(9):836-841.
- (36) Dyson L, McCormick F, Renfrew MJ. Interventions for promoting the initiation of breastfeeding. *Cochrane Database Syst Rev* 2005 Apr 18;(2):CD001688.
- (37) Kozhimannil KB, Attanasio LB, Hardeman RR, O'Brien M. Doula care supports near-universal breastfeeding initiation among diverse, low-income women. *Journal of midwifery & women's health* ;58(4):378-382.
- (38) Bonuck KA, Trombley M, Freeman K, McKee D. Randomized, controlled trial of a prenatal and postnatal lactation consultant intervention on duration and intensity of breastfeeding up to 12 months. *Pediatrics* 2005 Dec;116(6):1413-1426.
- (39) Chapman DJ, Damio G, Young S, Perez-Escamilla R. Effectiveness of breastfeeding peer counseling in a low-income, predominantly Latina population: a randomized controlled trial. *Arch Pediatr Adolesc Med* 2004 Sep;158(9):897-902.
- (40) Ryser FG. Breastfeeding attitudes, intention, and initiation in low-income women: the effect of the best start program. *J Hum Lact* 2004 Aug;20(3):300-305.
- (41) Wolffberg AJ, Michels KB, Shields W, O'Campo P, Bronner Y, Bienstock J. Dads as breastfeeding advocates: results from a randomized controlled trial of an educational intervention. *Am J Obstet Gynecol* 2004 Sep;191(3):708-712.
- (42) National Institute for Children's Health Quality. Projects: Best Fed Beginnings. 2015; Available at: <http://breastfeeding.nichq.org/solutions/best-fed-beginnings>. Accessed July 23, 2015.
- (43) National Institute for Children's Health Quality. Projects: New York State Breastfeeding Quality Improvement in Hospitals (BQIH) Collaborative. 2015; Available at: <http://breastfeeding.nichq.org/solutions/nys-breastfeeding>. Accessed July 23, 2015.
- (44) Health Resources and Services Administration, Maternal and Child Health. Business Case for Breastfeeding. 2015; Available at: <http://mchb.hrsa.gov/pregnancyandbeyond/breastfeeding/>. Accessed July 15, 2015.
- (45) The New York City Department of Health and Mental Hygiene. Breastfeeding: Latch On NYC. 2014; Available at: <http://www.nyc.gov/html/doh/pregnancy/html/after/breast-feeding-latchon.shtml>. Accessed July 23, 2015.
- (46) HealthConnect One. HealthConnect One. 2015; Available at: <http://www.healthconnectone.org/>. Accessed September 20, 2015.
- (47) South Dakota State University. SDSU receives a Bush Foundation Community Innovation Grant. 2013; Available at: <http://www.sdstate.edu/news/articles/sdsu-receives-a-bush-foundation-community-innovation-grant.cfm>. Accessed September 20, 2015.



References

- (48) Maternity Care Coalition. MOMobile. 2015; Available at: <http://maternitycarecoalition.org/professionals/services-for-families/momobile/>. Accessed September 20, 2015.
- (49) Minnesota Department of Health. Women, Infants and Children Program: How does WIC support breastfeeding? 2015; Available at: <http://www.health.state.mn.us/divs/fh/wic/bf/support.html>. Accessed July 23, 2015.
- (50) United States Department of Agriculture. Loving Support Makes Breastfeeding Work: Community Partners. 2015; Available at: <http://lovingsupport.nal.usda.gov/community-partners>. Accessed July 23, 2015.
- (51) Minnesota Breast Feeding Coalition. Beginning Baby Friendly Request for Proposals. 2015; Available at: <http://mnbreastfeedingcoalition.org/hospital-summit/>. Accessed July 23, 2015.
- (52) Minnesota Breastfeeding Coalition. Hospital Summit. 2015; Available at: <http://mnbreastfeedingcoalition.org/hospital-summit/>. Accessed July 23, 2015.
- (53) Everyday Miracles. Programs and Services. 2015; Available at: <http://www.everyday-miracles.org/services-and-classes/>. Accessed July 23, 2015.
- (54) Minnesota Department of Health. Breastfeeding Friendly Recognition. 2015; Available at: <http://www.health.state.mn.us/divs/oshii/bf/recognition.html>. Accessed July 15, 2015.
- (55) MVNA. Lactation Education and Home Visiting program grows. 2015; Available at: <http://www.mvna.org/2015/06/lactation-education-home-visiting-program-grows/>. Accessed September 20, 2015.
- (56) North Memorial Health Care. Breast Milk Depot. 2015; Available at: <https://www.northmemorial.com/milkdepot>. Accessed September 20, 2015.
- (57) Cohen D CB. RWJF Qualitative Research Guidelines Project: Semi-structured Interviews. 2006; Available at: <http://www.qualres.org/HomeSemi-3629.html>. Accessed July 2015, 2015.
- (58) Jonas JA, Davies EL, Keddem S, Barg FK, Fieldston ES. Freelisting on Costs and Value in Health Care by Pediatric Attending Physicians. *Academic pediatrics* ;15(4):461-466.
- (59) MACK N, WOODSONG C, MACQUEEN KM, GUEST G, NAMEY E. Qualitative Research Methods: A Data Collector's Field Guide. Family Health International 2005;ISBN: 0-939704-98-6.
- (60) Miles MB, Huberman MA, Saldana J editors. Qualitative data analysis: a methods sourcebook. Third ed. Thousand Oaks, California: Sage Publications, Inc.; 2014.
- (61) Krueger RA. Focus groups : a practical guide for applied research. 3rd ed.. ed. Thousand Oaks, Calif.: Thousand Oaks, Calif. : Sage Publications; 2000.
- (62) Valorose J, Dillon K, Schauben L, Alizaga N. Breastfeeding supports and challenges: mothers' perspectives on healthcare, worksites and social influences. 2010; Available at: <http://www.health.state.mn.us/divs/hpcd/chp/cdrr/earlychildhood/docsandpdf/Infantfeedingreport2010.pdf>. Accessed September 30, 2015.



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**Notes – Agenda for the Sub-Committees of the Public Health
Advisory Committee**

October 27, 2015, 6:00 – 8:00 pm

Minneapolis City Hall, Room 132 & Room 333

AGENDA

Agenda Item	Presenter	Time	Committee Action
Supper is served!	La Loma Tamales	5:45 – 6:00	
PHAC Logistics and Department Updates Sub-committee discussions: <i>Communications/Operations:</i> <i>Orientation with new members:</i> <i>Yolonda Adams-Lee & Cindy Hillyer</i> <i>Ethics training (as needed)</i> <i>Begin Year in Review for 2015 annual report</i> <i>Policy & Planning:</i> <i>City's earned sick time discussion</i> <i>Follow up on several presentations heard this year: Healthy Sleep; Homelessness; Adverse Childhood Experiences; and Breastfeeding report</i> <i>Collaboration & Engagement:</i> NO MEETING TONIGHT <i>We will meet at the November 10 Raising of America event, which begins at 5:30 p.m. at UROC, 2001 Plymouth Avenue North, Minneapolis</i>	<i>Margaret Schuster</i> <i>Karen Soderberg / Peggy Reinhardt</i> <i>Ben Somogyi, Aide to CM Lisa Bender</i> <i>Dan Brady</i>	6:00 – 6:05 6:05 - whenever committee business finished 6:05 – 6:30 6:30 – 8:00	

Next Meeting of the Full Committee: December 1, 2015*, Minneapolis City Hall, Room 132

*There is NO meeting in November. The PHAC voted to combine November and December meetings and meet only once in those two months. December 1 is the next meeting and the last meeting of the year.

For more information: [Public Health Advisory Committee - City of Minneapolis](#); presentations, agendas, and meeting minutes posted on Meeting Records page.

If there are any problems/changes the night of the meeting, please call 612-919-3855.

Overview of PHAC Topics: Second Half of 2015

Summary of Presentation by Jennie Meinz, “Structural and Cultural Supports and Barriers for Breastfeeding in Minneapolis Cultural Communities”

Based on interviews with 40 key stakeholders that serve the African American, American Indian, Hispanic and Latino, Hmong, and Somali communities in Minneapolis, the presentation summarized findings related to perceived breastfeeding practices, supports, and barriers, and ideas for interventions to promote breastfeeding friendly environments.

Key Findings	Implications
Participants noted a trend in the African American and Hmong communities toward higher interest in breastfeeding among the younger generation of mothers.	This generation may need additional peer and professional support to initiate and maintain breastfeeding.
The transition to home is the most critical time when women need support.	Greater investment in nurse home visiting is one way to provide this support, and aligns well with the Mayor’s Cradle to K Initiative.
Minneapolis has many perceived supports for breastfeeding, but they are not sufficiently connected, comprehensive, nor culturally appropriate.	There is a need for greater dialogue between different entities supporting breastfeeding women (e.g., healthcare systems, community educators and supports, city, county, WIC) to connect existing resources, create more culturally- and linguistically-appropriate resources, and ensure resources are located where women need them.

Next Steps for PHAC

1. **Attend** (1-2 PHAC members) Minneapolis Health Department “lunch and learn” presentation by Jennie to discuss MHD’s role and next steps (yet to be scheduled)
2. **Write** a letter to the Mayor describing the study and highlighting the findings related to the need for nurse home visiting/lactation services and peer-to-peer support and how this fits into the Cradle to K initiative.
3. **Write** a letter to support the Healthy Baby Act (also consider possible negative impact this could have on efforts to diversify the lactation support workforce).
4. **Discuss** if PHAC is the right entity to serve as a “convener” to begin dialog between existing coalitions/partners (e.g., MN Breastfeeding Coalition, Hennepin County Breastfeeding Coalition, MN Hospital Association, MN Community Health Worker Alliance) and the city of Minneapolis—is this already happening at another level and we should be informed about those discussions?
5. **Other ideas?**

Summary of Presentation on Homelessness

<p><i>Homelessness: Current situation and ways forward</i></p> <p>Mikkel Beckmen Heading Home Hennepin</p>	<p>Prior eras of increased homelessness in the United States include after the Civil War, the Great Depression, post-World War II and the Korean war and effected primarily combat veterans. Each of these was improved through increased Federal spending on housing subsidies. Between 1978 and 1982, the budget for Housing & Urban Development department decreased from 26% to 6% of the Federal budget while also shifting the available Federal money from housing market interventions (building housing) to tax credits for mortgages.</p> <p>Homelessness is significantly 'a poor people' condition (5-10% of people below the poverty line do not have stable housing) and social views on homelessness and social attitudes towards poor people help perpetuate homelessness.</p> <p>There are only two routes to ending homelessness – lowering the cost of housing (e.g., via subsidies, portable vouchers) and raising personal income (higher wages and higher benefits; most shelter residence makes less than \$15K/year, there are few instances of those making \$25K/year or more using shelters). Housing stability impacts every measureable outcome (e.g., health, education, employment) and stable housing is the essential platform for health and community life.</p>
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Next Steps for PHAC

1. **Engage** – Continue to press for a Public Health lens in the city's Comprehensive Plan. Re-engage CMs Gordon and Bender to discuss the idea of a Housing Advisory Committee to supplement the work CPED is doing.
2. **Collaborate** – Look for opportunities to support city-wide efforts that seek to address homelessness and apply the public health lens to those efforts. For example, could PHAC partner with organizations like The Citizens League to raise awareness and propose policy interventions?
3. **Other ideas?**

Summary of Presentation on Adverse Childhood Experiences (ACEs)

<p><i>Adverse Childhood Experiences (ACEs)</i></p> <p>Mark Sander, PsyD, LP</p>	<p>The ACE Study counted multiple types of childhood stressors (called Adverse Childhood Experiences, or ACEs) and measured a wide array of health and social problems. Participants self-identified in 10 categories of ACEs, rating each category as 0 (not present in their childhood) or 1 (present, regardless of frequency & severity). The ten category total is the ACE score (from 0 to 10). The number of ACEs show a very strong dose-response relationship; that is, the higher the ACE score, the higher the percentage of health and social problems for individuals with that score (from less than 10% for the group with a 0 ACE score to over 50% for the group with an ACE score of 5 or higher).</p> <p>When combined with new learnings about the effects of toxic stress on the developing brain, ACE researchers concluded that ACEs are the leading cause of health and social problems in our nation. Because many common health and social problems have a common cause - the powerful impact of ACEs throughout the life course - health and social problems are not separate issues, they are a strongly interconnected issue.</p> <p>Three protective systems interact and guide positive adaptation:</p> <ul style="list-style-type: none">- individual capabilities- attachment and belonging with caring and competent people- protective community, faith, and cultural processes <p>These three protective systems are nested: people do best when they are living in thriving families and communities, when they help one another to develop personal attributes, when they have a positive view of one's life and one's capabilities.</p> <p>Building community capacity is about helping people learn, manage and improve their efforts systematically, and about providing flexible funding, state of the art education, and direct supports that help mobilize everyone who wants to help. Because each community is unique, each successful community will travel that journey differently. Hence flexibility in approach is important to building resilience capacity.</p>
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Next Steps for PHAC

1. **Analyze** – Consider how this issue is interwoven with other issues (particularly those in this summary). What interventions might address ACEs along with related social health problems?
2. **Collaborate** – Look for opportunities to support city-wide efforts that seek to address the issue and apply the public health lens to those efforts.
3. **Other ideas?**

Summary of Presentation on Healthy Sleep

<p><i>Insufficient Sleep: An Invisible Public Health Concern</i></p> <p>J. Roxanne Prichard, Ph.D. Associate Professor of Psychology, University of St. Thomas</p>	<p>The majority of US children and adults do not get enough sleep. 25 percent of U.S. adults report insufficient sleep or rest at least 15 out of every 30 days.</p> <p>Healthy People 2020 has established the following sleep objectives:</p> <ul style="list-style-type: none"> • Increase the proportion of persons with symptoms of obstructive sleep apnea who seek medical evaluation. • Reduce the rate of vehicular crashes per 100 million miles traveled that are due to drowsy driving. • Increase the proportion of students in grades 9 through 12 who get sufficient sleep. • Increase the proportion of adults who get sufficient sleep. <p>Racial & Economic Disparities in Sleep</p> <ul style="list-style-type: none"> • People who work multiple jobs (15% of the workforce) are 61% more likely to report sleeping 6 hours or less on weekdays. • 25% of live-in domestic workers had responsibilities that prevented them from getting at least 5 hours of uninterrupted sleep during the week. • African-Americans are over 3x as likely as whites to report less than 5 hours of sleep, while Asians and non-Mexican Hispanics were 2.5x as likely. <p>Lack of sleep has documented deleterious effects on diet, mental health and physical health (diabetes and heart disease)</p> <p>Recommendations for potential policy action:</p> <ul style="list-style-type: none"> • Follow the American Academy of Pediatrics recommendations to start high schools no earlier than 8:30 AM. • Protect domestic workers' right to sufficient sleep. • Work to improve sleep environments, especially in lower income neighborhoods, through decreased noise and light pollution.
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Next Steps for PHAC

1. **Analyze** – Consider how this issue is interwoven with other issues in this summary and informs the City's Paid Sick Leave policy/referendum discussion and school start times. What steps can be taken by the PHAC to move the needle / provide input / connect the dots re: lack of healthy sleep and impact to persons who are not covered by paid sick leave, and to our children (and subsequently to Minneapolis school staff & teachers)?
2. **Collaborate** – Do opportunities exist to support city-wide efforts that seek to address healthy sleep (see recommendations above) and apply the public health lens to those efforts? For example, is this something that the Agenda for Working Families would address indirectly?
3. **Other ideas?**

from Birdie Cunningham:

There are MPLS Elementary schools that start at 7:30 AM.

Middle schools start at 8:00 or 8:30.

Below is the listing of High school hours:

Broadway ALC = 9:40 –4:15

Edison 8:15 –3:00

FAIR Downtown 8:40 –3:10

Henry 7:56 – 3:00

North Arts & Communication and North Summatech 8:00 –2:30

Roosevelt High School 8:10 – 3:00

South 8:30 –4:00

Southwest 8:30 – 3:00

Washburn 8:30 – 3:00

Wellstone 8:30 –4:00



Public Health Advisory Committee

December 1*, 2015, 6:00 – 8:00 pm

Minneapolis City Hall, Room 132

AGENDA

Agenda Item	Presenter	Time	Committee Action
Welcome and Introductions	Karen Soderberg	6:00	Approve agenda
PHAC Logistics and Updates Approve meeting minutes 2016 Meeting Schedule Reports from Sub-committees: <i>Communications/Operations:</i> <i>Update on member terms and progress on annual report</i> <i>Policy & Planning:</i> <i>Recommendations / suggested courses of action from summer's presentations</i> <i>Collaboration & Engagement:</i>	Karen Soderberg Karen Soderberg Dan Brady Margaret Schuster	6:05 – 6:20	Approve Minutes Approve 2016 schedule
Presentation from MHD staff <i>Air Quality Report</i>	Patrick Hanlon, Supervisor, Environmental Services; Jennie Lansing, Air study Coordinator	6:25 – 7:05 7:05 – 7:20	Informational report + Q & A / discussion
Commissioner Updates <i>MN Student Survey & the shape of the SHAPE survey</i> <i>Other updates</i>	Gretchen Musicant	7:25– 7:55	Informational / Discussion
Information Sharing Announcements, news to share, upcoming events	All	7:55 – 8:00	Informational

This is the last meeting of the year. Next meeting of the Full Committee is

January 26, 2016 Minneapolis City Hall, Room 132

*PHAC members voted to combine November & December meetings to avoid conflicts with national holidays.

For more information, visit our webpage: [Public Health Advisory Committee - City of Minneapolis](#)

We extend **hearty thanks** to the following members for their years of service: Dan Brady (At Large), Julie Ring (Ward 1), Abdullahi Sheikh (Ward 8), and Jennifer Pelletier (U of MN rep)

If there are any problems/changes the night of the meeting, please call 612-919-3855.

Public Health Advisory Committee (PHAC) Minutes

December 01, 2015

Members Present: Julie Ring, Sahra Noor, Harrison Kelner, Akisha Everett, Karen Soderberg, Sarah Jane Keaveny, Margaret (Peggy) Reinhardt, Birdie Cunningham, Silvia Perez, Cindy Hillyer, Jennifer Pelletier, Yolonda Adams-Lee, Daniel Brady

Members Excused: Autumn Chmielewski, Jane Auger, Joseph Colianni

Members Unexcused: Jahana Berry, Dr. Happy Reynolds-Cook, Abdullahi Sheikh, Dr. Rebecca Thoman

MHD Staff Present: Gretchen Musicant, Margaret Schuster, Don Moody

Guests: Patrick Hanlon, Jenni Lansing, Stepheny Ross, Kathy Tuzinski, Joseph Desenclos

Karen Soderberg called the meeting to order 6:00 p.m. at City Hall.

Item	Discussion	Outcome
Introduction	Members and guests introduced themselves.	
Agenda/Min Approval	September minutes were reviewed Members had no additions to the December agenda.	motion to approve minutes carried by unanimous consent 2016 schedule approved
2016 Meeting Schedule	2016 meeting schedule was reviewed	
Reports from Sub-committees: <i>Operations / Communication</i>	Orientation of all new members has been completed. Karen and Peggy are working on the 2015 Annual Report. Recognition for retiring members: Julie Ring, Abdullahi Sheikh, Jennifer Pelletier, Dan Brady, and Dr. Rebecca Thoman. New appointments for these seats will be submitted to Council for approval in January.	
<i>Policy & Planning</i>	In October, CM Lisa Bender's aide Ben Somogyi reported to sub-committee on Council action around Paid Sick & Safe Time; he suggested a letter of support for publicly supporting this concept. A letter was drafted. When finalized and reviewed by Health Department staff, a vote will be taken via email - preferably before the end of the year – in order to submit the letter to the working group established by Council. In 2016, the working group will outline components to any future ordinance in a report to the council. PHAC will review these details and consider a response to their report. For future discussion yet: Develop actionable items from 2015 presentations on Homelessness, Healthy Sleep, ACES, and the Breastfeeding Report for possible 2016 committee action / learning.	
<i>Collaboration & Engagement</i>	Jennie Meinz will present her final report and recommendations to Health Department staff and interested individuals on December 14. Sub-committee members and Health Department staff attended the <i>Raising of America</i> showings and discussions, including the November 9 Mayor Hodges event at Children's Hospital and the November 10 event at UROC. C&E members attended, in part, to learn about hosting community event(s) like these.	

Public Health Advisory Committee (PHAC)
Minutes

Item	Discussion	Outcome
<p>Presentation: Air Quality Report <i>Patrick Hanlon, MHD Environmental Initiatives Manager and Project Manager; Jenni Lansing, Air study Coordinator</i></p>	<p>Patrick and Jenni presented on the Minneapolis air quality study. Their presentation is included in the PHAC December 01, 2015 Meeting Materials packet. Key Points included:</p> <ul style="list-style-type: none"> • Overall, the air quality in Minneapolis is good, especially for an urban area of our size. However, even low levels of air pollution and VOCs continue to contribute to emergency room visits, serious illness and hospitalizations, and even early death. • Although the state does continuous air quality monitoring, the number of monitors is low. This two-year study was specifically designed to do city-wide testing to monitor volatile organic compounds (VOCs) at the neighborhood level. • The study consisted of eight 72-hour collection events, once every three months for the study's duration. The city was divided into 34 zones, 120 collection sites, with at least sites two per zone. Volunteers who picked up and returned a sampling device at collection events accounted for 60% of the samples. Each sample was tested for 61 VOCs, generating over 58 thousand data points. <i>Note: sample testing and data compilation from the August 2015 final collection event had not been completed as of this presentation.</i> • While not directly tested in the study (though monitored regionally), ground level ozone is created by the chemical reactions between VOCs and nitrous oxides in the presence of sunlight and heat. Ground level ozone can reduce lung function and inflame the linings, with possible long term effects from repeated exposure. Knowing the sources of VOCs, and taking action to mitigate them, can help reduce ground level ozone. • The study used conservative Health Risk Value (HRV), which is the level of a chemical that is likely to cause little or no risk to human health. Of the 61 VOCs tested for, four had occurrences above the HRV: <ul style="list-style-type: none"> Tetrachloroethylene (PERC) – 96 occurrences above HRC; common sources are metal degreasing and older drying cleaning operations Benzene – 90 occurrences above HRC; common sources are gasoline fumes (from pumping gas), vehicle exhaust, some factory emissions, cigarette smoke Trichloroethylene (TCE) – 14 occurrences above HRC; common sources are industrial solvents (degreasers), various consumer products (like correction fluids, paint removers/strippers, rug cleaning fluids) Naphthalene – 11 occurrences above HRC; common sources are vehicle exhaust, mothballs, cigarette smoke • Minneapolis leads the way for cleaner air statewide by supporting greener business efforts; reducing the number of dry cleaners using PERC; increasing use of water based paints; increasing public transportation, bicycle and walking availability and accessibility; working towards zero waste by reducing generated waste and increasing recycling and composting; implementing anti-idling 	<p>Report to committee</p>

**Public Health Advisory Committee (PHAC)
Minutes**

Item	Discussion	Outcome
	<p>ordinances; and, tree planting and replacement.</p> <ul style="list-style-type: none"> Next steps to help improve air quality include air sampling around specific businesses, pollutant evaluations, develop a land use regression, shift resources from sampling to solution implementation, and continue to leverage available resources for monitoring and improving air quality in Minneapolis. 	
Department Updates- Gretchen Musicant	<p>Minnesota Student Survey: After choosing to not participate in 2015, the Minneapolis Public Schools will participate in 2016.</p> <p>Metro SHAPE survey – Response rates for this survey, especially in 2014, were very low (22%), which means there is a high likelihood that results are based on a biased sample. Even with a different survey initiation system (including oversampling distribution in areas with higher proportions of low-income and minority residents), responses were not representative of the general population of the metro region. There were no non-English speakers, and male, minority, adults under 45, and non-college educated adults were underrepresented. The result is an overestimating of the health status of the actual adult population.</p>	
Information Sharing –	<p>After almost 25 years, Teenwise Minnesota (“The source on adolescent sexual health”) closed, effective November 30, 2015. Several public and private entities are stepping in to continue some of Teenwise's key features; how many and how much of a gap will remain is unknown. The Teenwise Minnesota website will remain active, including links to documents and other sexual health websites, through the end of February 2016.</p>	

Meeting adjourned at 8:00 p.m.

Minutes submitted by Minutes submitted by Don Moody and Margaret Schuster

Next Full Committee Meeting: January 26, 2016, Minneapolis City Hall, Room 132, 6:00-8:00 p.m.

Next Sub-Committee Meeting: February 23, 2016, Minneapolis City Hall, Room 132, 6:00-8:00 p.m.



Public Health Advisory Committee

2016 Meeting Dates

PHAC meetings are the 4th Tuesday of each month and run from 6:00-8:00 PM in City Hall, exact room locations are indicated on the monthly agenda; a light supper is served at 5:45 PM. The full Committee meets *every other month* beginning **January 2016**; sub-committees meet every other month independent of the full committee beginning **February 2016**. If unable to attend, please email Don Moody at Don.Moody@minneapolismn.gov or call (612) 673-2907.

KEY: Full Committee meeting dates are **GREEN**; Sub Committee meeting dates are **ORANGE**.

January 26, 2016

February 23, 2016

March 22, 2016

April 26, 2016

May 24, 2016

June 28, 2016

July 26, 2016

August 23, 2016

September 27, 2016

October 25, 2016

November 29, 2016 (NOTE: This is the 5th Tuesday of the month)

December 2013 (NOTE: No meeting unless determined by sub-committee)

If you have any questions about this schedule, please contact Margaret Schuster at 612.673.2643 or by email at: Margaret.Schuster@minneapolismn.gov

PHAC records including agendas, meeting materials, and membership information can be found on the Health Department website at: <http://www.ci.minneapolis.mn.us/health/phac/index.htm>

Minneapolis Health Department

Air Quality in Minneapolis: A Neighborhood Approach

***A presentation to the Public Health Advisory Committee
December 1, 2015***

Patrick Hanlon, Environmental Initiatives Manager, Project Manager
Jenni Lansing, Air Study Coordinator



Air Quality in Minneapolis

Thank you!

Air Quality: Regional vs. Local

Study design

Volatile Organic Compounds
Why are they a concern?

VOCs over Health Risk Values

What Minneapolis is doing



Minneapolis air quality

The balance:

Minnesota Pollution Control Agency and Minnesota Department of Health: Life and Breath Report

“While air quality in Minnesota is currently good and meets federal standards, even low and moderate levels of air pollution can contribute to serious illnesses and early death. Air pollution contributed to about 2,000 deaths, 400 hospitalizations, and 600 emergency-room visits in the Twin Cities in 2008.”

A Neighborhood approach

The questions:

What can we learn about air quality in Minneapolis by screening over a wide area?

How do levels compare to Health Risk Values?

How can we respond to improve our air quality?

The mission:

Conduct a City wide air quality study at the neighborhood level.

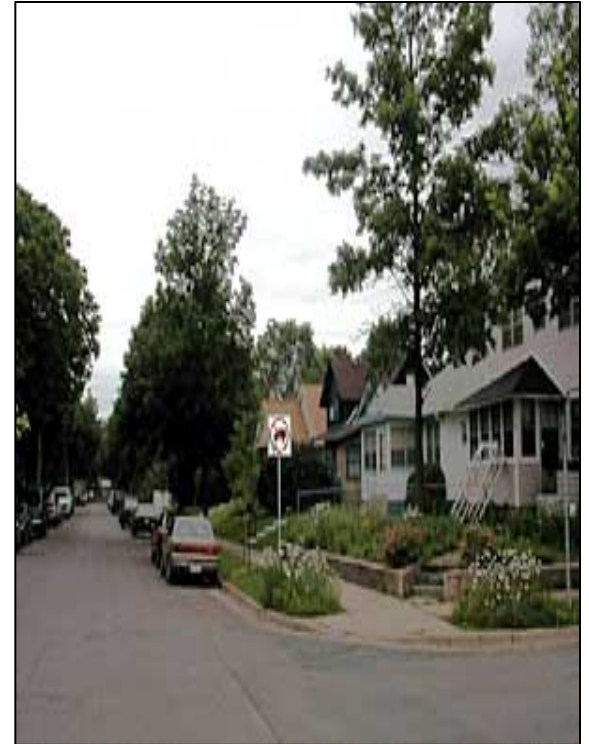
The goal:

Study 61 Volatile Organic Compounds (VOCs) over two years at 120 different locations across the City (58.4 square miles).

Study influences:

Awareness of historical environmental injustice.

Knowledge of businesses using legal VOC emitting processes.



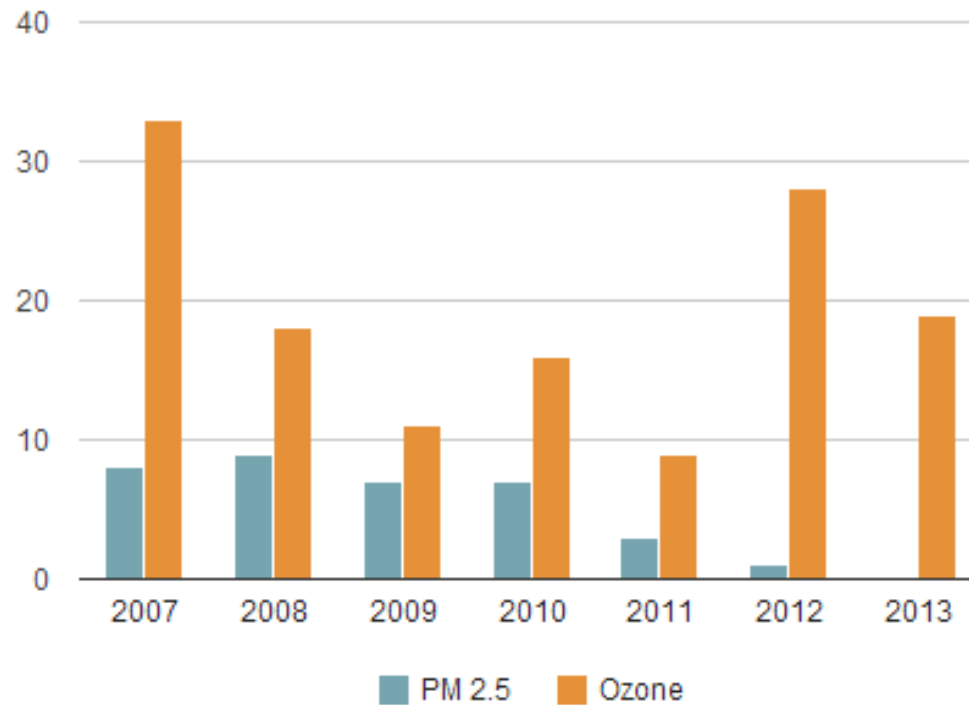
Air Quality Health Concerns

- 1. Regional Air Quality**
 - 2. Local Air Quality**
 - 3. Worker Exposure**
-

Regional Air Quality

Ambient Air Quality

Days with air pollutant concentrations exceeding sustainability target, 2007-2013

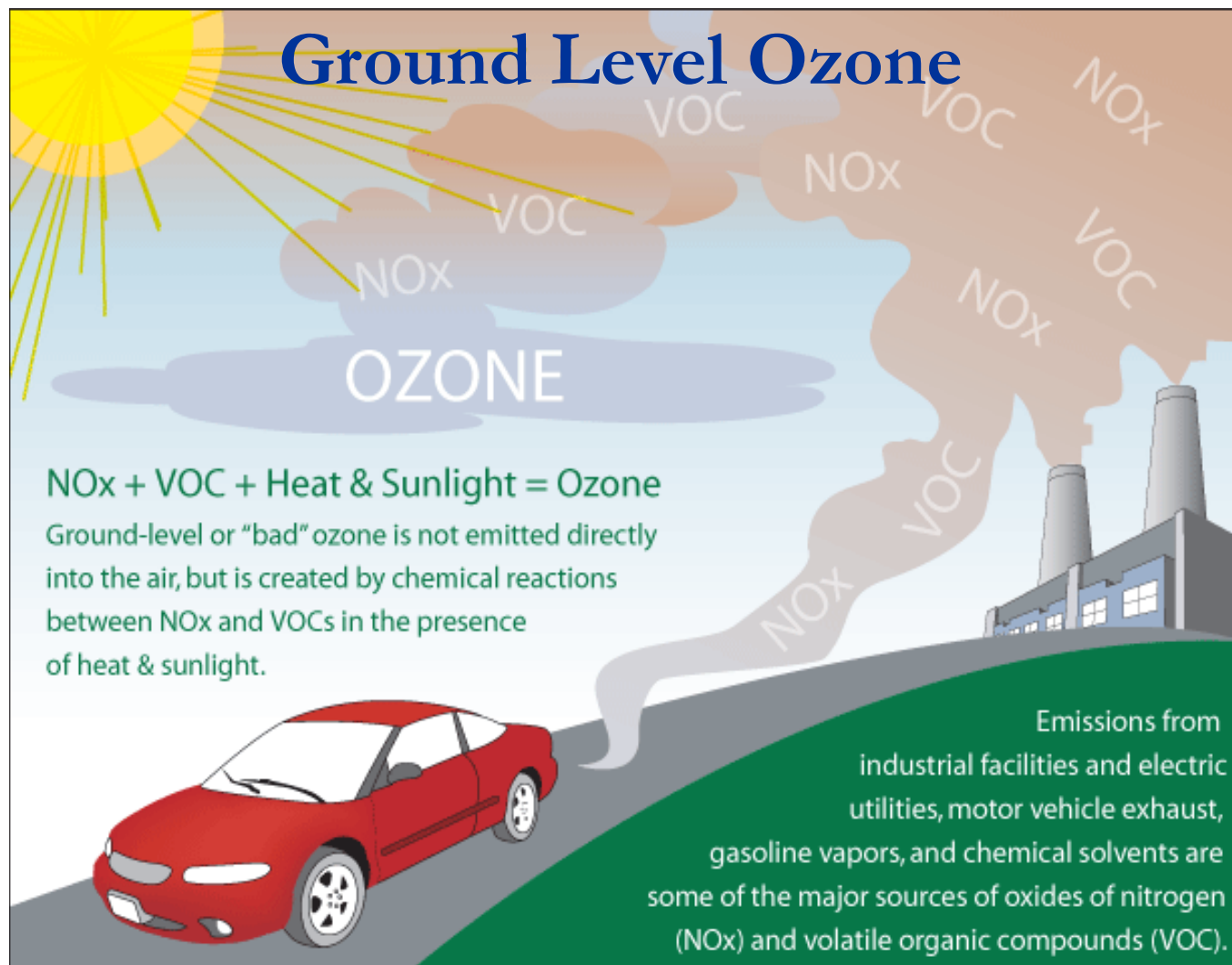


Regional Air Quality

Breathing it can:

- Reduce lung function
- Inflamm the linings of the lungs

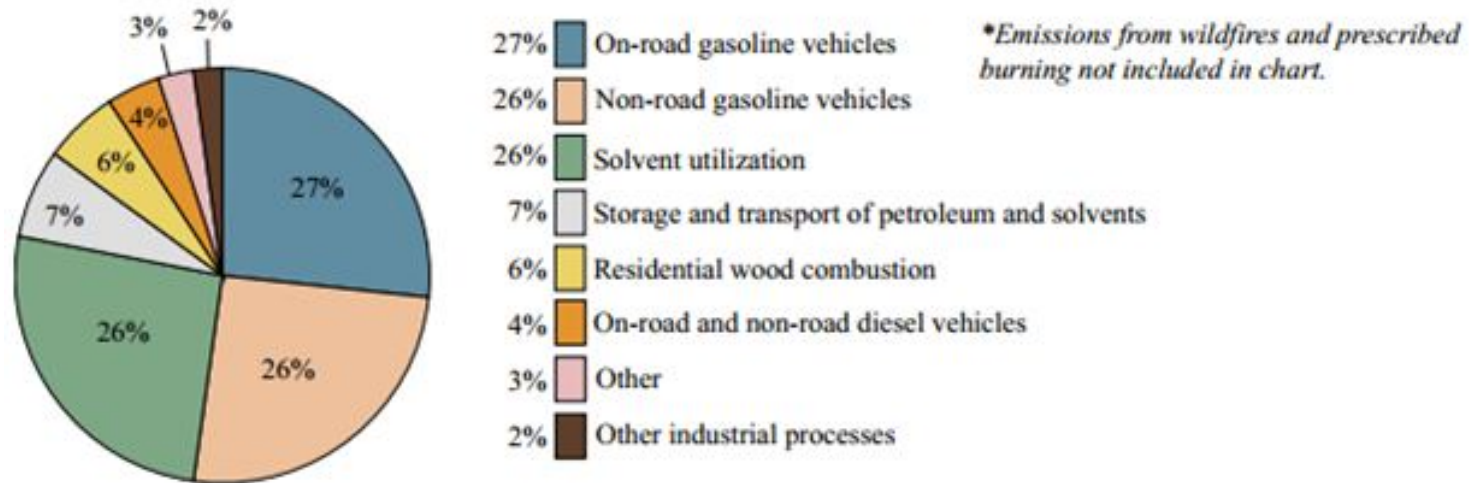
Repeated exposure may permanently scar lung tissue. -EPA



Regional Air Quality

Volatile Organic Compound Sources

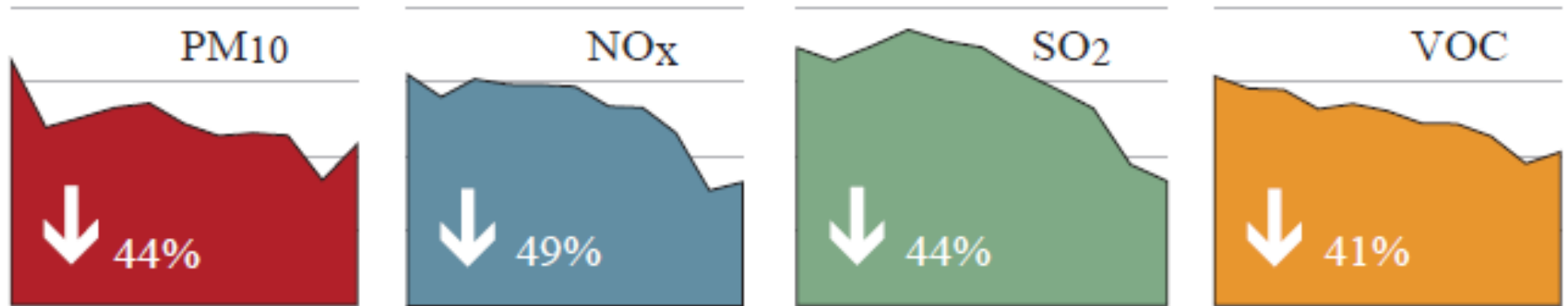
Chart 3: Sources of 2008 VOC Emissions²⁵



Source: 2008 Minnesota Criteria Pollutant Emission Inventory, version 1. Data provided by the Air Data Analysis Unit on March 1, 2013

Regional Air Quality

Chart 5: Point Source Pollutants Declines (2000-2010)²⁸



For the period 2000-2010, percent decrease in total emissions for specific pollutants *Minnesota PointSource Criteria Pollutant Inventory*

PM₁₀ – Particulate matter less than 10 micrometers in diameter

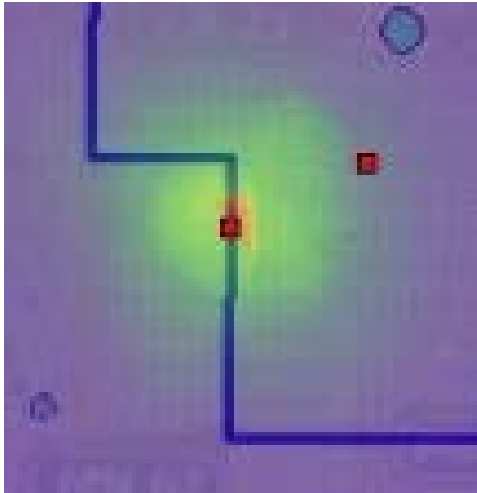
NO_x – Nitric oxide and nitrogen dioxide

SO₂ – Sulfur dioxide

VOC – Volatile Organic Compound

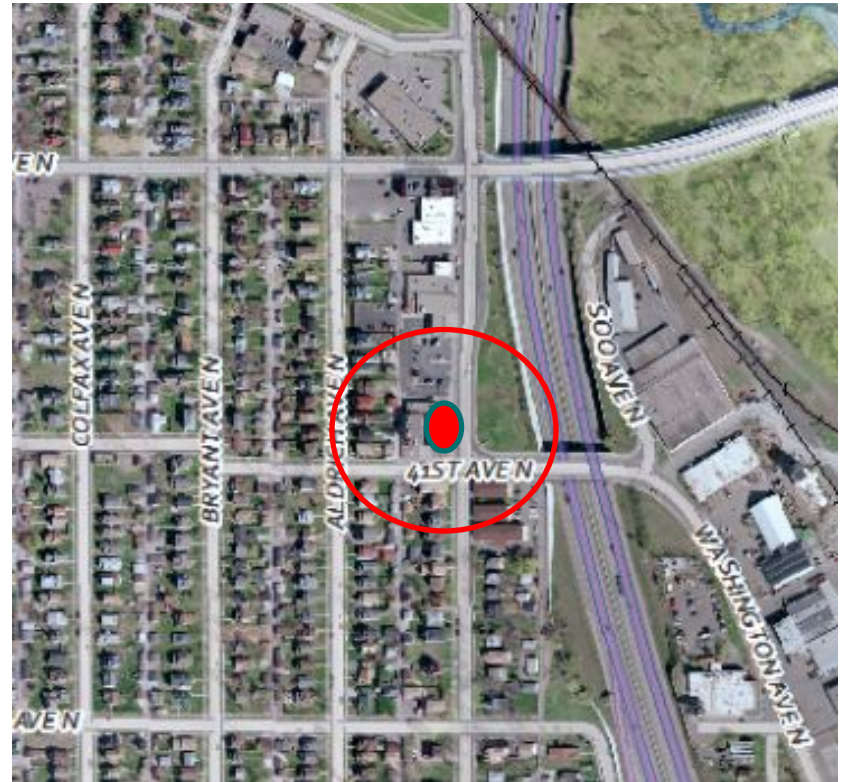
Local Air Quality

Small sources



- Modeled increased cancer risk
- Do emissions get out into the neighborhood?

Avestopolis Cleaners



4115 Lyndale Ave N

Worker Exposure

Workers in businesses that create VOCs have the highest level of VOC contact

Workers' VOC exposure is often 100 times greater than in the surrounding neighborhood.

Example case study:

In 2014, US Cleaners' employees were being exposed to $87,000 \text{ ug/m}^3$ of perchloroethylene.

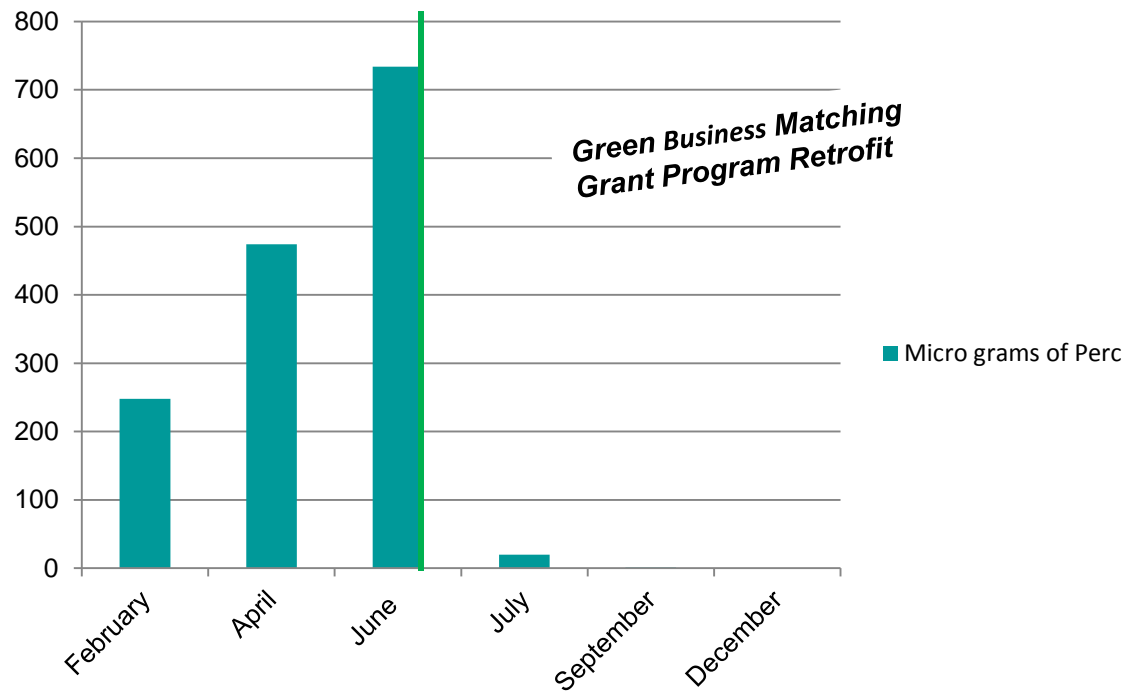
The actionable level was 60 ug/m^3 for remediation activities.



Worker Exposure

Next door to US Cleaners, children in the day care were being exposed to significant amounts of perc as well.

Rise and Shine Day Care Perchloroethylene Levels

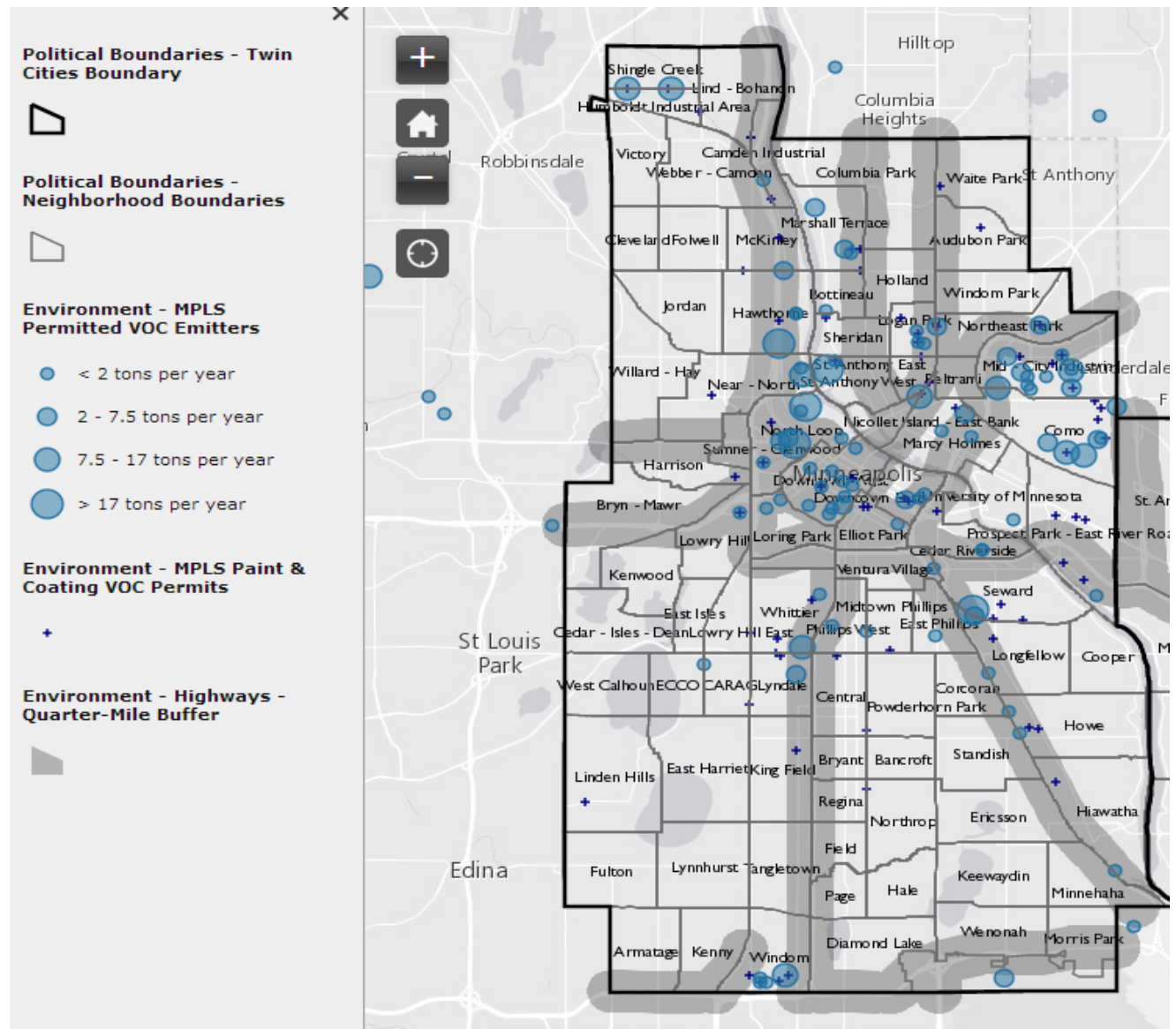


Inequity

In our
neighborhoods

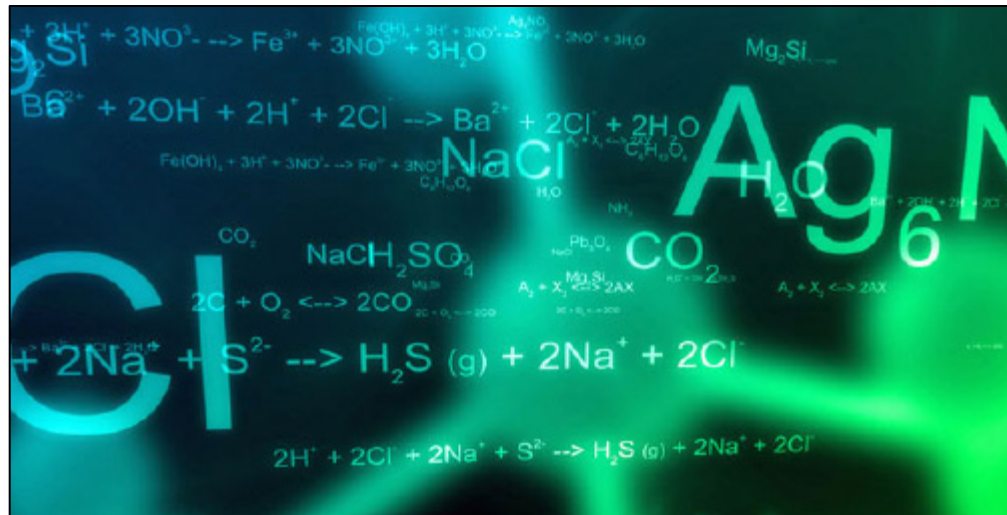
In the work places

Clean Air Is Not
Equally Available



What We Don't Know

Are there sources we haven't considered?



Study design

Two year study

November 2013 February 2014 May 2014 August 2014

November 2014 February 2015 May 2015 August 2015

- 120 air samples per collection
- Collection event is 3 days (72 hours)
- Each sample tested for 61 VOCs
- City divided into 34 zones
- Goal is to collect two air samples in each zone

The math:

8 collection events x 120 samples = 960 samples

960 samples x 61 VOCs = 58,560 data points

Key Ingredient: Volunteers

We Can't Do This Without Volunteers

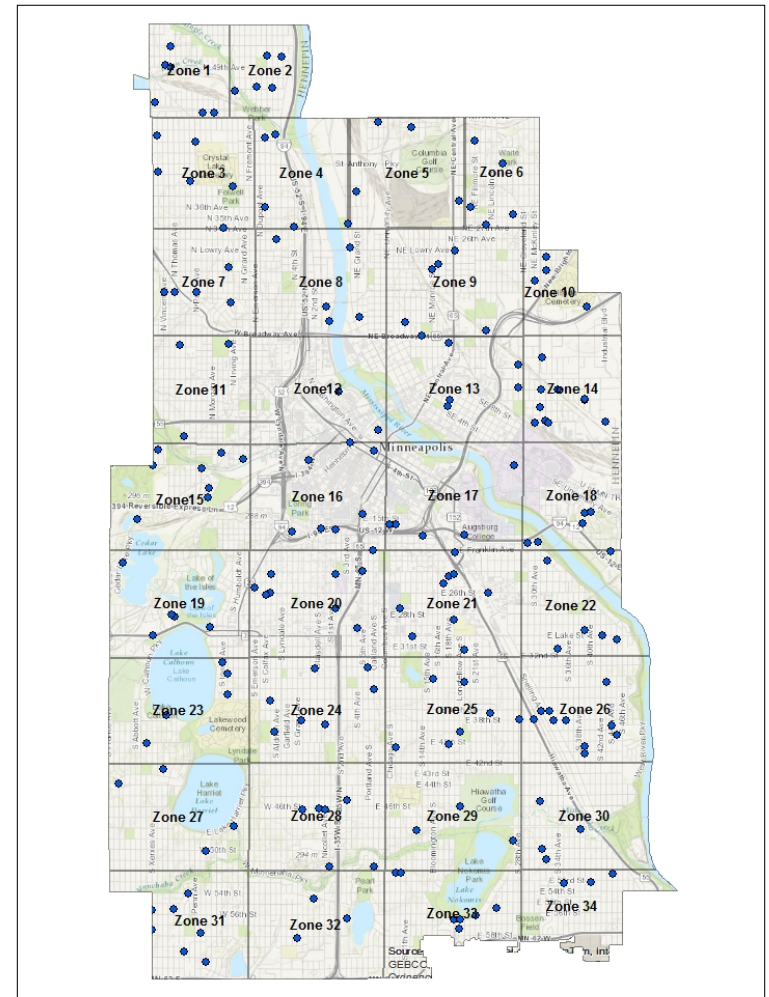
Key Ingredient: Volunteers

Essential to the study's success

120 air samples at each collection

70-75 are resident volunteers (60%)

45-50 are commercial businesses,
Minneapolis Park and Rec Board
property, and City property (40%)

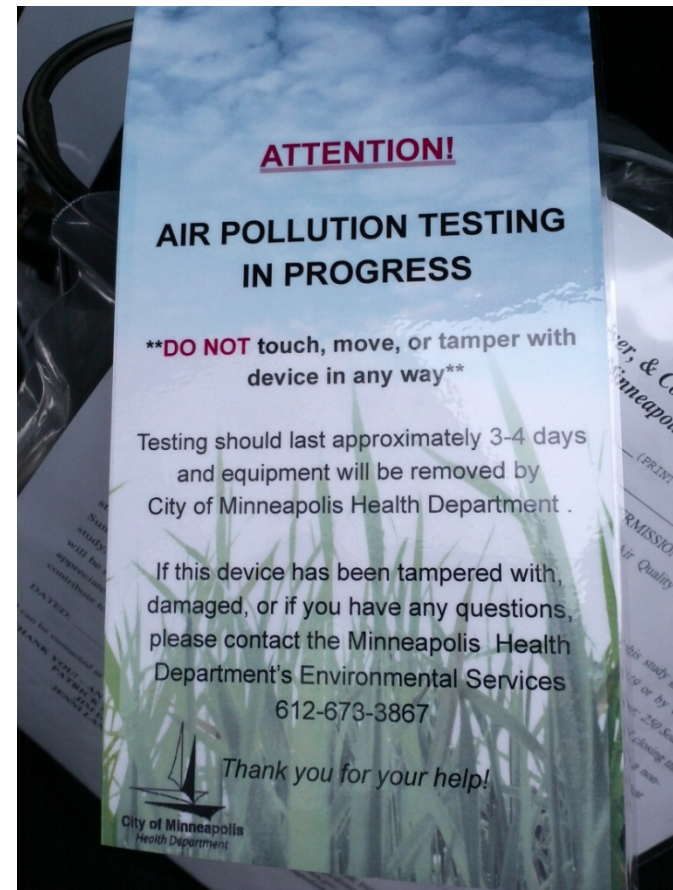


Summa Canister - Sampling Device

- Stainless steel canister
- Passive sample
- Collects sample for 72 hours
 - Flow controller



Canister in Action!



Health Risk Value

- Health Risk Value (HRV): The concentration of a chemical that is likely to pose little or no risk to human health
- Most HRVs are expressed as concentrations of micrograms of chemical per cubic meter of air ($\mu\text{g}/\text{m}^3$)
- Study uses conservative HRV values
Chronic long term exposure vs. acute exposure
- Four VOCs with occurrences above HRV:
 - Tetrachloroethylene (PERC)
 - Benzene
 - Trichloroethylene (TCE)
 - Naphthalene

Tetrachloroethylene

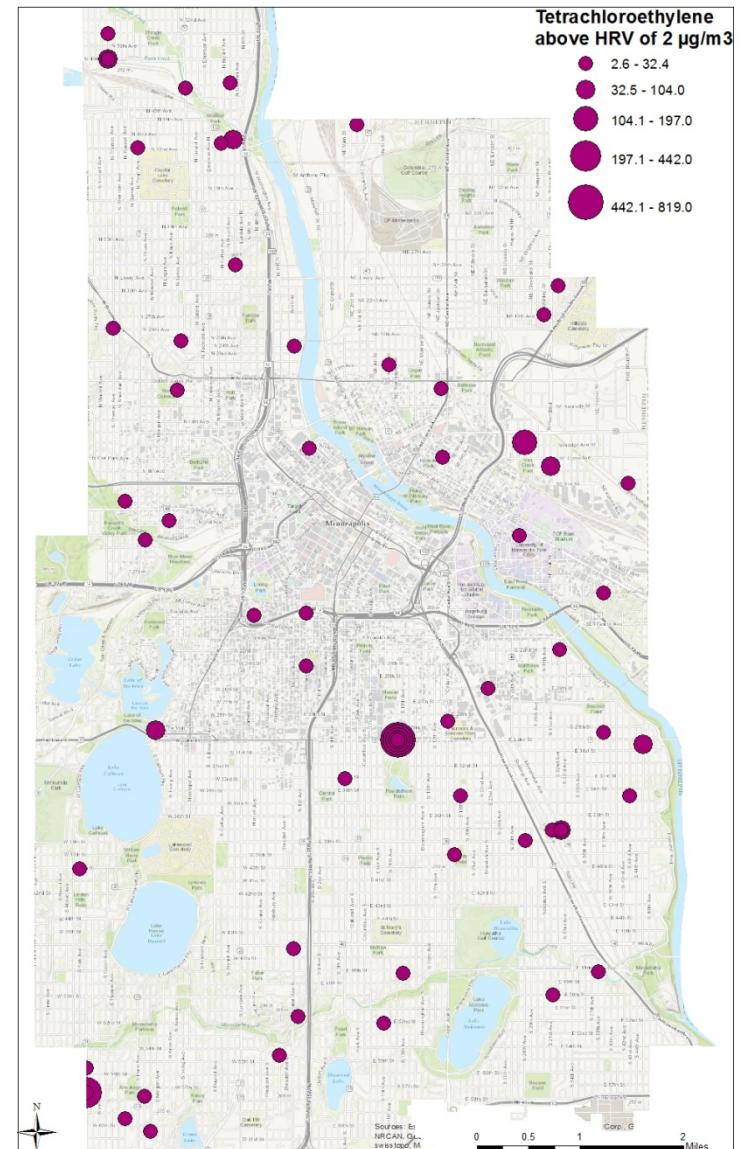
96 Occurrences above HRV

Sources:

- PERC
- Dry-cleaning fabrics
- Metal degreasing operations

Cancer - Likely to be carcinogenic to humans (EPA, 2012)

HRV: $2 \mu\text{g}/\text{m}^3$ - recently lowered from $20 \mu\text{g}/\text{m}^3$



Benzene

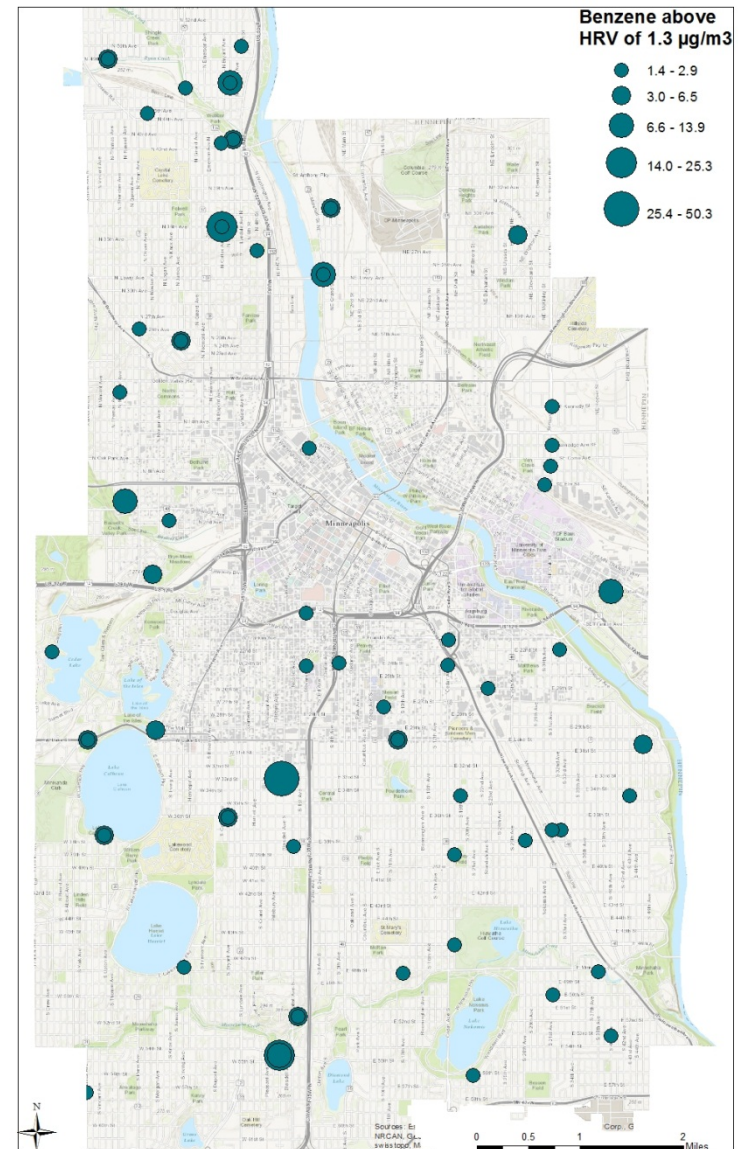
90 Occurrences above HRV

Sources:

- Gasoline fumes
- Automobile exhaust
- Emissions from some factories
- Cigarette smoke

Cancer - known human carcinogen (EPA, 2009)

HRV: $1.3 \mu\text{g}/\text{m}^3$



Trichloroethylene

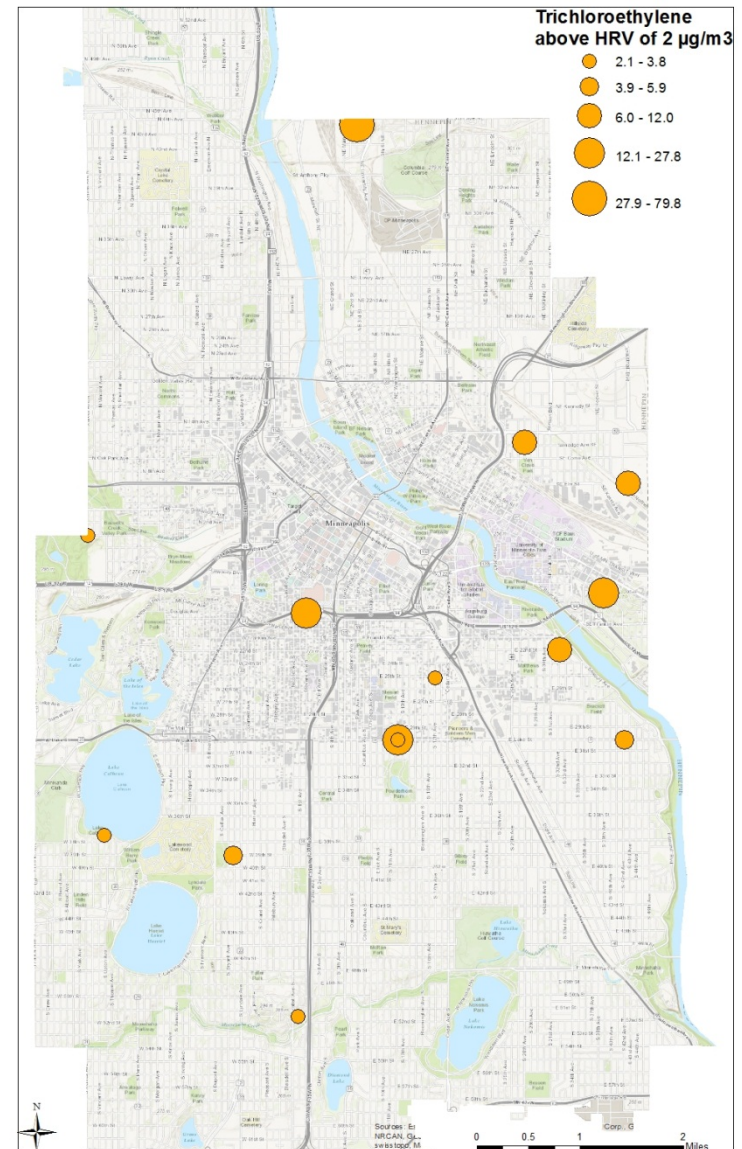
14 Occurrences above HRV

Sources:

- Industrial solvent - Degreaser
- Consumer products such as
 - Correction fluids
 - Paint removers/strippers
 - Adhesives
 - spot removers
 - rug-cleaning fluids

Cancer - carcinogenic
to humans (EPA, 1999b)

HRV: $3 \mu\text{g}/\text{m}^3$



Naphthalene

11 Occurrences above HRV

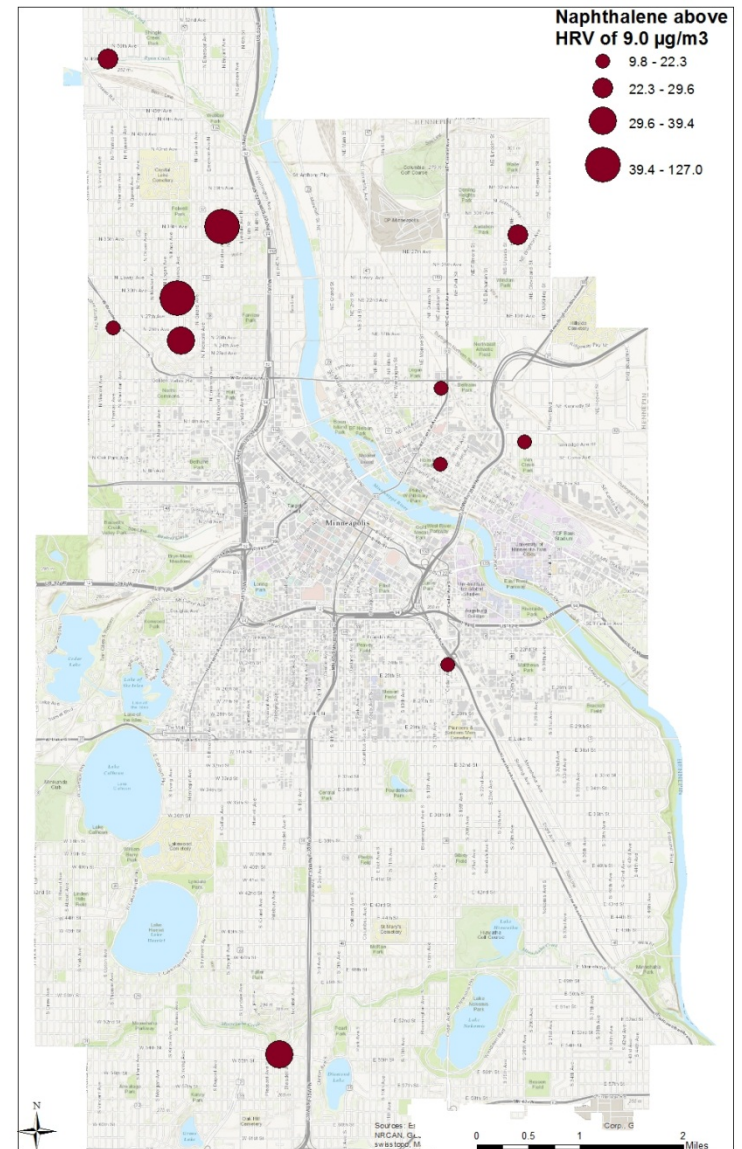
Sources:

- Automobile exhaust
- Mothballs
- Cigarette smoke

Possible human carcinogen
(EPA, 1999c)

- Marked respiratory and nasal impacts
- Cataracts and damage to the retina

HRV: $9 \mu\text{g}/\text{m}^3$



VOCs above Health Risk Values

- Link to MapIT Minneapolis:

<http://tinyurl.com/MinneapolisAirQuality>

What can we do in Minneapolis?





IDLING IS ILLEGAL

THIS IS NOT A TICKET

In Minneapolis, it is against the law for any vehicle to idle more than three minutes* except in traffic.

Warning drivers: \$200 fine for violation

* Five minute limit for diesel trucks and buses.



MINNEAPOLIS
green.
business



ZERO WASTE

Why no trash bins?

We are sorting all the waste behind the scenes.

Enjoy Commencement knowing it's Zero Waste.

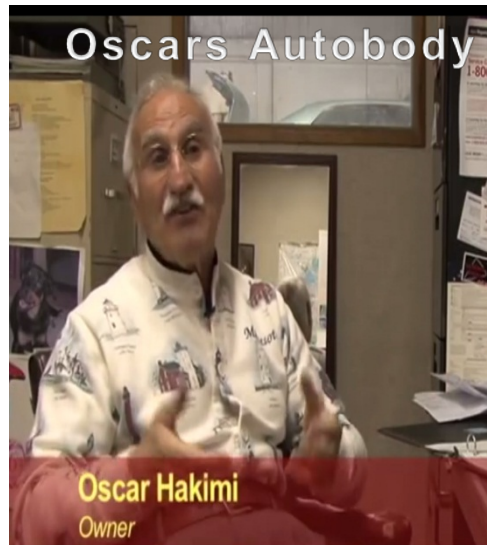
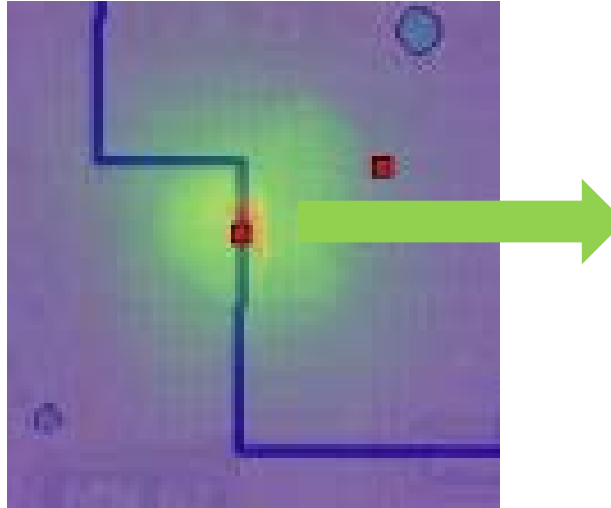


sustainability@BU



Solutions Based

green
business



Air sampling
around specific
businesses

Evaluate
pollutants

Shift resources
from sampling to
solutions

Next Steps

Develop a Land Use
Regression

Minneapolis is
leading the charge for
cleaner air statewide

Continue to leverage
resources for
air quality in
Minneapolis

Thank You – Air Study Partners

- City of Minneapolis Residents and Businesses
- Neighborhood and Business Organizations
- Pace Analytical® Services, Inc.
- Minneapolis Parks and Recreation Board
- Metro Transit
- University of Minnesota
- Minnesota Pollution Control Agency
- Environmental Initiative



For More Information

Link to MapIT Minneapolis:

<http://tinyurl.com/MinneapolisAirQuality>

Environmental Services

environmentalservicesinfo@minneapolis.gov

<http://www.minneapolismn.gov/environment>

Minneapolis Health Department

612-673-2301

<http://www.minneapolismn.gov/health>



References

- U.S. Environmental Protection Agency. *Integrated Risk Information System (IRIS) on Benzene*. National Center for Environmental Assessment, Office of Research and Development, Washington, DC. 2009.
 - U.S. Environmental Protection Agency. *Integrated Risk Information System (IRIS) on Tetrachloroethylene*. National Center for Environmental Assessment, Office of Research and Development, Washington, DC. 2012.
 - U.S. Environmental Protection Agency. *Integrated Risk Information System (IRIS) on Trichloroethylene*. National Center for Environmental Assessment, Office of Research and Development, Washington, DC. 1999b.
 - U.S. Environmental Protection Agency. *Integrated Risk Information System (IRIS) on Naphthalene*. National Center for Environmental Assessment, Office of Research and Development, Washington, DC. 1999c.
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