



State of Illinois
Illinois Department of Public Health

Cognitive Decline Burden Brief

January 2024

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Subjective Cognitive Decline

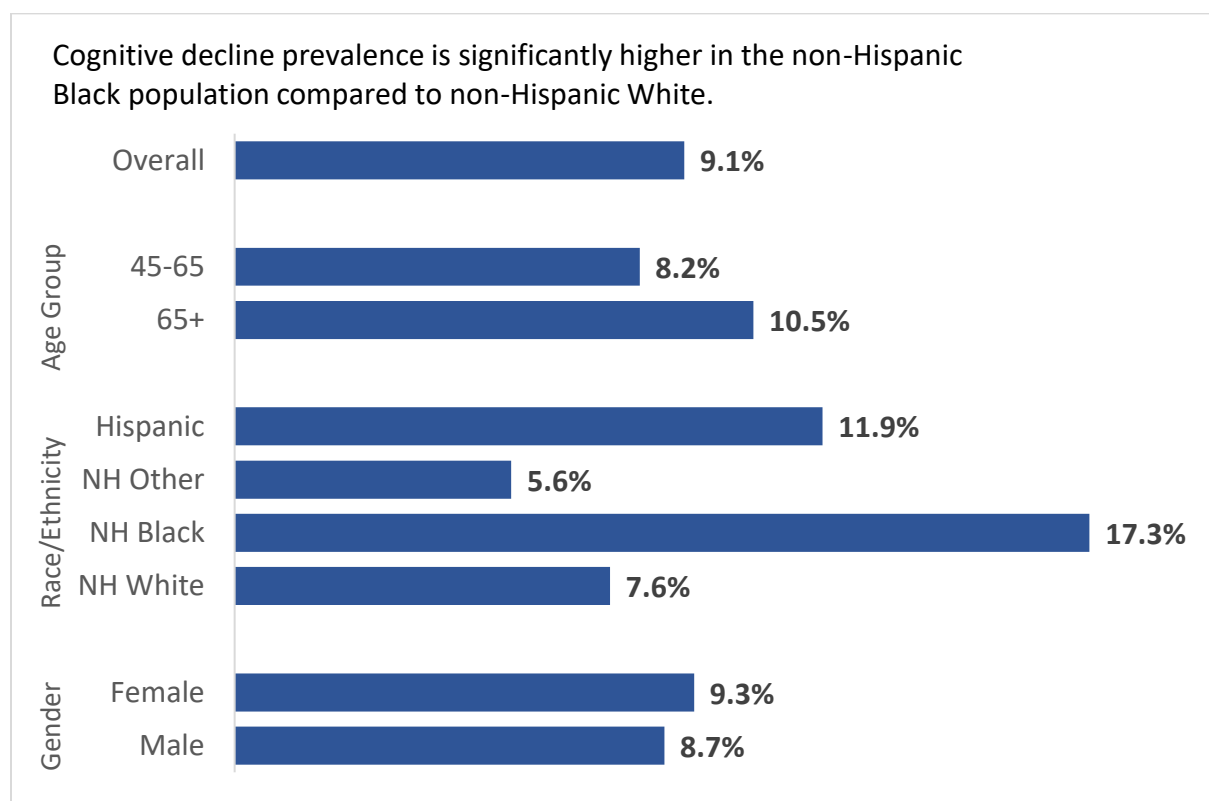
A report based on the Illinois County Behavioral Risk Factor Survey (IL CBRFS), 2015-2019

Subjective Cognitive Decline (SCD) is self-reported memory problems that have been getting worse over the past year for adults aged 45 years and older. Between 2015-2019, the IL CBRFS surveyed just over 23,000 Illinois adults over the age of 45 and found that 9.1% or an estimated 460,000 people report SCD.

Who is Reporting Cognitive Decline?

The prevalence of SCD is similar among age groups and gender but there is a disparity among race/ethnicity. Non-Hispanic (NH) Blacks have a significantly higher prevalence than NH Whites (17.3% vs. 7.6%). The Hispanic group does not significantly differ from other groups.

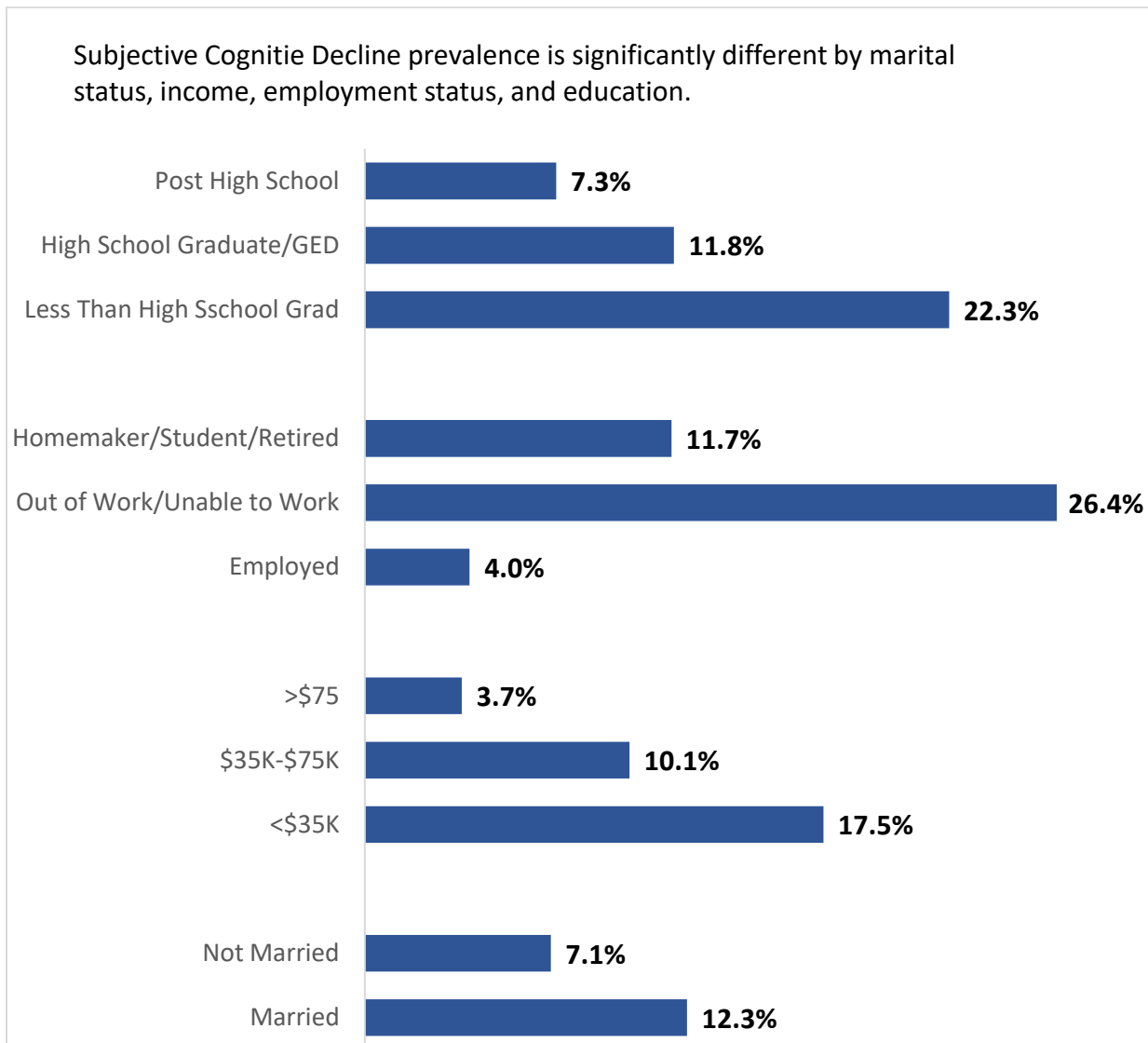
Figure 1. Prevalence of SCD by key demographics, Illinois, 2015-2019



Married adults report a higher prevalence of SCD compared to not married adults (12.3% vs. 7.1%). Adults with a household income of less than \$35,000 have a higher prevalence (17.5%)

of SCD compared to adults in other income brackets. There are significant differences in prevalence by employment status. More than a quarter of adults who are out of work/unable to work report SCD compared to 11.7% of retired/homemakers/students and 4% of adults currently employed. Significantly more adults with less than a high school degree report SCD compared to those with a degree or equivalent and to those with more than high school (22.3% vs. 11.8% vs. 7.3%).

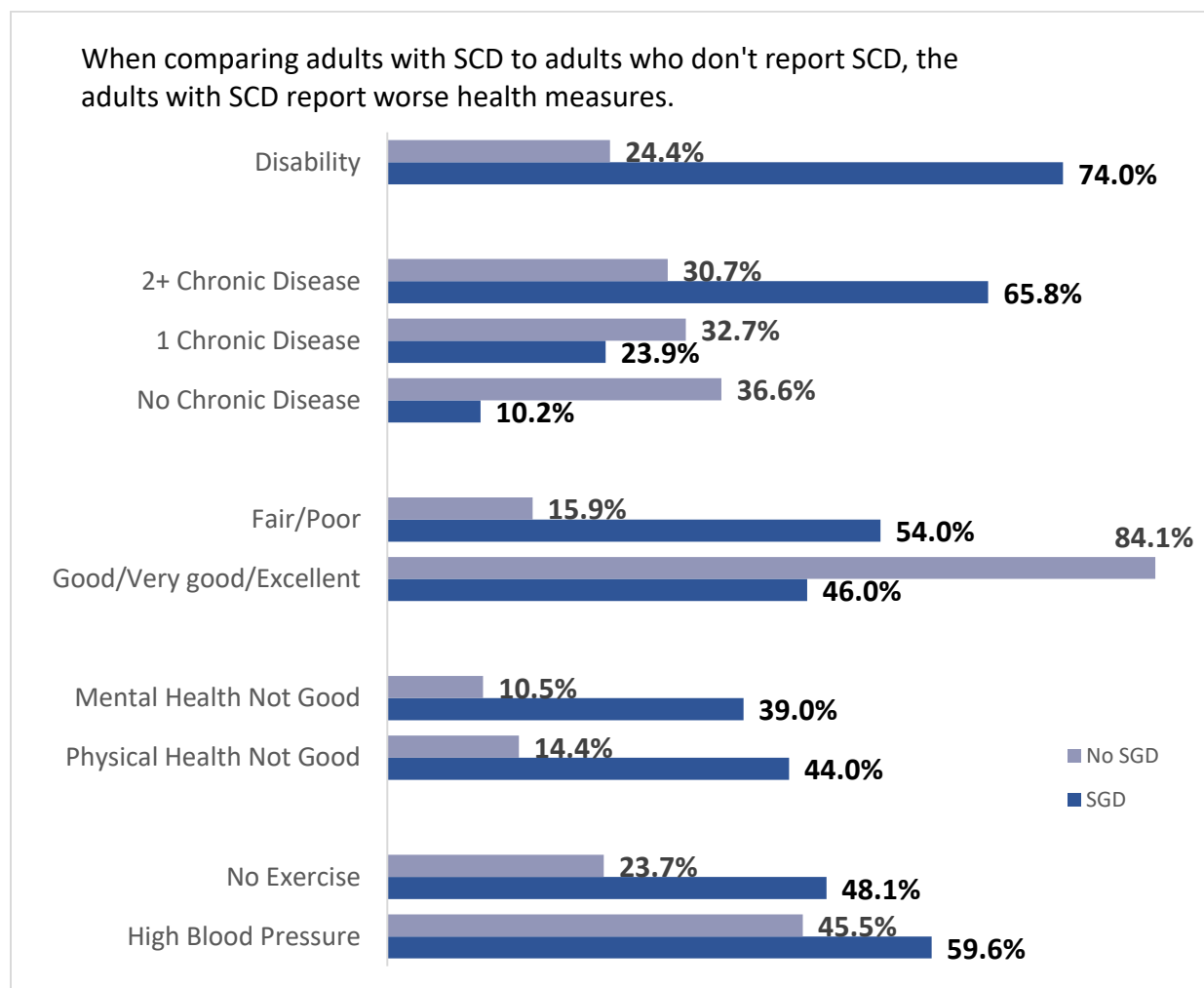
Figure 2. Prevalence of SCG by additional demographics, Illinois, 2015-2019



General Health Measures among Adults with SCD

When compared to adults who do not report SCD, adults who do report SCD have a higher prevalence of a number of factors that affect overall health and risk factors for other illnesses. The following are higher in adults who do report SCD compared to those who do not: disability status (74.0% to 24.4%), having multiple chronic diseases (65.8% to 30.7%), overall health is fair/poor (54% to 15.9%), physical health was not good for more than 14 days in the past month (44% to 14.4%), mental health was not good for more than 14 days in the past month (39% to 10.5%), no exercise in the past 30 days (48.1% to 23.7%), and high blood pressure (59.6% to 45.5%)

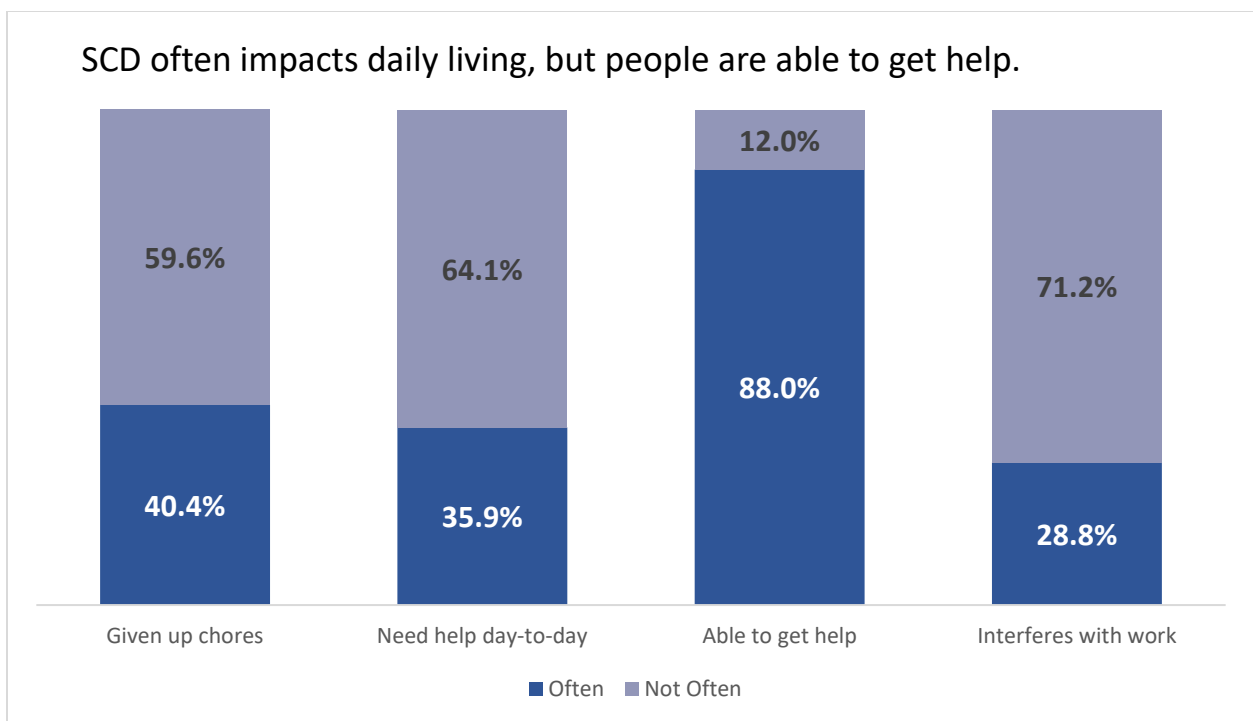
Figure 3. Prevalence of health conditions among adults with and without SCD, Illinois, 2015-2019



Impact of SCD on Daily Living

In the past year, 40.4% of adults with SCD often had to give up chores due to memory loss. Significantly more adults with SCD and in fair/poor health had to often give up chores compared to those who rated their health higher (53.7% to 25.1%). Of adults with SCD, 35.9% say they often need help with day-to-day activities due to their memory loss. Most adults (88%) say they often need help with day-to-day activities due to their memory loss. Most adults (88%) are often able to get help with activities. More than a quarter of adults (28.8%) with SCD report that their memory loss interferes with their work.

Figure 4. Impact of SCD on Daily Living, Illinois, 2015-2019



Discussing Memory Loss with a Health Professional

Only 41.6% of those reporting SCD have discussed their memory loss with a health professional. A higher percentage of adults 45 – 64 years of age have discussed it compared to those over the age of 65 years (46.6% vs. 35.2%). A higher percentage of those who say their physical health is not good for more than 14 days in the past month have discussed their memory loss with their health care provider compared to those who report better physical health (53.5% vs 32.6%).

Discussion

Summary of Findings

In summary, the prevalence of Subjective Cognitive Decline (SCD) in Illinois is similar among age groups as well as gender, but a disparity exists among race and ethnicity groups. Prevalence of cognitive decline is significantly higher in non-Hispanic Black populations when compared to non-Hispanic Whites. When comparing adults with SCD to adults who don't report SCD, the adults with SCD report worse health indicators. This includes several factors that affect overall health, as well as risk factors for both SCD and other illnesses, such as no exercise in the past 30 days or being informed of high blood pressure. Also of note is that only 41.6% of those reporting SCD have discussed their memory loss with a health professional. Positive findings suggest that while SCD impacts daily living, Illinoisians report that they are able to get help.

Implications and Action

The higher prevalence of SCD for the non-Hispanic Black population underscores the importance of a focus on improving equity for Black Illinoisians. Increasing awareness and early detection of cognitive decline is especially important for this population, as is culturally adapting interventions and linking communities to trusted resources.

Findings in this report also highlight the relationship of other health factors with SCD, including living with a disability, living with one or more chronic diseases, frequent mental distress, physical inactivity, and having high blood pressure. This underscores the importance of risk reduction efforts and increasing access to care, including robust health promotion programming. Increased attention is also needed to address these comorbidities, increase healthy behaviors, and address the other social determinants that may impede access to disease management and healthy behaviors, particularly for those in underserved communities.

Discussing memory loss with a health professional is important. Illinoisians should know that memory loss interfering with daily life is not a normal part of aging. Knowing the signs of cognitive decline or conditions that cause dementia, such as Alzheimer's disease is important. Doctors and other health professionals can help by assessing brain health, helping people

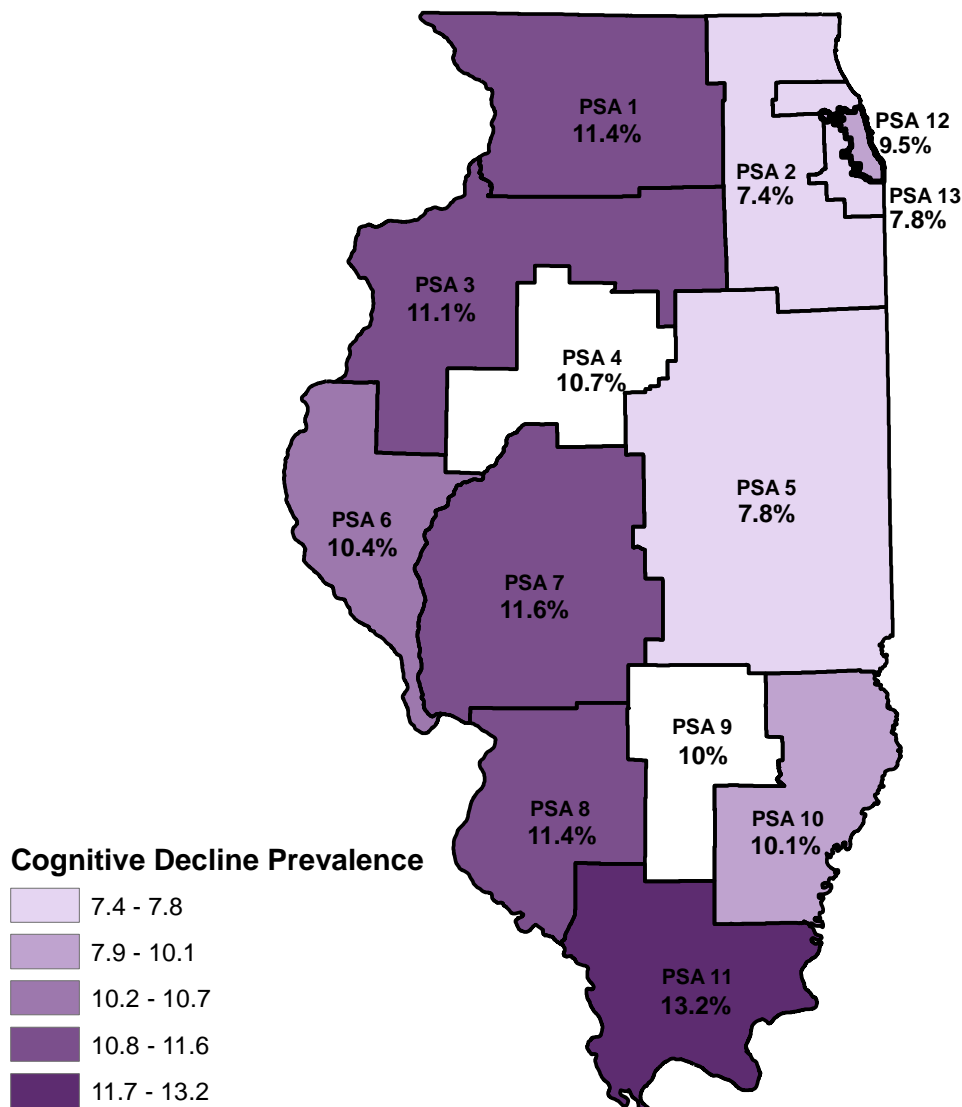
manage risk factors, treating other chronic conditions that impact brain health, and making referrals to community resources if cognitive decline or dementia is present.

Appendix 1

SCD by Geography

In accordance with the federal Older American's Act, the Illinois Department of Aging has divided Illinois into 13 Planning and Service Areas (PSA) called Local Area Agencies on Aging (AAA). The prevalence of SCD varies among the areas. The highest prevalence of SCD is in PSA 11 (southern Illinois) at 13.2%, which is significantly higher than PSA 2 (7.4%) and PSA 5 (7.8%)

Prevalence of Cognitive Decline Among Illinois Adults 45 years of Age and Older by Area Agency on Aging (AAA) Planning Service Areas (PSAs), 2015-2019

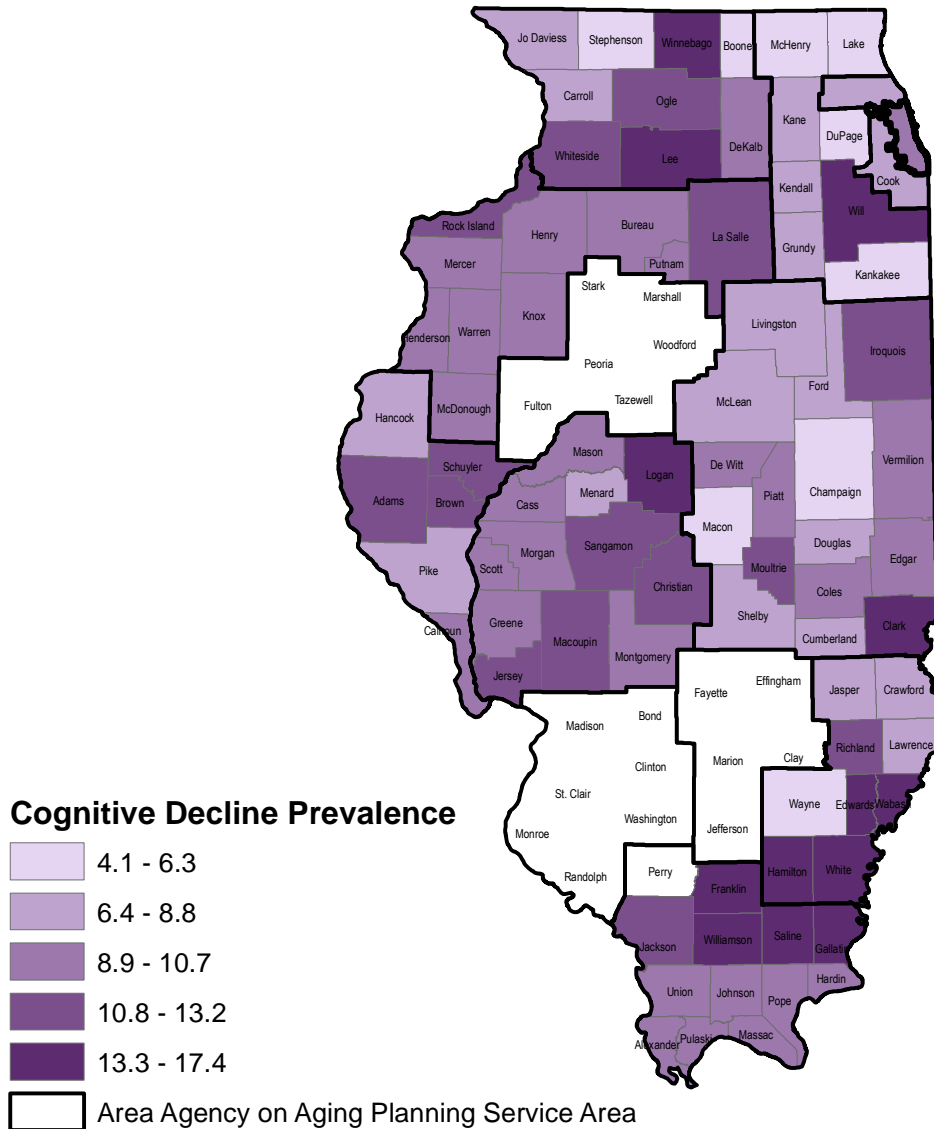


Data Source: Illinois Department of Public Health, Illinois County Behavioral Risk Factor Survey (ICBRFS), County Round 6, 2015-2019
Map created by the Office of Health Promotion, October 2022



The following map outlines Prevalence of Cognitive Decline prevalence by counties within each PSA.

Prevalence of Cognitive Decline Among Illinois Adults 45 years of Age and Older, 2015-2019



Data Source: Illinois Department of Public Health, Illinois County Behavioral Risk Factor Survey (ICBRFS), County Round 6, 2015-2019

Note: Perry County data does not meet the standards of reliability and has been suppressed.

Map created by the Office of Health Promotion, October 2022



Appendix 2

Cognitive Decline Tables

Table 1. Experienced confusion/memory loss past 12 months (age 45+) by demographics, ICBRFS, 2015-2019

		Estimated Population	Weighted Percent	95% CI	Number of Respondents
Overall	All	459,614	9.1%	7.9%-10.3%	2,834
Age	45-64	260,742	8.2%	6.8%-9.8%	1,278
	65+	198,872	10.5%	8.6%-12.8%	1,556
Gender	Male	207,220	8.7%	7.1%-10.7%	1,282
	Female	252,394	9.3%	7.8%-11.1%	1,552
Race/ethnicity	White, non-Hispanic	300,153	7.6%	6.6%-8.7%	2,561
	Black, non-Hispanic	99,323	17.3%	11.5%-25.2%	85
	Other, non-Hispanic	7,489	5.6%	2.6%-11.8%	42
	Hispanic, All Races	41,631	11.9%	7.3%-18.8%	68
Income	Less than \$35,000	204,489	17.5%	14.6%-20.9%	1,502
	\$35,000 - \$75,000	149,937	10.1%	7.8%-13.0%	727
	\$75,000 or More	76,688	3.7%	2.7%-5.1%	359
Marital status	Not Married	233,341	12.3%	10.5%-14.5%	1,567
	Married	225,818	7.1%	5.8%-8.8%	1,263
Employment	Employed	108,289	4.0%	3.1%-5.2%	545
	Out of Work/Unable to Work	130,033	26.4%	21.3%-32.3%	842
	Homemaker/Student/Retired	221,056	11.7%	9.6%-14.2%	1,443
Education	Less than High School	57,467	22.3%	16.8%-29.1%	323
	High School Grad/GED	134,452	11.8%	9.6%-14.6%	1,140
	Post High School	266,401	7.3%	6.0%-8.8%	1,364
Have health care coverage	No	38,261	13.6%	8.7%-20.7%	184
	Yes	421,238	8.8%	7.6%-10.1%	2,645
Functional disability	No Disability	119,432	3.3%	2.6%-4.3%	681
	Disability	340,183	23.2%	20.1%-26.7%	2,153
Chronic health conditions ¹	No Chronic Disease	45,844	2.7%	1.8%-3.9%	263
	1 Chronic Disease	107,230	6.7%	5.0%-8.9%	602
	2+ Chronic Diseases	294,762	17.4%	14.9%-20.3%	1,909
General health	Good/Very Good/Excellent	210,696	5.1%	4.3%-6.2%	1,346
	Fair/Poor	247,618	25.3%	21.3%-29.7%	1,483
Physical health not good	0-14 Days	255,882	6.1%	5.1%-7.4%	1,456
	14+ Days	201,125	23.4%	19.5%-27.8%	1,344
Mental health not good	0-14 Days	277,798	6.3%	5.3%-7.6%	1,719
	14+ Days	177,425	27.0%	22.3%-32.2%	1,075
Rural/urban	Urban	366,872	8.8%	7.4%-10.3%	580
	Rural	92,743	10.4%	9.6%-11.1%	2,254

Illinois County Behavioral Risk Factor Survey, Round 6 (Collected 2015-2019)

Table 2. Select variables by experienced confusion/memory loss past 12 months (age 45+), ICBRFS, 2015-2019

		EXPERIENCED CONFUSION/MEMORY LOSS PAST 12 MONTHS (AGE 45+)							
		Yes				No			
		Estimated Population	Weighted Percent	95% CI	Number of Respondents	Estimated Population	Weighted Percent	95% CI	Number of Respondents
Overall	All	459,614	100.0%	100%-100%	2,834	4,613,400	100.0%	100%-100%	23,113
Have health care coverage	No	38,261	8.3%	5.4%-12.6%	184	242,879	5.3%	4.1%-6.7%	1,022
	Yes	421,238	91.7%	87.4%-94.6%	2,645	4,366,107	94.7%	93.3%-95.9%	22,064
Functional disability	No Disability	119,432	26.0%	20.6%-32.2%	681	3,487,941	75.6%	73.5%-77.6%	16,139
	Disability	340,183	74.0%	67.8%-79.4%	2,153	1,125,459	24.4%	22.4%-26.5%	6,974
Chronic health conditions ¹	No Chronic Disease	45,844	10.2%	7.0%-14.7%	263	1,669,009	36.6%	33.9%-39.4%	7,027
	1 Chronic Disease	107,230	23.9%	18.5%-30.4%	602	1,490,316	32.7%	30.2%-35.3%	7,189
	2+ Chronic Diseases	294,762	65.8%	59.1%-72.0%	1,909	1,397,578	30.7%	28.5%-33.0%	8,655
General health	Good/Very Good/Excellent	210,696	46.0%	39.4%-52.7%	1,346	3,880,918	84.1%	82.4%-85.7%	18,310
	Fair/Poor	247,618	54.0%	47.3%-60.6%	1,483	731,724	15.9%	14.3%-17.6%	4,790
Physical health not good	0-14 Days	255,882	56.0%	49.2%-62.6%	1,456	3,932,078	85.6%	83.8%-87.3%	18,835
	14+ Days	201,125	44.0%	37.4%-50.8%	1,344	659,043	14.4%	12.7%-16.2%	4,078
Mental health not good	0-14 Days	277,798	61.0%	54.3%-67.4%	1,719	4,110,611	89.5%	88.0%-90.9%	20,713
	14+ Days	177,425	39.0%	32.6%-45.7%	1,075	480,515	10.5%	9.1%-12.0%	2,224
Rural/urban	Urban	366,872	79.8%	76.7%-82.6%	580	3,811,333	82.6%	81.6%-83.6%	5,175
	Rural	92,743	20.2%	17.4%-23.3%	2,254	802,066	17.4%	16.4%-18.4%	17,938
Ever told have high blood pressure	No	187,983	40.4%	34.2%-47.0%	1,037	2,567,174	54.5%	51.8%-57.1%	11,160
	Yes	276,928	59.6%	53.0%-65.8%	1,792	2,146,272	45.5%	42.9%-48.2%	11,999
Exercise in past 30 days	Yes	241,705	51.9%	45.1%-58.7%	1,501	3,602,821	76.3%	74.3%-78.3%	15,389
	No	223,774	48.1%	41.3%-54.9%	1,335	1,117,136	23.7%	21.7%-25.7%	7,793

Illinois County Behavioral Risk Factor Survey, Round 6 (Collected 2015-2019)

Table 3. Subjective Cognitive Decline measures of daily living, ICBRFS, 2015-2019

	Always, Usually or Sometimes				Rarely or Never			
	Estimated Population	Weighted Percent	95% CI	Number of Respondents	Estimated Population	Weighted Percent	95% CI	Number of Respondents
Past 12 months, given up chores due to memory loss.	190,349	40.4%	33.7%-47.5%	1,109	280,540	59.6%	52.5%-66.3%	1,753
How often need help with day-to-day activities due to memory loss.	169,747	35.9%	29.4%-43.1%	971	302,485	64.1%	56.9%-70.6%	1,905
How often able to get help with activities.	146,868	88.0%	80.6%-92.8%	830	20,079	12.0%	7.2%-19.4%	136
Past 12 months: memory loss interferes with work.	135,571	28.8%	23.3%-35.0%	946	335,103	71.2%	65.0%-76.7%	1,915

Illinois County Behavioral Risk Factor Survey, Round 6 (Collected 2015-2019)

Table 4. Discussed memory loss with health professional, ICBRFS, 2015-2019

	Yes				No			
	Estimated Population	Weighted Percent	95% CI	Number of Respondents	Estimated Population	Weighted Percent	95% CI	Number of Respondents
Overall	196,859	41.6%	35.3%-48.3%	1,232	275,856	58.4%	51.7%-64.7%	1,638
Age								
45-64	124,454	46.6%	37.9%-55.5%	647	142,824	53.4%	44.5%-62.1%	644
65+	72,404	35.2%	27.1%-44.3%	585	133,033	64.8%	55.7%-72.9%	994
General health								
Good/Very Good/Excellent	80,336	37.0%	28.6%-46.2%	459	136,848	63.0%	53.8%-71.4%	912
Fair/Poor	116,514	45.9%	36.6%-55.4%	772	137,595	54.1%	44.6%-63.4%	722
Physical health not good								
0-14 Days	86,229	32.6%	24.9%-41.4%	495	178,214	67.4%	58.6%-75.1%	984
14+ Days	110,185	53.5%	43.9%-62.8%	727	95,931	46.5%	37.2%-56.1%	628
Rural/Urban								
Urban	154,051	40.8%	33.0%-49.0%	242	223,979	59.2%	51.0%-67.0%	349
Rural	42,807	45.2%	41.6%-48.9%	990	51,878	54.8%	51.1%-58.4%	1,289

Illinois County Behavioral Risk Factor Survey, Round 6 (Collected 2015-2019)

Table 5. Experienced confusion/memory loss past 12 months (age 45+) by Health Department, ICBRFS, 2015-2019

Health Department	Est. Pop.	Wt. %	95% CI	Unwt. count	Health Department	Est. Pop.	Wt. %	95% CI	Unwt. count
Clark	1,237	17.4%	10.4%-27.7%	45	Jefferson	1,597	9.9%	6.6%-14.5%	37
Edwards-Wabash-Hamilton	1,770	14.9%	10.2%-21.3%	65	Monroe	1,417	9.6%	6.3%-14.3%	28
Egyptian	2,914	14.6%	10.3%-20.2%	47	Henry-Stark	2,449	9.6%	6.2%-14.6%	45
Peoria	10,422	14.5%	7.6%-25.8%	33	McDonough	1,060	9.5%	6.4%-14.0%	29
Will	39,641	14.3%	8.0%-24.2%	30	Cook-Chicago	96,362	9.5%	6.4%-13.9%	46
St. Clair	14,368	14.0%	10.0%-19.3%	43	Greene	546	9.5%	6.4%-13.8%	30
Logan	1,671	13.9%	9.4%-20.0%	39	Effingham	1,323	9.3%	6.2%-13.8%	31
Winnebago	17,251	13.8%	6.8%-26.0%	29	Vermilion	3,059	9.2%	6.1%-13.6%	36
Franklin-Williamson	6,425	13.8%	8.3%-22.0%	41	Cass	480	9.1%	6.0%-13.4%	37
Lee	2,167	13.3%	7.4%-22.9%	35	Coles	1,740	9.0%	5.9%-13.6%	33
Jersey	1,309	13.2%	8.0%-20.9%	45	Bureau-Putnam-Marshall	2,215	9.0%	6.3%-12.7%	59
Rock Island	7,761	13.1%	8.8%-19.2%	39	Washington	556	8.8%	6.0%-12.6%	32
Jackson	2,585	13.0%	8.6%-19.2%	34	Jo Daviess	1,001	8.7%	5.5%-13.7%	27
Richland	880	12.5%	8.8%-17.5%	41	Kendall	3,544	8.5%	4.2%-16.4%	19
Macoupin	2,574	12.5%	8.2%-18.6%	43	Ford	498	8.4%	4.0%-16.7%	32
Brown-Schuyler	718	12.5%	8.1%-18.6%	35	Menard	452	8.4%	5.0%-13.6%	26
Fulton	1,938	12.1%	7.3%-19.5%	43	Shelby	835	8.0%	5.3%-11.8%	33
Christian	1,828	12.1%	8.5%-17.0%	42	Cook-Suburban	78,712	7.8%	5.3%-11.4%	32
Whiteside	3,160	12.1%	7.9%-18.1%	37	McLean	4,463	7.8%	4.3%-13.6%	21
Sangamon	10,000	12.0%	7.0%-19.7%	26	Livingston	1,229	7.7%	4.8%-12.2%	27
Iroquois	1,463	11.9%	7.7%-17.8%	42	Bond	545	7.6%	5.0%-11.3%	36
Moultrie	703	11.5%	8.0%-16.1%	42	Crawford	612	7.5%	4.6%-12.1%	32
Adams	3,251	11.4%	7.8%-16.4%	34	Carroll	556	7.5%	4.9%-11.1%	30
LaSalle	5,602	11.4%	6.9%-18.3%	32	Douglas	592	7.4%	4.6%-11.8%	29
Randolph	1,563	11.2%	7.7%-16.0%	35	Hancock	625	7.4%	4.9%-11.1%	33
Ogle	2,571	11.1%	6.5%-18.3%	34	Grundy	1,432	7.3%	4.6%-11.4%	28
DeKalb	3,777	10.7%	6.5%-17.2%	26	Lawrence	486	7.3%	4.9%-10.7%	32
Montgomery	1,312	10.5%	7.2%-15.0%	39	Pike	527	7.2%	4.5%-11.2%	27
Madison	11,372	10.5%	6.8%-15.8%	35	Tazewell	4,125	7.2%	4.1%-12.2%	24
Clay	620	10.5%	7.2%-15.0%	36	Cumberland-Jasper	654	7.0%	4.6%-10.5%	31
Fayette	960	10.4%	6.9%-15.3%	37	Kane	14,491	7.0%	4.2%-11.3%	26
Marion	1,740	10.4%	6.5%-16.2%	35	DuPage	25,674	6.3%	2.7%-14.0%	15
Edgar	849	10.3%	6.6%-15.6%	40	Wayne	444	6.3%	4.1%-9.5%	25
Calhoun-Scott	499	10.3%	6.5%-15.9%	29	Clinton	971	6.2%	3.8%-9.9%	23

Health Department	Est. Pop.	Wt. %	95% CI	Unwt. count	Health Department	Est. Pop.	Wt. %	95% CI	Unwt. count
Henderson-Warren	1,082	10.3%	7.5%-13.8%	52	Stephenson	1,374	5.8%	3.4%-9.9%	24
Mercer	784	10.2%	5.7%-17.5%	31	Woodford	895	5.7%	3.2%-10.0%	22
Morgan	1,557	10.2%	7.0%-14.7%	38	Boone	1,197	5.3%	3.1%-8.9%	24
Southern Seven	2,920	10.2%	7.3%-13.9%	47	Kankakee	2,415	5.3%	3.0%-9.1%	23
De Witt-Piatt	1,490	10.1%	7.1%-14.2%	42	Champaign	3,382	5.2%	3.1%-8.6%	18
Knox	2,316	10.1%	6.3%-15.7%	45	McHenry	6,713	4.9%	2.8%-8.6%	18
Mason	627	9.9%	6.5%-14.7%	40	Lake	12,294	4.1%	1.9%-8.3%	18
Macon	2,879	6.2%	3.5%-10.6%	25	Perry	*	*	*	*

Illinois County Behavioral Risk Factor Survey, Round 6 (Collected 2015-2019)

Appendix 3

Data Source Notes

The Cognitive Decline module of the Behavioral Risk Factor Surveillance System (BRFSS) was asked on the Illinois statewide survey in 2020. It was also asked on the Illinois County Behavioral Risk Factor Survey (IL CBRFS) between 2015-2019. The annual statewide survey has a sample size of around 2,400 for adults aged 45 years and older. The county round survey has a sample size of 25,000 for adults 45 years and older. Given the larger sample size, the county round data was used for this brief. In the statewide survey, the Cognitive Decline module only produced reliable data for the first questions when looking at demographics. For the additional questions, when analyzed by demographics the data did not meet standards of reliability. Cells totals of five or less or confidence intervals of +/-10% or greater do not meet standards of reliability. Where confidence intervals were large, relative standard error (RSE) was used to determine the reliability of estimates.

BRFSS Questionnaire Section: Cognitive Decline

The next few questions ask about difficulties in thinking or remembering that can make a big difference in everyday activities. This does not refer to occasionally forgetting your keys or the name of someone you recently met, which is normal. This refers to confusion or memory loss that is happening more often or getting worse, such as forgetting how to do things you've always done or forgetting things that you would normally know. We want to know how these difficulties impact you.

1. During the past 12 months, have you experienced confusion or memory loss that is happening more often or is getting worse? (yes/no)
2. During the past 12 months, as a result of confusion or memory loss, how often have you given up day-to-day household activities or chores you used to do, such as cooking, cleaning, taking medications, driving, or paying bills? Would you say it is... (always, usually, sometimes, rarely, never)
3. As a result of confusion or memory loss, how often do you need assistance with these day-to-day activities? Would you say it is... (always, usually, sometimes, rarely, never)
4. When you need help with these day-to-day activities, how often are you able to get the help that you need? Would you say it is... (always, usually, sometimes, rarely, never)
5. During the past 12 months, how often has confusion or memory loss interfered with your ability to work, volunteer, or engage in social activities outside the home? Would you say it is... (always, usually, sometimes, rarely, never)

6. Have you or anyone else discussed your confusion or memory loss with a health care professional?
(yes/no)

Responses were collapsed for analysis. Always, usually, sometimes was coded as “Yes” and rarely, never was coded as “No.”

Rural Definition

The IDPH definition by county is used. The IDPH rural health map of counties designated as rural/urban is used. Rural is defined as a county not part of a metropolitan statistical area (MSA), as defined by the U.S. Census Bureau; or a county that is part of an MSA but has a population fewer than 60,000.

<https://dph.illinois.gov/topics-services/life-stages-populations/rural-underserved-populations.html>