

RIVERSIDE TOWNSHIP

Mental Health Board

Consultant's Report

(April 16, 2025)

1. Dr. Troiani attended the Monday - April 14th Illinois Mental Health Summit meeting and on that same day the Policy Committee meeting of Mental Health America of Illinois.
2. Attachment "A" includes the agenda from the Monday meeting of the Illinois Mental Health Summit. Also included is a list with the status of the legislative bills that are being tracked by the Illinois Mental Health Summit as of April 15, 2025.
3. The following federal updates are forwarded from the Illinois Behavioral Health Association (IBHA) and published in a Politico report:

SAMHSA CUTS CRITICIZED - More than a dozen CEOs of organizations working to improve the lives of people living with mental illness or substance use disorder are speaking out against potential staff cuts at the Department of Health and Human Services' Substance Abuse and Mental Health Services Administration, or SAMHSA, Carmen reports. The Trump administration had fired about 10 percent of the agency's 900 staffers, the New York Times reported last week, as part of a quick reduction in the federal workforce. Some received emails over the last few days either reinstating them or telling them they would be placed on paid administrative leave because of a federal court order issued last week, according to a person familiar with the issue who was granted anonymity because they weren't authorized to speak publicly about it. HHS did not immediately respond to a request for more information about the number of people laid off and reinstated and the number of people it still plans to lay off. The mental health organizations' leaders, who are part of the CEO Alliance for Mental Health, warned Tuesday that staff cuts could cause widespread harm as the agency managed grants for substance use prevention and treatment and the 988 Suicide and Crisis Lifeline, which has served more than 14 million seeking help since 2022.

The CEOs said cuts would reduce oversight of the grants SAMHSA manages that help people with the most severe mental illness, curtail progress in reducing fatal overdoses and harm the agency's efforts to bring mental health resources to rural communities. The CEOs include Robert Gebbia of the American Foundation for Suicide Prevention, Dr. Marketa Wills of the American Psychiatric Association and Daniel Gillison Jr. of the National Alliance on Mental Illness.

Why it matters: The country has faced a mental health crisis since the beginning of the pandemic. U.S. suicide rates reached record levels, with more than 49,000 people dying by suicide in 2022, the latest year for which the Centers for Disease Control and Prevention has finalized data available. Fatal drug overdoses also climbed during the pandemic to a record of some 111,000 in 2023 but have started to drop since, decreasing by a quarter in the year ending in Sept. 2024, according to CDC data. Still, the gains are fragile, and mental health

and substance use disorder experts worry that drastic cuts in federal workers and in funding dedicated to the issue could potentially lead to a new rise in addiction and deaths.

4. Discussion is underway with the Illinois Certification Board (ICB) to explore the feasibility of establishing a credential (i.e., certification) for "Crisis Workers". A working committee will be established to start the process of developing a credential with standards that would be established for those in in Illinois. Individuals working with the Dial #988 crisis response system and DMH funded Program 590 - Mobile Crisis Responders would be eligible. Those included are individuals who work in the crisis system, who have lived experience and those who qualify as mental health professionals (MHP).
5. Attachment "B" is a report from the National Center for Health Statistics. There has been a 25% drop in Fentanyl related deaths which has been attributed to the Harm Reduction Programs.
6. Attachment "C" Is an article from the Wall Street Journal (March 19, 2025) titled Alcohol Makers Are Hooked on Heaviest-Drinking Buyers.
7. Attachment "D" is an article from TIME (March 2024) titled America has Reached Peak Therapy. Why is our Mental Health Getting Worse?
8. Attachment "E" From the JAMA Network - Open is an article titled Neighborhood Characteristics and Mental Health from Childhood to Adolescence.
9. Attachment "F" Is an article from the Chicago Sun times (April 10, 2025) titled Failure to treat, failure to protect: For accused mentally ill killers and their victims in Chicago, help is too little, too late.

Respectfully Submitted,

Joseph E. Troiani

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Mental Health Summit

April 14th, 2025

10 am to Noon

(Virtual meeting only)

Agenda

1. Legislative update (attachment)
2. Bills to review
 - a. HB1429–Response to *Grants Pass* decision criminalizing sleeping in public
 - b. HB1872–Periodic mental health assessments in DCFS
 - c. HB2960–mental health education in schools
 - d. HB3718–strengthens ability to discipline DHS employees
 - e. SB594–excludes identifying with a “diverse sexual orientation” from definition of mental illness in MHDDCode
 - f. SB1943–limits collection of data about seclusion and restraints in schools
3. Federal Medicaid cuts
4. Presentations on two bills
 - a. HB1428–Isolated Confinement Restriction Act The Chicago School
 - b. HB44–Emerging Adult Sentencing Act The Chicago School
5. Criminal justice
 - a. Task Force on Unfit Criminal Defendants
6. Children’s mental health
7. Hybrid Summit meeting on May 12th Bordoni/Cale
 - a. RSVP for lunch to be provided
8. Announcements from members
9. Other business

The next Summit meeting will be on Monday, May 12th

Legislation for 2025

Mental Health Summit and Mental Health America of Illinois Tracking
April 15, 2025

<u>Bill</u>	<u>Description</u>	<u>Sponsor</u>	<u>Status</u>
House Bills			
HB57	Amends the Essential Support Person Act to include CILAs Floor am. #1	Meier	MH ¹ Passed 22-0 Passed 21-0 Passed House 113-0 Harriss Assignments
HB1081	Requires DHFS to apply for an amendment to the home and community based Medicaid waiver to cover therapeutic recreation programs (Am #1 adopted)	Gill (+20 ²) Capel	Hum. Ser. ³ Passed 12-0 Passed House 107-0 Assignments
HB1085	Strengthens mental health parity provisions of of the Insurance Code (reintroduction of HB4475 from 2024) am #1 adopts	LaPointe (+55) Villa	MH Passed 17-5 Passed House 72-33 Assignments
HB1365	Creates temporary licenses for mental health professionals to reduce workforces shortages	Morgan (+8)	Health Lic. ⁴ Passed 12-0 Passed House 115-0 1 st rdg
HB1712	Requires DPH to train healthcare providers about how to use POLST forms–Am #1 adopted	Grasse (+11)	Pub.H ⁵ Passed 6-3 Passed House 76-40 1 st rdg

¹ Mental Health and Addiction Committee

² Number of co-sponsors

³ Human Services Committee

⁴ Health Care Licenses Committee

⁵ Public Health Committee

HB1843	Amends zoning law to prevent local zoning from excluding CILAs (Am #1 adopted)	Ness (+14)	Housing Passed 11-5 Passed House 77-35
HB1872	Requires youth in the custody of DCFS to have a mental health provider and periodic assessments	Kifowit (+10)	Adopt Passed 9-3 Passed House 75-35
HB2387	Various amendments to outpatient commitment law (Re-introduction of HB5351 from 2023) Am #1 adopted	Katz Muhl (+9)	Jud-Civ Passed 20-0 Passed House 103-0 Fine Assignments
HB2545	Allows appeals of denials of supportive housing	Guzzardi (+7)	Housing Passed 11-6 Passed House 69-42 1 st rdg
HB2562	Requires additional training for guardians to include training about estates, dementia and Alzheimers (Am #1 tabled) Am #2 adds other provisions about the duties of a guardian	Costa Howard (+2)	Jud-Civ Passed 19-0 3 rd rdg Passed 20-0 Passed House 114-0
HB2994	Restores confidentiality of juvenile mental health records (narrows scope of Public Act 103-0474) Am #1 adopted– Am #2 adopted	Mussman (+1)	Jud-Civ Passed 19-0 Passed House 111-0
HB3078	Adds physician assistants to the definition of “qualified examiner” in the MHDDCode (among numerous other changes) (Am#1 adopted--adds autism provisions)	Lily	Hum.Ser. Passed 8-3 Passed House 76-39
HB3385	Strengthens the Early Action on Campus Act by mandating staffing levels Floor Am #1 adopted	Hernandez (+18)	Higher Ed. ⁶ Passed 11-0 Passed House 111-0
HB3487	Requires DFPR to collect demographic data about behavioral health professionals	Syed (+10)	MH Passed 15-7 Passed House 75-37

⁶ Higher Education Committee

HB3572	Allows diversion of persons charged with a misdemeanor and who may be unfit to stand trial Am # 1 adopted	Hirschauer (+11)	Jud-Crim Passd 10-5 Passed House 111-0
HB3718	Enhances powers of DHS to investigate and discipline care staff in mental health and disabilities facilities (Am # 2 adopted)	Morris (+13)	Hum.Ser Passed 12-0 Passed House 112-0

Senate Bills

SB118	Requires DHS to create programs to treat gambling	Morrison (+1)	Executive Passed 11-0 Passed 55-0 Didech Rules
SB126	Requires insurance to cover Alzheimers treatments and diagnostic testing (am 31 adopted)	Murphy (+17) Gill (+22)	Insurance Passed 12-0 Passed Senate 55-0 Rules
SB188	Extends repeal date for out of state commitment law Sen Floor Am #1 adopted makes program permanent and requires data collections	Halpin Johnson	B&MH Passed 8-0 Passed Senate 55-0 Rules
SB205	Provides the personal needs allowance must increase with cost of living— deadline extended to 5/9/25	Rose	App-HHS
SB594	Am #1 amends definition of mental illness in MHDDCode to exclude “identifying as having a diverse sexual orientation” Amendment pending— deadline extended to 5/9/25	Harmon	Executive Passed 11-0 3 rd rdg
SB1231	Changes procedures for hearings for special education hearings—changes to time periods floor am #1 adopted	Cappel	Education Passed 13-0 Passed Senate 56-0
SB1263	Gives residents of nursing homes and SMHRFs the right to leave facility in the absence of medical finding of danger Deadline extended to 5/9/25	Aquino (+1)	HHS ⁷

⁷ Health & Human Services Committee

SB1299	Amends the Assisted Living and Shared Housing Act to give residents more protection from discharge or transfer Am #1 adopted Deadline extended 5/9/25	Lightford	HHS Passed 10-0 3 rd rdg
SB1346	Requires health insurance companies to provide a health benefit information card with information about whether they are regulated by the Dept. Of Insurance	Fine (+3) Morgan	Insurance Passed 14-0 Passed Senate 56-0
SB1395	Improves access to education for persons with intellectual disabilities in prisons (am #1 adopted) Deadline extended to 5/9/25	Johnson (+7)	Crim Passed 6-2 App-PSI ⁸
SB1411	Provides that the person designated in the Health Care Surrogate Act be authorized to consent under the Living Will Act when the individual has a terminal condition Am # 2 pending	Fine Gong Gershowitz	Judiciary Passed 9-0 Passed Senate 55-0
SB1480	Requires health insurance to cover mental health crisis services. Requires DHS to create a Statewide Crisis Continuum Strategic Plan-- Deadline extended to 5/9/25	Fine (+6)	Insurance
SB1560	Requires DHS to provide training to hospital staff regarding the BEACON program for resources for youth in need of mental health services Am #3 adopted	Feigenholtz (+3)	Education Passed 13-0 Passed 52-0
SB1844	Requires DHFS to collect and disseminate data about the use of prior authorization in the Medicaid program for psychotropic medications Deadline extended to 5/9/25	Feigenholtz (+3)	BH Passed 8-0 2 nd rdg
SB1882	Creates pilot program to appoint advocates for persons with intellectual disabilities in the criminal justice system Deadline extended to 5/9/25	Stadelman (+1)	Crim. Passed 8-0 App-HS
SB2120	Implements 988 system, including cell phone tax Deadline extended to 5/9/25	Fine (+1)	Revenue
SB2421	Creates the Psychiatric Residential Treatment Facilities Act for the placement of youth	Fine	HHS Passed 7-3 Passed Senate 55-0

⁸ Appropriations–Public Safety &Infrastructure Committee

		Lapointe	Rules
SB2471	Requires DHFS to provide Medicaid to employed persons with disabilities irrespective of income or assets to the extent permitted by Federal law Deadline extended to 5/9/25	Guzman (+2)	App-HHS ⁹
SB2500	Amends the Community Emergency Services and Support Act (CESSA). Removes prohibition on the participation of emergency responders in the involuntary commitment process and allows law enforcement to transport persons to hospitals when necessary. Requires data collection concerning involuntary commitment. (Floor Am #1 adopted)	Peters (+6) Cassidy	HHS Passed 10-0 Passed Senate 56-0 Rules

Executive Orders Subject to Legislative Review

EO2501	Executive Order combines the Division of Mental Health and the Division of Substance Use Prevention and Recovery into the new Division of Behavioral Health and Recovery	Filed: 2/14/25 In the absence of legislative disapproval becomes law 60 days later
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Bold	Legislation supported by the Mental Health Summit
#	Legislation opposed by the Mental Health Summit
&	Legislation supported by MHAI—no Summit position
*	Legislation opposed by MHAI—no Summit position

The current status of mental legislation being tracked by the Mental Health Summit may be found at <https://mentalhealthsummit.wordpress.com/pending-mental-health-legislation/>

The full text and current status of all legislation pending in the Illinois legislature may be found at: <https://www.ilga.gov/>

⁹ Appropriations_Health & Human Services Committee

Inactive Bills

HB44	Community Base Corrections Act provides funding for community services as an alternative to incarceration (2 amendments pending)	Mayfield	Rest. Just. ¹⁰ Rule 19a ¹¹
HB55	Strengthens provisions for oversight of CILAs	Meier (+1)	App-HHS ¹² Rule 19a
HB1064	Amends the Community Mental Health Act to allow library districts to provide mental health services	Didech	MH Rule 19a
HB1096	Requires DOC to provide all programs to inmates that are available in any prison irrespective of the inmates projected release date	Davis	Rules
HB1122	Requires CILAs to notify DHS whenever an emergency call is made from the facility	Meier	App-HHS Rule 19a
HB1134	Increases "personal needs allowance" for those CILA residents on Medicaid to \$100/month and provides for cost of living increases	Meier	Rules
HB1136	Provides for easier re-admission to a state dev. dis. facility for persons discharged to a CILA	Meier	Rules
HB1143	Legalize psilocybin for the treatment of mental illnesses (reintroduction of HB1/SB3696)	Ford	Rules
HB1198*	When the petitioner is not a relative requires the appointment of public guardian or state guardian	Costa Howard	Jud-Civ ¹³ Rule 19a

¹⁰ Restorative Justice and Public Safety Committee

¹¹ Bill returned to Rules Committee because it failed to pass out of committee or full House before deadline

¹² Appropriations-Health and Human Services Committee

¹³ Judiciary-Civil Committee

HB1236	Requires schools to provide trauma services to students who have experienced the death of a relative	West	Educ-P ¹⁴ Rule 19a
HB1242	Mandates staffing levels at state psych. hospitals	West	Rules
HB1360	Requires health insurance policies to cover all Alzheimers tests and treatments (am #1 adopted)	Gill (+10)	Insurance Passed 17-0 am # 2 adopted 16-0 Rule 19a
HB1425	Gives preference to family members to serve as guardians	Morris	Con & Fam. ¹⁵ Rule 19a
HB1429	Limits ability of local government to criminalize sleeping in public (Am #1 pending)	Olickal (+23)	Housing Passed 10-6 Rule 19a
HB1448	Prohibits use of prior authorization for any behavioral health service (except meds) covered by private insurance or Medicaid	Syed (+5)	MH Rule 19a
HB1467	Eliminates criminal defense that defendant believed alleged victim of patronizing a prostitute claim was not intellectually disabled or a minor	La Ha (+17)	Rules
HB1587	Gives residents of nursing homes and SMHRFs the right to go outside as they wish	Moeller	Hum.Ser. Rule 19a
HB1743	Requires DHS to compensate county jails whenever they fail to accept into treatment within 20 days someone found unfit to stand trial	Tipsword (+19)	App-HHS Rule 19a
HB1810	Improves access to education for persons with intellectual disabilities in prison	Dias (+9)	Rest. Just Passed 7-3 Rule 19a
HB1874	Provides property tax relief for CILAs	Yang Rohr (+43)	Rev. ¹⁶

¹⁴ Education Policy Committee

¹⁵ Constitutional & Family Law Subcommittee

¹⁶ Revenue & Finance Committee

			Rule 19a
HB1895	Strengthens regulations for group homes for children with intellectual disabilities	Costa Howard	Hum.Ser Passed 12-0 Rule 19a
HB2356	Adds local law enforcement to the list of entities to be notified when someone poses a clear and present danger to self or others	Ugaste	MH Rule 19a
HB2356	Adds local law enforcement to the list of entities to be notified when someone poses a clear and present danger to self or others	Ugaste	MH Rule 19a
HB2398	Requires DHFS to collect and publicize data about prior authorization of psychotropics	LaPointe	Hum.Ser. Rule 19a
HB2429	Limits rate increases for assisted living and shared housing housing facilities	Syed	App-HHS Rule 19a
HB2438	Limits use of prior authorization for psychotropic medications covered by Medicaid	West	Rules
HB2512	Requires provision of information about side effects to be given to parents when children get psychotropic meds. under the Medicaid program. Requires data to be collected by DHFS about adverse reactions to psychotropic med.	Davis	Rules
HB2528	Requires improvements in services in supportive living dementia care facilities (Medicaid subcommittee)	Avelar	Hum.Ser Rule 19a
HB2538	Requires DHS to do a wellness check when an adult developmental disabilities loses a parental guardian	West	MH Rule 19a
HB2625	Allows children and persons with intellectual disability to testify remotely in sexual assault cases	Niemerg	Rules
HB2871	Requires screening for tardive dyskinesia	LaPointe	App-HS Rule 19a
HB2960	Requires mental health to be included in middle school and high school health classes	Dias (+5) Education Policy	Passed 9-4

	House floor Am#1 adopted		Rule 19a
HB2992	Creates Psilocybin Equity Pilot Project Act to authorize limited use of drug	Mah (+12)	Executive Rule 19a
HB2993	Requires a monthly directed payment to each community mental health provider based upon the number of Medicaid users	LaPointe	App-HS Rule 19a
HB3088	Allows waivers to permit persons with developmental disabilities to stay in facilities beyond age 22	Moeller	App-HS Rule 19a
HB3157	Strengthens procedures for restoring FOID cards to persons who have been had them suspended due to mental illness (am #1 pending)	Hirschauer	Gun Vio. ¹⁷
HB3350	Restricts ability of pharmaceutical companies to limit access to 340B drugs	Moeller (+20)	App-HS Rule 19a
HB3372	Requires a court to consider whether a supported decision-making agreement would be preferable to a guardianship before appointing a guardian	Mussman	Jud-Civ Rule 19a
HB3458	Provides defense to aggravated battery to a police officer that officer knew defendant had a mental illness and defendant acted abruptly	Davis (+2)	Rules
HB3468	Reintroduction of DHS bill making changes to the law governing the confinement of unfit defendants (see SB2373) am # 1 pending	Costa Howard	Jud-Crim Rule 19a
HB3697	Amends CESSA to allow mobile mental health responders to initiate commitment proceedings-other changes to statute	Cassidy(+4)	MH Passed 22-0 Rule 19a
HB3707	Prohibits prior authorization for community mental health services covered by commercial insurance (Am #1 to shell bill)	LaPointe (+3)	Executive Rule 19a
HB3998	Repeals provision in Medicaid law which automatically terminates Medicaid expansion under the ACA if the	Ford	Rules

¹⁷ Gun Violence Prevention Committee

Federal government reduces is cost share below 90%

HB3999	Creates the County Co-Responder program allowing sheriffs to create victim assistance programs with behavioral health services	Grant (+1)	Filed
HB4034	Changes Medicaid rules for prior authorization of psychotropic medications	West	Rules
SB55	Strengthens mental health parity provisions of of the Insurance Code (reintroduction of HB4475 from 2024)	Villa (+30)	Assignments
SB78	Amends the Community Mental Health Act to allow library districts to provide mental health service	Johnson	Assignments
SB222	Authorizes “conditional employees” in child care facilities pending background check (not allowed contact with children)	Halpin	Assignments
SB273	Amends Criminal Code to provide that financial crimes against persons with disabilities may be tried in any county where assets are held and enhances penalties - Deadline extended to 4/11/2	Tracy	Crim Clear ¹⁸ Rule 3-9a ¹⁹
SB1327	Requires parity for mental health claims for disability insurance	Morrison(+1)	Insurance
SB185	Creates the Mental Health and Substance Use Transparency Act requiring detailed reporting concerning all service providers in the state. Deadline extended to 4/11/25	Syverson	B&MH ²⁰ Rule 3-9a
SB1438	Strengthen protections for children in group homes	Turner	Assignments
SB1469	Requires improvements in services to persons in supporting living dementia care settings	Peters (+2)	HHS
SB1589	Amends the Line of Duty Compensation Act to	Peters	Assignments

¹⁸ Criminal Law Clear Compliance Committee

¹⁹ Bill returned to Assignments because it failed to pass out of committee or full Senate before the deadline

²⁰ Behavioral and Mental Health Committee

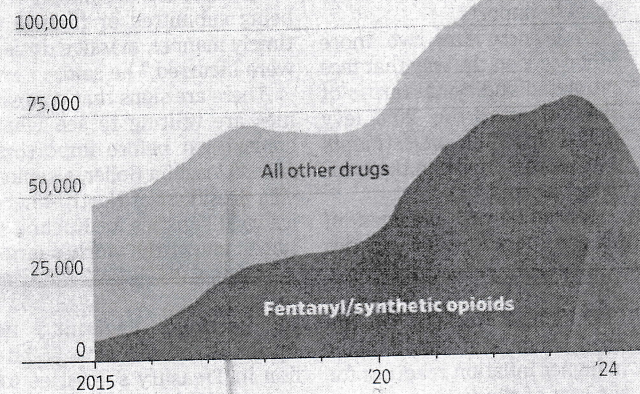
	provide benefits to mental health professionals employed by law enforcement		
SB1603	Prohibits commercial health insurance or Medicaid from requiring prior authorization for community mental health services Deadline extended to 4/11/25	Fine (+6)	Insurance Rule 3-9a
SB1655	Creates standards and procedures concerning juveniles who may be unfit to stand trial- Deadline extended to 4/11/25	Collins (+4)	Criminal Rule 3-9a
SB1753	Creates Ensuring Essential Service Act to improve services to persons with dev. disabilities	Cervantes	Assignments
SB1824	Requires courts to consider PTSD as a mitigating factor in sentencing combat veterans. Requires evaluation of combat veterans who have been arrested to determine whether they are in need of mental health services	Porfine (+1)	Assignments
SB1943*	Amends School Code to limit collection of data about restraint and seclusion (am #1 adopted)	Cappel	Education Passed 11-0 Rule 3-9a
SB2109	Strengthen powers of guardian of the estate concerning assets held by financial institution	Simmons	Assignments
SB2286	Prohibits health insurance from requiring prior authorization for preventive services or from imposing copays	Simmons (+1)	Assignments
SB2287	Prohibits health insurance from charging persons more for mental health services performed out of network	Simmons	Assignments
SB2353	Prohibits health insurance from creating a limit on the number of outpatient mental health visits	Simmons (+4)	Assignments
SB2373	Substantial changes to the law governing the confinement of persons found unfit to stand trial (re-introduction of SB3444 from 2024)	Collins (+1)	Assignments

National Center for Health Statistics

Overdose Deaths Decline

In the 12 months ended in October 2024, overdose deaths in the U.S. fell 25% from a year earlier, led by a decrease in fentanyl deaths, according to preliminary estimates. **A3**

Provisional drug-overdose deaths, for 12 months ending in the date shown



Source: National Center for Health Statistics

March 19, 2025

Alcohol Makers Are Hooked On Heaviest-Drinking Buyers

By LAURA COOPER

Most ads for liquor or beer include a reminder to “drink responsibly.” Still, the alcohol industry depends on people who drink more than public-health officials say is safe.

One-fifth of adults account for an estimated 90% of alcohol sales volumes in the U.S., according to an analysis published in 2023 by equity research firm Bernstein.

“Heavier drinkers are obviously where the money is,” said Philip Cook, a professor emeritus at Duke University whose 2007 book, “Paying the Tab,” was among the scientific studies analyzed by Bernstein.

That dependence has become a greater risk to companies as the U.S. government

considers putting cancer warnings on alcohol packaging and lowering the recommended limit of drinks a day people can safely consume.

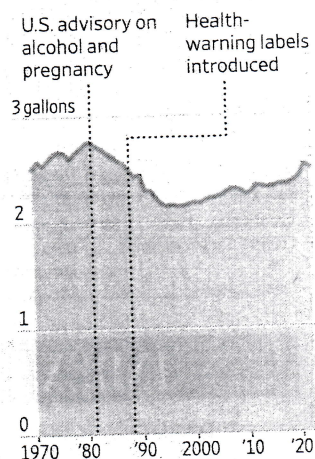
The industry’s sales are declining because of consumer health concerns, expanding legalization of cannabis, the use of GLP-1 drugs such as Ozempic and a generational shift toward less alcohol consumption. That leaves beer, wine and spirits companies more reliant on people like Kevin Turner.

“People know alcohol is bad for you, that it can be addictive. People understand that,” said Turner, 39 years old, of Orlando, Fla. “It is poison. It is delicious poison, but it is absolutely poison.”

On weeknights, Turner en-

Please turn to page B2

U.S. annual per-capita consumption of ethanol in beer, wine and spirits



Note: Based on population ages 14 and older.
Source: National Institute on Alcohol Abuse and Alcoholism

Booze Sales Rely on Big Drinkers

Continued from page B1

joys a couple of glasses of liquor from his home bar. On weekend evenings, he often meets up with friends at a local bar for three or four beers. Turner, a former smoker, said he is confident he could stop drinking if he wanted to, but a cancer warning label or a revision to the federal dietary guidelines wouldn't immediately change his habits.

For nearly three decades, the guidelines have said it is safe for men to have a maximum of two drinks a day and for women to have one. A standard drink measure in the U.S. is equivalent to 12 ounces of beer, five ounces of wine or 1.5 ounces of distilled spirits.

Alcohol-industry veterans say they are aware of the loyal customers but don't market to them. "In any category, especially in alcohol, the industry is very concerned about overconsumption," said Ann Mukherjee, the former North America chief at Pernod Ricard who introduced an Absolut Vodka marketing campaign addressing the role of alcohol in sexual assault.

The alcohol industry, she said, would prefer to "be less reliant on just a small group driving a majority of consumption. They don't think this is healthy for their own business, sustainability of the category,

and for their own consumers."

Today, federal rules require alcohol labels with warnings about drunken driving and drinking during pregnancy, as well as a general warning that alcohol "may cause health problems."

Federal guidelines on alcohol consumption could change this year in an update by the Agriculture and Health and Human Services departments. A report issued this month to inform the new guidelines found that for both men and women, one drink a day increases the risk of death from alcohol-related illnesses and injuries.

The alcohol industry generally acknowledges that heavy drinking increases the risk for several types of cancer. But industry groups also say that alcohol consumed in moderation can be part of a healthy lifestyle for some people. Industry lobbyists are fighting to prevent any changes to the federal guidelines, arguing that the risks are already known and that the government should take into consideration a recent report showing that moderate drinking lowers mortality rates.

The discussion around the cancer risks of alcohol adds pressure to an already struggling industry. Shares of Constellation Brands plummeted this month after the company reported lower-than-expected beer sales and a \$2.25 billion write-down on its wine-and-spirits business. Spirits maker Diageo has warned that it is facing weak consumer demand. Jack Daniel's maker Brown-Forman last week said it would cut about 12% of its workforce, or roughly 648 jobs.

HEALTH MENTAL HEALTH

America Has Reached Peak Therapy. Why Is Our Mental Health Getting Worse?

15 MINUTE READ

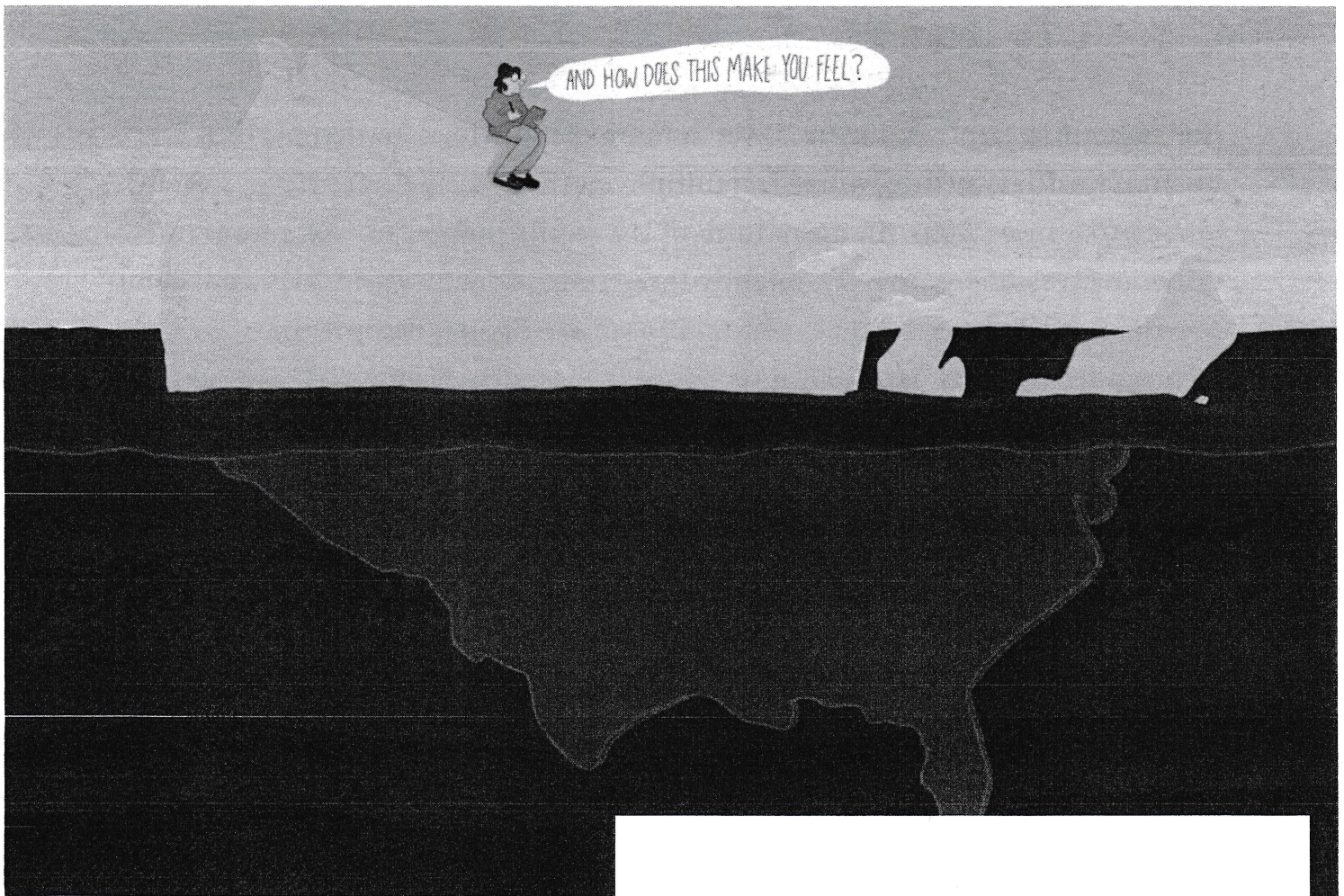


Illustration by Katie Kalupson for TIME

BY JAM

AUGUST

The U.S. has reached peak therapy. From books, podcasts, and movies. Professional counselors, celebrities, and

politicians routinely go public with their mental health struggles. And everyone is talking—correctly or not—in the language of therapy, peppering conversations with references to gaslighting, toxic people, and boundaries.

All this mainstream awareness is reflected in the data too: by the latest federal estimates, about one in eight U.S. adults now takes an antidepressant and one in five has recently received some kind of mental-health care, an increase of almost 15 million people in treatment since 2002. Even in the recent past—from 2019 to 2022—use of mental-health services jumped by almost 40% among millions of U.S. adults with commercial insurance, according to a recent study in *JAMA Health Forum*.

But something isn't adding up. Even as more people flock to therapy, U.S. mental health is getting worse by multiple metrics. Suicide rates have risen by about 30% since 2000. Almost a third of U.S. adults now report symptoms of either depression or anxiety, roughly three times as many as in 2019, and about one in 25 adults has a serious mental illness like bipolar disorder or schizophrenia. As of late 2022, just 31% of U.S. adults considered their mental health “excellent,” down from 43% two decades earlier.

More From TIME

Trends are going in the wrong direction, even as more people seek care. “That’s not true for cancer [survival], it’s not true for heart disease [survival], it’s not true for diabetes [diagnosis], or almost any other area of medicine,” says Dr. Thomas Insel, the psychiatrist who ran the National Institute of Mental Health (NIMH) from 2002 to 2015 and author of *Healing: Our Path from Mental Illness to Mental Health*. “How do you explain that disconnect?”

Is mental-health care working in the U.S.?

Since 2002, the share of Americans getting mental-health care has grown by 1/3rd; the share of those reporting “excellent” mental health has fallen by nearly as much

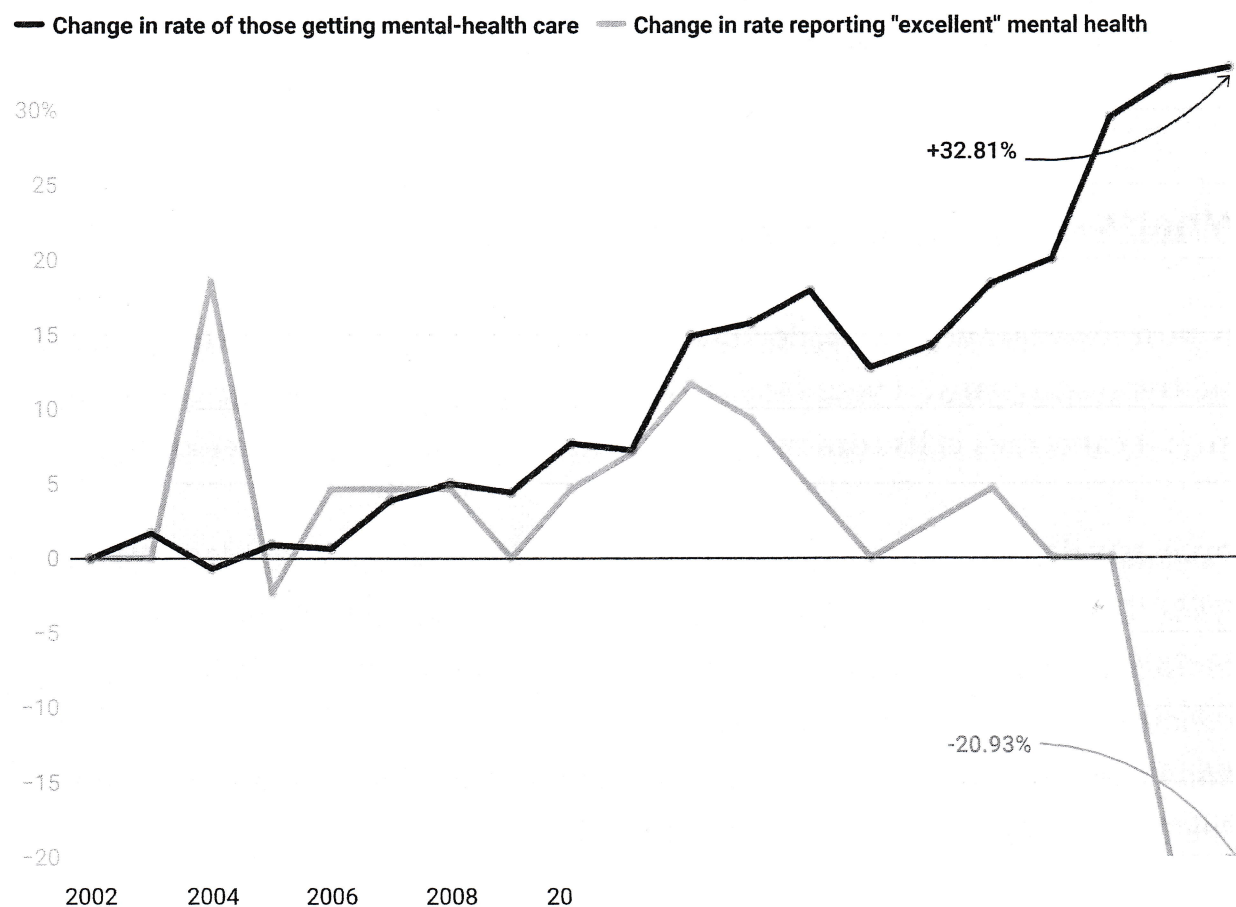


Chart: Elijah Wolfson for TIME • Source: SAMHSA; NSI

Dr. Robert Trestman, chair of the American Council on Healthcare Systems and at play, some positive and some negative comfortable seeking care as mental

stigmatized, increasing the total number of people getting diagnosed with and treated for mental-health issues.

Less positively, Trestman says, more people seem to be struggling in the wake of societal disruptions like the pandemic and the Great Recession, driving up demand on an already-taxed system such that some people can't get the support they want or need.

Some experts, however, believe the issue goes deeper than inadequate access, down to the very foundations of modern psychiatry. As they see it, the issue isn't only that demand is outpacing supply; it's that the supply was never very good to begin with, leaning on therapies and medications that only skim the surface of a vast ocean of need.

What's really in a diagnosis

In most medical specialties, doctors use objective data to make their diagnoses and treatment plans. If your blood pressure is high, you'll get a hypertension drug; if cancerous cells turn up in your biopsy, you might start chemotherapy.

Psychiatry doesn't have such cut-and-dry metrics, though not for lack of trying. Under Insel, numerous NIMH research projects aimed to find genetic or biological underpinnings of mental illness, without much payoff. Some conditions, like schizophrenia, have clearer links to genes than others. But by and large, Insel says, "we don't have biomarkers. We don't have a lot of things that you would have in other parts of medicine."

What psychiatry has is its Bible, the Mental Disorders (DSM). The DSM's conditions largely based on symptoms and how disruptive they are. Relative to a more subjective approach. It's essentially a line between what they observe in their patient and the line from normal to disorder—a

during brief appointments on teletherapy apps, where things can easily slip through the cracks.

Dr. Paul Minot, whose nearly four decades as a psychiatrist do not stop him from vocally critiquing the field, feels his industry is too quick to gloss over the "ambiguity" of mental health, presenting diagnoses as certain when in fact there's gray area. Indeed, research suggests both **misdiagnosis** and **overdiagnosis** are common in psychiatry. One **2019 study** even concluded that the criteria underlying psychiatric diagnoses are "scientifically meaningless" due to their inconsistent metrics, overlapping symptoms, and limited scope. That's a sobering conclusion, because diagnosis largely determines treatment.

"If I'm giving you an antibiotic but you have a viral infection, it's not going to do anything," Trestman says. Similarly, an antidepressant may not work well for someone who actually has bipolar disorder, which can be mistaken for depression. **This imperfect diagnostic system** may help explain why, even though antidepressants are one of the most-prescribed drug classes in the U.S., they don't always yield great results for the people who take them.

Joseph Mancuso, a 35-year-old DJ, music producer, and content creator in Texas who uses the stage name Joman, has been in and out of the mental-health care system since he was a teenager. Over the years, he's received a range of diagnoses, including depression and bipolar disorder, that he says never felt quite accurate to him. (More recently, he received a diagnosis that felt right: complex post-traumatic stress disorder.) These diagnoses led to numerous prescriptions, some of which helped and many of which didn't. "I felt at times that I was just a dartboard and they were just throwing darts and seeing what would stick," he says.

Some treatments don't seem to stick for properly diagnosed. In a **2019 review** to assess the efficacy of supposedly effective treatments, researchers systematically exposed to their triggers. Some methods—like exposure therapy—came out looking good. But a full body of evidence to back them, the authors :

“It’s not the case that, holy shit, therapy just doesn’t work at all,” says co-author Alex Williams, who directs the psychology program at the University of Kansas. But Williams says the results inspired him to make some changes in his practice, leaning more heavily on therapeutic styles with the best data behind them.

Over-medicated...and over-therapized?

Even styles of therapy with solid evidence behind them can vary in efficacy depending on the clinician at the reins. One of the best predictors of success in therapy, research has shown, is the relationship between patient and provider—which may explain why it can feel like a crapshoot, with some people leaving their sessions feeling enlightened and empowered and others feeling the same as when they walked in.

The latter scenario was the case for “Shorty,” a 31-year-old from North Carolina who asked to be identified by his nickname to preserve his privacy. Shorty became disillusioned with therapy after trying it while struggling with substance abuse in college. “We just talked,” he says, “but we [weren’t] really solving anything. I was just paying this dude money.”

Some people may indeed benefit from therapy, Shorty says. But it annoys him that the practice is sometimes seen as an automatic fix for life’s problems when both anecdotal evidence and scientific data suggest it doesn’t work for everyone. The APA says about 75% of people who try psychotherapy see some benefit from it—but not everyone does. “Some people experience negative effects, studies show,” he says. “After a few sessions before they have a breakthrough.”

Given the significant investment of time and money required for therapy to succeed, it’s not surprising that, in contrast to a quicker fix, is what many adults had taken some kind of psychological class, antidepressants are the most commonly used.

There certainly are people who report that their symptoms improve or disappear after taking an antidepressant, and research suggests they are particularly effective for people with severe depression. People with anxiety and other conditions may also benefit from their use, according to the National Library of Medicine. But the data on antidepressants aren't as solid as one might expect for one of the most widely used drug classes on the market.

In the early 2000s, the NIMH ran a large, multi-stage trial meant to compare different antidepressants head-to-head, in hopes of determining whether some worked better than others across the board or in specific groups of patients. Instead, Insel says, "what we came out with was the evidence that, actually, none of them are very good. It was really striking how poorly all of the antidepressants performed across the entire population." Most people had to try multiple drugs, or take multiple at once, to go into remission, and about 30% of people in the trial never saw complete relief. Lots of people also dropped out before the study ended.

In the years since, studies have reached lukewarm findings about antidepressants. A 2018 meta-analysis of data from 522 trials found that all of the 21 analyzed drugs worked better than placebos—but their benefits were "mostly modest." A 2019 review went further, concluding that antidepressants' effects are "minimal and possibly without any importance to the average patient with major depressive disorder."

Dr. Joanna Moncrieff—a founding member of the Critical Psychiatry Network, a group for psychiatrists who are skeptical of the mental-health establishment—believes that's because some antidepressants don't work the way they're advertised. For decades, researchers have been aware of a shortage of mood-regulating neurotransmitters in the brain. Blockbuster antidepressants like Prozac, which was introduced in the 1980s, are meant to boost those serotonergic levels.

But Moncrieff's research, as well as other studies, suggests that depression isn't caused by low serotonin levels.

serotonin isn't the main problem, Moncrieff says, taking these drugs is "not correcting a chemical imbalance. It is creating a chemical imbalance."

So why do some people feel better after taking antidepressants? They clearly have some effect on the brain, potentially improving mood, but Moncrieff isn't convinced they're really treating the root cause of depression. To do that, she believes, clinicians need to help people solve problems in their lives, rather than simply prescribing a pill.

"Lots of people would disagree with that," Moncrieff admits. But studies, including the 2019 research review on psychiatric treatments, do show that "problem-solving therapy," a modality that teaches people how to manage stressors, can work.



The antidepressant drug Prozac is pictured in a Ca
Reed/Bloomberg—Getty Images

That's the approach taken by Minot,
label feelings like sadness and worry
understand where they come from, v

Not everyone is convinced by this argument. Sadness may be part of life, but Insel says that's an entirely different beast than depression, which can manifest more like feeling "dead" and may have no clear link to what's going on in someone's life. "People who think that's just on the continuum of the human experience...have never met anybody who's truly depressed," he says.

Dr. Edmund Higgins, an affiliate associate professor of psychiatry at the Medical University of South Carolina, has grappled with this tension in his own work with incarcerated people—many of whom, he says, would benefit from therapy. But without the time and resources to do that long-term work, he’s mostly limited to writing prescriptions. “You can put them on medicines and they’ll have some improvement,” in some cases more than others, Higgins says. “But guess what? They’re still anxious and depressed.”

A medication might help with symptoms of someone's life, whether they're ir bullied at school, dealing with discrimination. Nor can a pill change the fact that weapon violence is common, the effects of 10% of the population lives in poverty, spreading, and the legal system is re

“A lot of people are suffering from material conditions and [are] having a reasonable, rational human response to suffering,” says Mancuso, the musician from Texas. But in his experience, the psychiatric system doesn’t always acknowledge the range of factors that can influence mental health—from personal trauma all the way up to the geopolitical climate—and instead seems more focused on getting people diagnosed, medicated, and out the door.

Mancuso points to a sentiment expressed by the philosopher Jiddu Krishnamurti: “It is no measure of health to be well-adjusted to a profoundly sick society.”

Beyond the couch

Improving mental health at scale, Insel agrees, requires the system to look beyond the therapist’s couch. (Insel co-founded a startup focused on community-based behavioral care.) Seemingly non-medical solutions—like improving access to affordable housing, education, and job training; building out community spaces and peer support programs; and increasing the availability of fresh food and green space—can have profound effects on well-being, as can simple tools like mindfulness and movement.

“That’s not the way we roll in health care,” Insel says, but that’s incrementally changing. California, for example, has made efforts to broaden what qualifies as health care, and the federal government is funding an expansion of the country’s network of Certified Community Behavioral Health Clinics, which provide a range of behavioral and pl

Nonetheless, policy solutions are co take effect—particularly in a bitterly meantime, expanding access to men Trestman maintains. A system that i never going to do its job perfectly, p concentrated in certain geographic : U.S. population, and is financially out or reach for many people.

To make the biggest dent in rates of mental illness, Insel says the system needs to focus on adding resources in the right places. Teletherapy has grown enormously since the pandemic, which is important but has limitations. Many teletherapy apps meet demand by expecting clinicians to take on a huge quantity of short appointments, TIME's previous reporting has found, which makes it difficult for providers to diagnose accurately, establish a rapport with patients, and provide holistic care.

Plus, it's not clear that online services adequately serve people "in the deep end of the pool," Insel says. Patients with severe psychiatric diagnoses often need specialized care that can't be effectively offered through a mass-market app, and may not have the resources to access these services anyway. Brick-and-mortar, community-based care still plays an important role for people with serious mental illness, Insel says.

Focusing on quality, not just quantity, of care is also important, Trestman says. To the extent that people receiving mental health care are measured, these metrics usually focus on process—how long they've been seen, whether they schedule follow-up appointments—rather than whether their condition is improving, Trestman says. Research suggests fewer than 20% of mental-health clinicians measure changes in symptoms over time.

"What really matters is, is someone getting better? Are they able to return to work? Are they able to care for their family? Are they able to start planning for their future?" Trestman says. "Those are the key issues that we're talking about, and those are just not measured in any consistent way."

In his own practice, Trestman asks if successful treatment means to them blood test, but they build in some of lacking.

Patients like Mancuso are hungry for that recognizes the influence of the focuses not on medication, but on re

That kind of care isn't always the default of a for-profit system struggling to meet demand. But Mancuso believes it's what's necessary to see improvements in mental health at both a national and personal level.

"I had a rough upbringing. I had a lot of people take advantage of me. I was bullied really badly in school," Mancuso says. "I needed more than pills. I needed guidance."

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Neighborhood Characteristics and Mental Health From Childhood to Adolescence

Niloofar Shoari, PhD; Marta Blangiardo, PhD; Monica Pirani, PhD

Abstract

IMPORTANCE The relationship of neighborhood environmental and socioeconomic factors with mental health across childhood and adolescence remains unclear.

OBJECTIVE To investigate the associations of neighborhood characteristics with mental health at various developmental stages, from early childhood to late adolescence.

DESIGN, SETTING, AND PARTICIPANTS This population-based cohort study used data from the Millennium Cohort Study, including approximately 19 000 children born in the UK from 2000 to 2002. This analysis included individuals in England with complete data on neighborhood exposures at ages 3, 5, 7, 11, 14, and 17 years. Data were analyzed from January to December 2023.

EXPOSURES Neighborhood-level air pollution, green space, and socioeconomic status.

MAIN OUTCOMES AND MEASURES Strengths and Difficulties Questionnaire (SDQ) scores linked with exposure to air pollution, green space, and socioeconomic status, measured at participants' residential addresses, were analyzed using a hierarchical bayesian regression model. Hypotheses were formulated after data collection.

RESULTS The sample included 3595 children and adolescents, with 1826 (50.5%) female; 3012 participants (83.8%) were White and 583 participants (16.2%) were another ethnicity. The mean (SD) SDQ score was 7.1 (5.1). After adjusting for individual and household factors, neighborhood socioeconomic status emerged as the strongest factor associated with mental health. Residing in affluent neighborhoods was associated with improved mental health, with this association magnifying through adolescence. For children of the same age, those in the most affluent neighborhoods had log-transformed SDQ scores 0.73 (95% credible interval [CrI], 0.58 to 0.88) lower at age 17 years compared with their peers in the most deprived areas; at age 5 years, scores were 0.31 (95% CrI, 0.17 to 0.45) lower. Exposure to particulate matter with diameter less than 2.5 μm was associated with poorer mental health during early childhood (age 3 years), with an effect size of 0.15 (95% CrI, 0.08 to 0.22). While green space was not directly associated with improved mental health, a sex-based difference was observed, with males showing more favorable associations (interaction, -0.10 [95% CrI, -0.17 to -0.03]).

CONCLUSIONS AND RELEVANCE In this cohort study of children and adolescents, associations between neighborhood characteristics and mental health evolved from childhood through adolescence. These findings suggest that targeted interventions in disadvantaged neighborhoods and strategies to protect young children from air pollution are essential. A comprehensive approach is recommended to incorporate air pollution, green space, and socioeconomic status not only in residential neighborhoods but also in other settings, such as schools.

Key Points

Question Are neighborhood characteristics associated with children's mental health at different developmental stages?

Findings In this cohort study of 3595 children and adolescents in England followed up for 17 years, neighborhood socioeconomic status was associated with mental health, especially during adolescence. Exposure to air pollution at age 3 years was associated with poorer mental health, whereas green space was not associated with mental health.

Meaning This cohort study enhances understanding of how neighborhood characteristics are associated with mental health, emphasizing the combination of environmental and socioeconomic factors and how these associations change with age.

+ Supplemental content

Author affiliations and article information are listed at the end of this article.

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Introduction

Childhood and adolescent mental health issues, including anxiety, depression, eating disorder, and self-harm, are growing concerns in the UK, with probable mental disorder estimated to affect approximately 18% of young people as of 2023.¹ Early mental health issues profoundly affect educational attainment,^{2,3} social relationships,⁴ and long-term health.⁵ While the social aspects of neighborhoods are well-studied in relation to mental health,⁶⁻⁸ less is known about the influence of environmental characteristics.

Air pollution and green space are key environmental factors linked to mental health. Childhood exposure to air pollution has been associated with depression,⁹ behavioral problems,¹⁰ attention-deficit/hyperactivity disorder,^{11,12} and later-life mental and neurological disorders.¹³⁻¹⁷ Similarly, air pollution exposure during adolescence is associated with an increased risk of mental disorders.^{14,18,19}

Research on green space and mental health shows mixed results. Some studies report positive associations,^{8,20-24} while others indicate null or adverse effects.²⁵⁻²⁹ Inconsistencies may stem from differences in confounders, exposure characterization and assessment windows, and the timing of mental health outcomes. For example, research exploring air pollution and green space individually vs jointly report varying findings.^{9,30-33}

Neighborhoods influence mental health through multiple pathways, including direct environmental exposures, shared socioeconomic conditions, and broader contextual effects.³⁴ Our study examines contextual environmental exposures, namely air pollution and green space, while simultaneously capturing area-level socioeconomic characteristics that reflect shared vulnerabilities within neighborhoods. However, gaps remain regarding the timing of exposure and its effects across the lifespan. Research often averages exposures over time^{31,35,36} or examines specific age at exposure,^{9,17,19,27,30,32,36-41} overlooking potential developmental windows of heightened sensitivity. Identifying critical age windows when neighborhood exposures are associated with mental health is crucial for developing age-appropriate interventions and public health strategies.

This study uses data from the Millennium Cohort Study (MCS) to address these gaps, examining neighborhood-level environmental factors associated with mental health across 17 years. We investigate whether specific age windows show stronger associations, and we assess variations by sex, ethnicity, and socioeconomic status. Finally, we explore whether green space characteristics, such as greenness or functionality, are associated with mental health.

Methods

The MCS was approved by the National Health Service research ethics committee system and ensured informed parental consent and child agreement for participation. This cohort study adhered to the Strengthening the Reporting of Observational Studies in Epidemiology (STROBE) reporting guideline for cohort studies.

Design and Setting

We conducted a longitudinal analysis of children and adolescents in England from age 3 to 17 years. The study leveraged repeated measures of exposures and outcomes across multiple time points, allowing us to capture both within-individual changes over time and cross-sectional associations at specific ages.

Population

The MCS is a nationally representative UK-based cohort of children born between September 2000 and January 2002. Its primary aim is to investigate the social, economic, and health factors associated with early life and development. Sampling was stratified by country and the type of electoral ward, with oversampling of socioeconomically disadvantaged and ethnically diverse areas, as described by Plewisch et al.⁴² Data collection occurred over 8 sweeps, from infancy to young

adulthood. Specifically, cohort members were surveyed at approximately ages 9 months (sweep 1), 3 years (sweep 2), 5 years (sweep 3), 7 years (sweep 4), 11 years (sweep 5), 14 years (sweep 6), 17 years (sweep 7), and 23 years (sweep 8). Data were collected through face-to-face interviews with parents, teachers, and self-completed questionnaires. Ethnicity was collected through self-report by the parent (usually mother) at the time of the child's enrollment into the study. In this study, we categorized ethnicity as White and other ethnicity (eg, Black or Black British, Caribbean, Indian, Pakistani or Bangladeshi, or multiple ethnicities) to facilitate interpretation of findings. Cohort members participated in data collection at ages 14, 17, and 23 years. The original dataset included 18 293 children from across the UK. For this analysis, we focused exclusively on children who resided in England throughout their participation in the study.

For this analysis, we used data from sweeps 1 to 7 (infancy to age 17 years),⁴³⁻⁴⁹ reconstructing neighborhoods of residence using lower layer super output areas (LSOAs). The LSOAs are geographic units used in UK census data, each representing approximately 1500 residents. In cases of multiple births, we used data on first-born twins and triplets only.

The overall MCS population showed stable or expected variations in individual and household characteristics over time, such as socioeconomic status and family structure (eTable 1 in Supplement 1). Our analysis focused on a subset of 3595 cohort members who had complete residential histories across sweeps 1 to 7. Starting with 2868 children and adolescents with complete LSOA records, the sample was expanded to 3595 by inferring no relocation if the same LSOA was recorded before and after a sweep with missing data. Exposures were assigned to each member based on the LSOA recorded at each sweep. Participation varied across sweeps due to missing data or dropout. Inclusion and exclusion criteria are presented in eFigure 1 in Supplement 1.

Mental Health

Mental health was assessed using the Strength and Difficulties Questionnaire (SDQ), a validated screening tool measuring emotional and behavioral difficulties.⁵⁰ The SDQ demonstrates strong psychometric properties, with good internal consistency and test-retest reliability.⁵¹ The SDQ comprises 20 items grouped into 4 scales (emotions, conduct, hyperactivity/inattention, and peer relationships), scored from 0 to 40. Higher SDQ score indicates greater mental health challenges. SDQ scores were collected at ages 3, 5, 7, and 14 years with the parent-reported questionnaires, at age 11 years with a teacher-reported questionnaire, and at age 17 years with both parent- and self-reported questionnaires. To ensure result consistency, only parent-reported SDQ scores were considered, thus excluding data from age 11 years.

In this study, we analyzed the total difficulties score to capture overall mental health status. Subscales were not separately analyzed, as our focus was on general mental health rather than specific behavioral problems. SDQ scores were treated as a continuous measure, without applying clinical cutoff points.

Covariates and Exposures

At each survey sweep, we measured exposure to green space, air pollution, and neighborhood socioeconomic status based on the LSOA of residence, analyzing both exposures and outcome for the same period. This approach allowed us to assess how these environmental and socioeconomic factors evolved over time and were associated with mental health trajectories.

Green Space

We used 2 metrics for green space: Normalized Difference Vegetation Index (NDVI; 2000-2017), derived from National Aeronautics and Space Administration Moderate Resolution Imaging Spectroradiometer and reflecting neighborhood greenness, and the area of green space (2017-2018) based on its designated function, including the public parks, gardens, and playing fields, sourced from Ordnance Survey.⁵² Hereafter, we refer to *green space* as both NDVI and the area of green space unless specified otherwise.

Air Pollution

Annual averages of nitrogen dioxide (NO₂), particle matter with less than 10 and less than 2.5 μm (PM₁₀ and PM_{2.5}, respectively) for 2000 to 2018 were obtained from the Department for Environment, Food and Rural Affairs.⁵³ More details are reported in eMethods 1 in Supplement 1.

Socioeconomic Status

Neighborhood socioeconomic status was measured by the 2004 Index of Multiple Deprivation (IMD), which combines 7 weighted domains of deprivation: income, employment, education, health, crime, barriers to housing and services, and living environment. More details are in eMethods 2 in Supplement 1. The first decile of the IMD score indicates the most deprived areas and the tenth decile, the least deprived. In our study, we presented distributions of IMD by grouping them into 3 categories: 1 to 3 deciles, most deprived; 4 to 7 deciles, moderately deprived; and 8 to 10 deciles, least deprived. This categorization aimed to simplify analysis and interpretation.

Household income and neighborhood IMD data were not collected in sweep 7, leading to additional missing information. To address this, we assumed income stability from the previous sweep. Additionally, we included only cohort members who did not relocate between sweep 6 and sweep 7, allowing us to assign them the IMD deciles from sweep 6.

We included several individual-, household-, and neighborhood-level covariates based on existing literature and data availability. At the individual level, we considered sex, ethnicity (White or other ethnicity), obesity (normal weight, overweight, obese), and whether the cohort member reported a longstanding illness. Obesity classification was based on categories in the dataset, which were derived from body mass index. Household-level variables included poverty status (below or above 60% median equivalized income), maternal education level (National Vocational Qualification) equivalent, mother ever diagnosed with depression or serious anxiety, and family structure (single or couple-parent carer). Only maternal education at birth and diagnosis of maternal mental health issues at birth were available from sweep 1. At the neighborhood level, we included rural vs urban classification. For a more in-depth explanation of the covariates, see eMethods 3 in Supplement 1 and cohort documentation.⁴³⁻⁴⁹

Statistical Analysis

We specified a hierarchical Bayesian regression model to accommodate the nested structure of the longitudinal data. We modeled log-transformed SDQ test score as a function of individual-, household-, and neighborhood-level characteristics. Individuals-specific random intercepts accounted for within-individual dependency across repeated SDQ scores, and time-varying covariates for neighborhood factors identified critical age of exposure from early life to adulthood. The variance inflation factor score was used to detect potential multicollinearity.

Let Y_{it} denote the log-transformed SDQ test score for participant i ($i = 1, 2, \dots, 3595$) measured at age t ($t = 3, 5, 7, 14$, and 17 , corresponding to sweep 2, 3, 4, 6, and 7, respectively). We assumed that Y_{it} follows a normal distribution, as specified below:

$$\begin{aligned} Y_{it} &\sim \text{Normal}(\mu_{it}, \sigma^2) \\ \mu_{it} &= a_i + \sum_p \beta_p x_{it,p} + \sum_k \gamma_k z_{it,k} + \text{interaction} \\ a_i &\sim N(\mu_a, \sigma_a^2) \\ \gamma_k &\sim N(\mu_{\gamma,k}, \sigma_{\gamma,k}^2) \end{aligned}$$

Here, a_i is the individual-specific intercept, modeled by a normal distribution with mean μ_a and variance σ_a^2 . The term $\sum_p \beta_p x_{it,p}$ captures the effects of individual- and household-level variables $x_{it,p}$, each associated with a corresponding coefficient β_p , where the set of coefficients is given by $\beta_1, \beta_2, \dots, \beta_p$. The term $\sum_k \gamma_k z_{it,k}$ includes k time-varying neighborhood-level covariates $z_{it,k}$, each linked to a coefficient $\gamma = \gamma_{t,1}, \gamma_{t,2}, \gamma_{t,3}, \gamma_{t,k}$. For the fixed-effects β , and hyperparameters μ_a and μ_{γ} we specified a $\text{Normal}(0, 1000)$ prior. For the variance parameters σ^2 , σ_a^2 , and $\sigma_{\gamma,k}^2$ we assumed an inverse-gamma (1, 0.01) prior. This is equivalent to specifying a prior on precision ($\tau = 1/\sigma^2$) under the common bayesian framework, where τ represents the reciprocal of the variance. We explored effect

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$$Y_{it} \sim \text{Normal}(\mu_{it}, \sigma^2)$$

$$\mu_{it} = a_i + \sum_p \beta_p x_{it,p} + \sum_k \gamma_k z_{it,k} + \text{interaction}$$

$$a_i \sim N(\mu_a, \sigma_a^2)$$

$$\gamma_{t,k} \sim N(\mu_{\gamma,k}, \sigma_{\gamma,k}^2)$$

Here, a_i is the individual-specific intercept, modeled by a normal distribution with mean μ_a and variance σ_a^2 . The term $\sum_p \beta_p x_{it,p}$ captures the effects of individual- and household-level variables $x_{it,p}$, each associated with a corresponding coefficient β_p , where the set of coefficients is given by $\beta_1, \beta_2, \dots, \beta_p$. The term $\sum_k \gamma_k z_{it,k}$ includes k time-varying neighborhood-level covariates $z_{it,k}$, each linked to a coefficient $\gamma = \gamma_{t,1}, \gamma_{t,2}, \gamma_{t,3}, \gamma_{t,k}$. For the fixed-effects β , and hyperparameters μ_a and μ_{γ} we specified a $\text{Normal}(0, 1000)$ prior. For the variance parameters σ^2 , σ_a^2 , and $\sigma_{\gamma,k}^2$ we assumed an inverse-gamma (1, 0.01) prior. This is equivalent to specifying a prior on precision ($\tau = 1/\sigma^2$) under the common bayesian framework, where τ represents the reciprocal of the variance. We explored effect

modification with sociodemographic factors by including various interaction terms between sex, ethnicity, and poverty and neighborhood-level exposures. We considered a prior $Normal(0,1000)$ for the coefficient of the interaction terms.

The bayesian model was implemented using the Markov Chain Monte Carlo methods via the R package NIMBLE version 1.3.0 (R Project for Statistical Computing),⁵⁴ with 2 chains of 10 000 postburn iterations after a 10 000 iteration burn-in. Convergence was assessed via trace plots and the Gelman-Rubin statistic.

We iteratively modeled neighborhood-level factors, first assessing air pollution, green space, and socioeconomic status individually, then examining their combined effects, exploring shifts in coefficients by neighborhood socioeconomic status. Model selection was guided by the Watanabe-Akaike information criterion to balance model fit and complexity.⁵⁵

Sensitivity analyses evaluated model robustness by (1) comparing models with missing vs complete data, (2) testing the of time-varying coefficients independence, (3) examining time-varying neighborhood effects independently, (4) modeling SDQ score with a Poisson distribution, (5) using alternative hyperpriors distributions, (6) restricting to urban areas only, and (7) limiting the sample to cohort members with complete LSOA records. Additionally, we ran a model that included only the cumulative exposure variables that is typically used to assess long-term health outcomes. We then compared it with the main model to examine whether cumulative exposure masks age-specific associations and explore potential differences in outcomes. Significance was determined as a 95% credible interval (CrI) that did not cross zero. Data were analyzed from January to December 2023.

Results

Among 3595 children and adolescents included in this study, 1826 (50.5%) were female; 3012 participants (83.8%) were White and 583 participants (16.2%) identified as another ethnicity. The mean (SD) SDQ score was 7.1 (5.1). The **Table** shows selected characteristics of our final study sample, while eTable 1 in **Supplement 1** compares these characteristics with the original population data for England. The maps of distribution of environmental characteristics, including air pollution, greenness, and the area of green space, across England are shown in eFigure 2 in **Supplement 1**.

The SDQ scores were right-skewed (eFigure 3 in **Supplement 1**), reflecting all scores collected over the study period, and showed a general decrease from early childhood to late adolescence, with a slight increase observed during early adolescence (Table). We observed a consistent decrease in mean exposure to neighborhood air pollution from 2004 (at age 3 years) to 2017. Specifically, the mean (SD) exposure levels at each sweep were 14.1 (2.3), 12.0 (2.0), 11.1 (1.9), 11.1 (1.6), 9.3 (1.3), and 9.4 (1.8) $\mu\text{g}/\text{m}^3$ for $\text{PM}_{2.5}$; 21.4 (3.3), 18.1 (3.0), 16.7 (2.4), 15.1 (2.0), 13.9 (2.0), and 14.4 (2.5) $\mu\text{g}/\text{m}^3$ for PM_{10} ; and 20.7 (8.0), 19.9 (7.5), 18.6 (7.2), 17.9 (6.5), 14.8 (6.2), 13.9 (5.7) $\mu\text{g}/\text{m}^3$ for NO_2 . All these concentration levels remained above the World Health Organization's recommended annual averages, which are 5 $\mu\text{g}/\text{m}^3$ for $\text{PM}_{2.5}$, 15 $\mu\text{g}/\text{m}^3$ for PM_{10} , and 10 $\mu\text{g}/\text{m}^3$ for NO_2 .⁵⁶ During the same period, exposure to neighborhood green space showed a modest increasing trend.

We present results from the best-fit model, with sensitivity analyses provided in eResults 2 in **Supplement 1**. **Figure, A** shows the estimated coefficients β for individual and household covariates. **Figure, B** displays neighborhood-level exposures γ at ages 3, 5, 7, 14, and 17 years. Individual-level factors, such as male sex, overweight or obesity (compared with normal weight), and a long-standing illness were associated with higher log-transformed SDQ scores, suggesting poorer mental health. The difference in log-transformed SDQ scores between children of White ethnicity and those of other ethnicities was small, with the 95% CrI including zero.

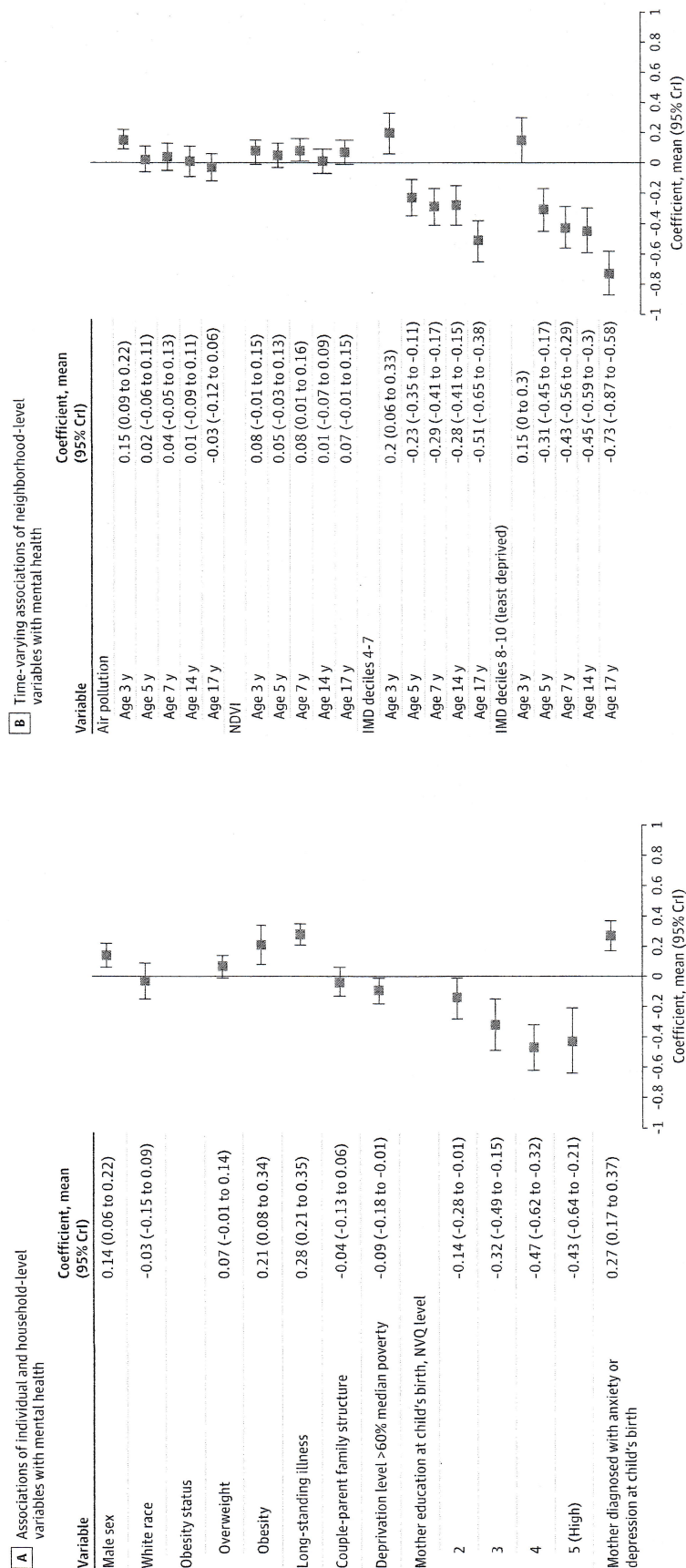
At the household level (**Figure, A**), there was no difference between 2-parent and single-parent households. Children with families above the 60% median poverty threshold showed lower log-transformed SDQ scores, although with some uncertainty. Maternal educational was negatively associated with log-transformed SDQ scores, with higher education associated with better mental

Table. Descriptive Statistics of the Sample in England at Each Sweep

Characteristic	Patients by survey sweep, No. (%)					
	2 (n = 3353)	3 (n = 3566)	4 (n = 3570)	5 (n = 3516)	6 (n = 3459)	7 (n = 3392)
Total SDQ score, mean (SD)	8.7 (4.8)	6.3 (4.4)	6.5 (4.9)	4.6 (4.7)	7.2 (5.6)	6.7 (5.5)
SDQ score components, mean (SD)						
Emotional problems	1.8 (1.3)	1.2 (1.5)	1.4 (1.7)	1.2 (1.8)	1.7 (2.0)	1.7 (2.2)
Conduct problems	2.5 (1.9)	1.2 (1.3)	1.1 (1.4)	0.5 (1.1)	1.1 (1.5)	0.9 (1.4)
Hyperactivity/inattention	3.5 (2.3)	2.9 (2.2)	3.0 (2.4)	1.9 (2.3)	2.6 (2.3)	2.1 (2.2)
Peer problems	1.4 (1.5)	0.9 (1.3)	1.0 (1.5)	1.0 (1.6)	1.5 (1.8)	1.5 (1.8)
Sex						
Male	1641 (48.9)	1753 (49.2)	1757 (49.2)	1735 (49.3)	1734 (50.1)	1692 (49.9)
Female	1712 (51.1)	1813 (50.8)	1813 (50.8)	1781 (50.7)	1725 (49.9)	1700 (50.1)
Ethnicity ^a						
White	2810 (83.8)	2989 (83.8)	2993 (83.8)	2944 (83.7)	2899 (83.8)	2843 (83.8)
Other ethnicity	543 (16.2)	577 (16.2)	577 (16.2)	572 (16.3)	560 (16.2)	549 (16.2)
Chronic illness						
Yes	517 (15.4)	679 (19.0)	659 (18.5)	473 (13.5)	576 (16.7)	578 (17.0)
No	2836 (84.6)	2887 (81.0)	2911 (81.5)	3043 (86.5)	2883 (83.3)	2814 (83.0)
Obesity						
Normal	2619 (78.1)	2869 (80.5)	2908 (81.5)	2625 (74.7)	2611 (75.5)	2471 (72.8)
Overweight	574 (17.1)	553 (15.5)	496 (13.9)	703 (20.0)	630 (18.2)	619 (18.2)
Obese	160 (4.8)	144 (4.1)	166 (4.6)	188 (5.35)	218 (6.3)	302 (8.9)
Household characteristics						
OECD equivalized household income, mean (SD), £	413 (240.2)	428 (233.4)	461.7 (238.7)	492.2 (174.8)	490.1 (174.2)	NA
Family status						
2 Parents/carers	3064 (91.4)	3165 (88.8)	3115 (87.3)	2935 (83.5)	2845 (82.2)	2651 (78.2)
1 Parent/carers	289 (8.6)	401 (11.2)	455 (12.7)	581 (16.5)	614 (17.8)	741 (21.8)
Mother diagnosed with depression/anxiety at birth						
Yes	2666 (79.5)	2808 (79.0)	2813 (78.8)	2776 (79.0)	2729 (78.9)	2700 (79.4)
No	687 (20.5)	746 (21.0)	757 (21.2)	740 (21.0)	730 (21.1)	701 (20.6)
Poverty						
≥60% Median poverty	2763 (82.4)	2913 (81.7)	3004 (84.1)	3139 (89.3)	2981 (86.2)	2940 (86.7)
<60% Median poverty	590 (17.6)	653 (18.3)	566 (15.9)	377 (10.7)	478 (13.8)	452 (13.3)
Mother education at birth, NVQ level						
1	353 (10.5)	379 (10.6)	383 (10.7)	381 (10.8)	370 (10.7)	348 (10.3)
2	1272 (37.9)	1351 (37.9)	1348 (37.8)	1320 (37.5)	1301 (37.6)	1270 (37.4)
3	402 (12.0)	419 (11.7)	421 (11.8)	417 (11.9)	406 (11.7)	405 (11.9)
4	1134 (33.8)	1211 (34.0)	1212 (33.9)	1197 (34.0)	1177 (34.0)	1169 (34.5)
5	195 (5.8)	206 (5.8)	206 (5.8)	201 (5.7)	205 (5.9)	200 (5.9)
Neighborhood characteristics, mean (SD)						
PM _{2.5} , µg/m ³	14.1 (2.3)	12.0 (2.0)	11.1 (1.9)	11.1 (1.6)	9.3 (1.3)	9.4 (1.8)
PM ₁₀ , µg/m ³	21.4 (3.3)	18.1 (3.0)	16.7 (2.4)	15.1 (2.0)	13.9 (2.0)	14.4 (2.5)
NO ₂ , µg/m ³	20.7 (8.0)	19.9 (7.5)	18.6 (7.2)	17.9 (6.5)	14.8 (6.2)	13.9 (5.7)
NDVI	0.5 (0.1)	0.5 (0.1)	0.5 (0.1)	0.5 (0.1)	0.6 (0.1)	0.5 (0.1)
Green space, mean (SD), ha	5.8 (30.1)	6.2 (30.8)	5.9 (22.2)	6.2 (20.1)	6.4 (22.8)	6.4 (22.8)
IMD decile						
1-3 (Most deprived)	923 (27.5)	934 (26.2)	893 (25.0)	816 (23.2)	787 (22.8)	757 (22.2)
8-10 (Least deprived)	1082 (32.3)	1213 (34.0)	1257 (35.2)	1289 (36.7)	1301 (37.6)	1289 (38.0)

Abbreviations: ha, hectares; IMD, Index of Multiple Deprivation; NDVI, Normalized Difference Vegetation Index; NO₂, nitrogen dioxide; NVQ, National Vocational Qualification; OECD, Organization for Economic Co-operation and Development; PM_{2.5}, particulate matter with diameter less than 2.5 µm; PM₁₀, particulate matter with diameter less than 10 µm.

^a Including Black or Black British, Caribbean, Indian, Pakistani or Bangladeshi, or multiple ethnicities.

Figure. Estimated Regression Coefficients of the Main Model With Particulate Matter Less Than 2.5 μm ($\text{PM}_{2.5}$)

The results for Index of Multiple Deprivation (IMD) are compared with deciles 1 to 3. CrI, credible interval; NVQ, National Vocational Qualification.

health for their offspring. In contrast, diagnosed maternal anxiety or depression at birth was associated with higher log-transformed SDQ scores, suggesting poorer child mental health.

In terms of age-dependent associations with neighborhood characteristics, exposure to all air pollutants was associated with higher log-transformed SDQ score, primarily at age 3 years (Figure, B). Specifically, each $1\text{-}\mu\text{g}/\text{m}^3$ increase of exposure at age 3 years was associated with log-transformed SDQ score increases of 0.15 (95% CrI, 0.09-0.22) for $\text{PM}_{2.5}$, 0.16 (95% CrI, 0.09-0.22) for PM_{10} , and 0.09 (95% CrI, 0.02-0.16) for NO_2 . The associations of exposure to air pollution at ages 5, 7, 14, and 17 years with SDQ score were negligible and included zero. Neighborhood greenness (as measured with NDVI) showed an unexpected positive association with SDQ scores, although with high uncertainty, and the area of green space showed no discernable association with mental health.

Residing in more affluent neighborhoods (higher IMD deciles compared with the most deprived deciles 1-3) had a protective association that increased gradually with age. For example, at age 7 years, we found a difference of -0.43 (95% CrI, -0.56 to -0.29) in the log-transformed SDQ score compared with living in the most deprived neighborhood. However, this difference became notably larger at age 17 years, with a mean difference of -0.72 (95% CrI, -0.88 to -0.58) for those in the affluent neighborhoods. Surprisingly, the estimated coefficient for neighborhood IMD was unexpectedly positive at age 3 years, diverging from the overall trend.

When the model coefficients were compared with those of the cumulative exposure model for neighborhood factors, the coefficient estimate for air pollution was notably weakened and showed higher uncertainty (eResults 1 in Supplement 1). This suggests that cumulative exposures may mask potential age-specific associations.

The associations of neighborhood greenness with SDQ varied by sex, with males showing lower log-transformed SDQ score as neighborhood greenness increased (difference, -0.10 [95% CrI, -0.15 to -0.03]). However, this association diminished when the area of green space was considered instead of greenness. Other interactions did not substantially affect model fit. When the air pollutants were specifically PM_{10} and NO_2 , the estimated coefficients were very similar to those shown in the Figure; these results are presented in eFigure 4 and eFigure 5 in Supplement 1. The trace plots showing the model convergence are displayed in eFigure 6 in Supplement 1.

Interplay of Air Pollution, Green Space, and Deprivation

Examining green space (as measured with NDVI) alone revealed modest, uncertain negative associations across all age groups. In contrast, air pollution was the sole time-varying variable consistently associated with higher log-transformed SDQ scores across all age windows, with the strongest association observed at age 3 years.

Our analysis of the associations of neighborhood deprivation consistently found that children residing in moderately to least-deprived neighborhoods (IMD deciles 4-10) had lower log-transformed SDQ scores compared with those living in the most deprived neighborhoods (IMD deciles 1-3). This association intensified with age, emphasizing the evolving association of neighborhood socioeconomic status with mental health.

Including neighborhood socioeconomic status in the model accounted for the associations of environmental exposures, except for air pollution at age 3 years, where the association remained positive, although attenuated. Coefficients from single-exposure models are in eTable 2 in Supplement 1, along with sensitivity analysis models and results.

Discussion

In this cohort study, we identified age windows when the associations of neighborhood characteristics and socioeconomic status with mental health differed, contributing to a better understanding of how neighborhood environments are associated with mental health during different developmental stages. While numerous studies have explored these associations among

children and adolescents,^{57,58} fewer have investigated how neighborhood environmental exposures are associated with mental health.

Neighborhood Socioeconomic Status and Mental Health

Our findings suggest that socioeconomic factors are more strongly associated with mental health outcomes than the environmental characteristics, aligning with previous studies.^{59,60} Adolescents in affluent neighborhoods had better mental health compared with those in deprived areas, likely due to better amenities, fewer stressors, and stronger social support.^{61,62} In contrast, adolescents in deprived neighborhoods are more likely to be exposed to stressors like violence and crime.^{63,64} Additionally, adolescence is a crucial period for identity formation, where socioeconomic disparities become more apparent.⁶⁵

We observed an unexpected lower log-transformed SDQ score at age 3 years among cohort members living in neighborhoods with IMD deciles 4 to 10 with to the most deprived areas. This may be attributed to unobserved and unmeasured covariates (eg, parenting choices) that were not accounted for in this study.

Air Pollution and Mental Health

The association between air pollution and mental health was strongest during early childhood, particularly at age 3 years. This aligns with clinical evidence showing that exposure to air pollution in early life, particularly from conception to age 5 years, leads to neurological changes, including alteration in brain white matter and volume due to neuroinflammation triggered by air pollutants.^{66,67} As children age, the association weakens, possibly due to lower vulnerability in adolescence or less time spent in residential neighborhoods.⁷

The reduced association between air pollution and mental health observed at older ages could be partially attributed to decreased air pollution levels over time. This highlights the significant role of air pollution in mental health outcomes and underscores the importance of continued efforts to reduce exposure, as even modest improvements in air quality may contribute to better mental health.

Green Space and Mental Health

Contrary to expectations, we found no meaningful association between green space and mental health. This may reflect the modest associations of green space when analyzed alongside air pollution and socioeconomic status or limitations in our green space metrics, which did not capture quality, accessibility, or functionality.⁶⁸ Other studies have similarly noticed that the presence of both air pollution and green space variables can modify or negate each other's effect, highlighting the importance of examining their joint impact.^{69,70} For example, using the MCS data, Mueller and Fluori⁷¹ found no direct association between green space and children's self-regulation when the model was adjusted for neighborhood air pollution as well as child- and family-level covariates.

We observed that the associations of neighborhood green space varied by sex, with males experiencing greater mental health benefit. This may suggest that males are more vulnerable to neuroinflammatory responses triggered by air pollution,⁷² making greenness exposure particularly beneficial for them. Our findings highlight the importance of considering sex differences green space-related health research.

Combined Associations of Multiple Neighborhood Exposures With Mental Health

The associations between environmental exposures and mental health should be interpreted cautiously, as these exposures are intertwined with other neighborhood characteristics. Through iterative modeling adjustments, we found that neighborhood deprivation was the most consistently associated factor, overshadowing the associations of environmental exposures. However, the association between air pollution and mental health in children aged 3 years remained consistently positive despite the attenuation.

Strengths and Limitations

This study has some strengths. Our nationwide sample enabled us to assess mental health and neighborhood characteristics with high spatial resolution, contributing to understanding time windows of vulnerabilities to neighborhood-level exposures. However, potential selection bias and unmeasured confounders, such as parental decisions, criminal records, parenting skills, school exposures, household smoking, activity patterns, green space quality, and crime rates, may affect our findings. Descriptive statistics revealed overrepresentation of children from White ethnic backgrounds, 2-parent families, and less-deprived neighborhoods. However, the hierarchical bayesian regression model with individual-specific random effects helps mitigate concerns about confounding factors.

This study also has some limitations. Misclassification of exposure due to our reliance on residential LSOA data and lack of activity pattern information (eg, commuting, leisure activities, or time spent indoors vs outdoors) may have influenced the observed associations. Additionally, assuming financial stability between sweep 6 (age 14 years) and 7 (age 17 years) may introduce bias by overrepresenting families with greater residential stability. Furthermore, including only the firstborn child in cases of multiple births may introduce bias, as birth order is associated with health and developmental outcomes.

Conclusions

This cohort study found that socioeconomic characteristics of neighborhoods were associated with mental health in the children and adolescents who lived there, particularly during adolescence. Air pollution was associated with poorer mental health, especially during early childhood exposures, highlighting the need for age-appropriate interventions. While we observed weak associations between green space and mental health, research on specific types of green space and quality could offer more insights. Our findings emphasize the importance of assessing exposures at residences and schools to better capture adolescents' broader environments. Neighborhood characteristics were associated with varying mental health outcomes from early childhood to late adolescence. Studying the associations of environmental factors in conjunction with other neighborhood characteristics is essential to avoid overestimation of their impacts.

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THE WATCHDOGS CRIME POLITICS

Failure to treat, failure to protect: For accused mentally ill killers and their victims in Chicago, help is too little, too late

People with mental illnesses are far likelier to be victims than to commit crimes. But a small number of unprovoked, midday killings downtown examined by the Sun-Times shows big gaps in care for severely mentally ill, violent people who cycle through jail, prison and hospitals.

By Stephanie Zimmermann and Frank Main | Apr 10, 2025, 5:30am CDT



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Henry Graham, a lost soul in one of America's wealthiest neighborhoods, was strolling Chicago's Magnificent Mile. Again.

It was June 29, 2023. For years, Graham had ricocheted back and forth around Chicago, Evanston and South Bend, Indiana. He'd bounce from homeless shelters to jails, prisons and hospitals, the troubles in his head never fully addressed.

On a good day, he'd walk in to St. James Episcopal Cathedral near Huron Street and Wabash Avenue for some free food and a little camaraderie.

On a bad day, he'd get booted from the church for menacing its staff.

FAILURE TO TREAT, FAILURE TO PROTECT

This six-part investigation by the Sun-Times looks at past cases and what would be needed to prevent them from happening again.

[Read more stories in the series >](#)

Since 2010, Graham has been charged with crimes 20 times and convicted of two felonies and seven misdemeanors, with most of the cases dropped and the convictions resulting in short sentences. Cops knew him but saw him as no more than a nuisance.

"Oh, yeah, I remember Henry," one officer says, recounting a trespassing incident and some minor trouble on a CTA platform.

Then, on that warm June day two summers ago, the clock on the Wrigley Building showed 3:45 p.m., and Graham was about to spiral out of control.

Wearing a black hoodie and carrying a backpack, the then-49-year-old Graham ambled south on busy North Michigan Avenue, passing the massive Starbucks Reserve Roastery and the Swarovski jewelry store.

Walking ahead on the sidewalk was Russell Long, 53, toting a Neiman Marcus shopping bag. A vice president of Northern Trust Bank, Long lived in a high-rise overlooking the Chicago River near the Wabash Avenue bridge.

Two people who'd just walked out of Starbucks said Graham raced up behind Long in front of the Cartier store at 630 N. Michigan Ave. and punched him in the back of his head.

The busy 600 block of North Michigan Avenue, where Russell Long was struck in the head in June 2023. He died about two weeks later. | Pat Nabong / Sun-Times

The 6-foot-3 Long pitched forward, falling hard onto the sidewalk on his face.

As Long lay semiconscious and bleeding profusely, the 5-foot-9 Graham sat down on a nearby fire hydrant, looking on as passersby rushed to help Long and call 911.

Gawkers gathered. And Graham left.

He walked a block south on Michigan Avenue. A witness ran ahead and flagged down two Chicago police officers sitting in a police vehicle.

Graham went over to the cops and admitted he punched Long, records show.

But neither they nor two other officers who were a block north, where paramedics were loading Long into an ambulance, arrested Graham — saying later that the semicomatose victim told them he didn't know whether he wanted to press charges.

So Graham was left free to continue to roam the streets for the next three months and, authorities now say, to attack others.

Long ended up dying at Northwestern Memorial Hospital 13 days after he was attacked.

Shocking, unprovoked attacks

To try to understand the reasons behind a spate of shocking crimes in downtown Chicago between 2021 and 2024, the *Chicago Sun-Times* examined four unprovoked killings and two nonfatal attacks, including a bizarre assault on a flight attendant from Mexico. Most of the attacks happened during the day. The victims: people who were just going about their lives.

In each case, the people charged — three who've been convicted — had a history of serious mental illness or delusional behavior and had drifted in and out of jails and hospitals, sometimes for decades, their conditions never regularly treated.

Reporters pored over thousands of pages of police reports and court records, went to court hearings for a year for those who were charged, and interviewed family members, mental health experts, law enforcement authorities and government officials.

What emerged most clearly from this reporting is that there is no system in Chicago to identify — let alone to help — the small percentage of severely mentally ill and violent people who commit these crimes. In each of these cases, it was only when they have been accused of murder or some other terrible crime that they were put on regular mental health medication — a finding that experts say is troubling but not surprising.

Here's what else we found:

- Despite stereotypes that some harbor, people battling severe mental illness are more likely to be victimized than commit crimes.
- For some who have slipped through the cracks for mental health care and been arrested, jail becomes society's *de facto* safety net. Due to a lack of bed space at Illinois' state-run psychiatric hospitals, dozens remain in custody at the Cook County Jail — many held there for months at a time — where they often cause disciplinary problems while not getting the level of psychiatric care the state hospitals would provide.
- Some could be helped by expanding the use of a legal process called outpatient civil commitment, in which a judge orders people with severe mental illness to be placed in supervised outpatient treatment if they're deemed to pose a danger to themselves or others. Such an approach involves services that include providing housing, medication and psychiatric care that mental health advocates say would, in the long run, save money and lives.

- Repeat offenders who are mentally ill often are homeless or in unstable housing, making outreach difficult even if there were someone trying to keep tabs on and help them.

“Nobody is in charge of the mental health system in Illinois,” says Mark Heyrman, who works with the nonprofit Mental Health America and retired from the University of Chicago Law School after 41 years as a clinical professor specializing in mental health law. “You can’t find anyone who says that’s their job. That’s true in almost every state.”

Mark Heyrman is a public policy committee member for the nonprofit Mental Health America and retired University of Chicago Law School professor. | Brian Ernst / Sun-Times

Decades ago, as part of a deinstitutionalization move, the vast majority of people with severe, lifelong mental illness were released from government mental institutions. That came in part as a reaction to civil rights abuses, but also because modern medicine was now able to help many of them live and function in their communities.

Since then, Illinois has lost most of its state psychiatric hospital beds. It now has about 1,200, compared with about 33,000 in the mid-1950s. But care outside of these institutions hasn’t kept up.

"There was not a corresponding shift of support to outpatient treatment of these individuals," says Dr. Stephen Dinwiddie, chief of forensic psychiatry at Northwestern University Feinberg School of Medicine and former medical director of the state's Elgin Mental Health Center.

"The emphasis continues [to be] on dangerousness rather than suffering, which has led to people 'exercising their freedoms' by being homeless, by being untreated and being victimized on the street," Dinwiddie says. "People basically are now neglected up until the time that they become sufficiently annoying to the general population that police act and bring them in to the jail."

This is happening at a time that federal funding for mental health support, which largely has come to states through Medicaid, increasingly is in question since the Trump administration's push to cut federal aid overall.

While Illinois' previous Medicaid expansion has helped cover low-income people who need private hospitalization, Medicaid reimbursement rates are lower than what Medicare or private insurance would pay. That's prompted some hospitals to close their psychiatric units, meaning there are fewer places for people with an acute mental health crisis to go.

Even when people end up hospitalized, often they find they have nowhere to go for follow-up services after being discharged.

A safety net filled with holes

Graham can be viewed as an example of how the safety net in Illinois for homeless people with severe mental illness is full of holes for those at the highest risk of harming themselves or others, even when the warning signs are obvious and long-standing.

Tracking Graham's early life was difficult. Sun-Times reporters couldn't locate and reach any of his relatives. Court records say he got a general equivalency diploma after attending high school in northwest Indiana and spent most of his life in Cook County.

About 15 years ago, living in South Bend, he piled up misdemeanor arrests and convictions after being diagnosed with schizophrenia, a chronic condition in which people experience reality in an abnormal way. They might have delusions that others are plotting to harm them. They might hear and see things that don't exist.

Records show Graham caught the attention of federal authorities in Indiana in July 2010 after making a false statement on a form while trying unsuccessfully to buy a gun at an Indiana gun store. Then 37 and battling his mental illness and drug abuse, Graham admitted he wanted a weapon because he was having trouble with people at the Hope Rescue Mission in South Bend, according to federal prosecutors.

He was sent to a federal mental institution in Massachusetts. But even there, while experiencing a paranoid delusion, he attacked another inmate and was deemed "grossly psychotic," records show.

In October 2011, U.S. District Judge Robert L. Miller Jr. sentenced Graham to "time served" on the gun-buying charge because he'd already spent a year in custody. The judge noted Graham's "inability to get on top of his mental illness" and said he appeared "more likely than most to commit further crimes. The risk is far less if he stays on his medication and under psychiatric care."

The judge also said parole would be a challenge for Graham, "who rarely stays anywhere as long as three years."

He was right: Graham repeatedly failed to live up to the conditions of his parole and got arrested three more times for threats and vandalism. He was imprisoned for two short stints, the last one in 2014.

Graham then moved to Cook County, where he became a familiar face to police in Chicago and Evanston. Five times before the attack on Long in June 2023, Graham was arrested for kicking, punching or threatening people.

These five arrest photos of Henry Graham span six years from 2014 to 2023. Top left is Graham's photo from his arrest in the Feb. 14, 2023, attack on Sarah Trujillo. | Chicago Police Department

More attacks

In Evanston 10 days after Trujillo was attacked, Graham kicked another woman, police say.

A couple of weeks later, also in Evanston, he punched a man in his face and body on the Dempster Street platform of the CTA's Purple Line, then screamed at the police officers who responded, threatening to kill their families, records show.

Two days before the attack on Long, police say he kicked a woman in her face near Chicago Avenue and State Street after asking whether she had a cellphone.

One of the cops who responded to the fatal attack on Long in June 2023 told investigators that he'd asked Long in the ambulance whether he wanted to sign a complaint against Graham, and when Long said, "I don't know," the officer let the matter drop, and Graham was allowed to go free.

In the days that followed the attack, Long's friends gathered at Northwestern Memorial Hospital, where he was in intensive care, in a coma with brain bleeding and facial fractures.

His friends said they couldn't believe the police hadn't done anything. Janelle Keck, a longtime friend of Long, tries to imagine what the officers were thinking, why they didn't even file a report.

"Without a report, it never happened. Then we can sweep it under the rug, and this guy just dies on life support, and the family goes back to rural Illinois or Arizona and just says, 'Oh, well, life in the big city,' " Keck says.

On July 2, days after the attack, a friend who was visiting Long at the hospital called 911 and demanded action. An officer responded and filed a police report.

Four officers ended up being disciplined for violating department rules for infractions including not filing a report on the day of the attack. They served suspensions ranging from one to five days.

Finally charged in downtown killing

After the attack on Long, Graham continued to wreak havoc, according to police reports and court records that show he was arrested for trespassing at St. James Cathedral, his former hangout, from which he'd been banned; he threw a bottle through a salon window in Evanston; he pushed a man and a 14-year-old girl; and he bit and threatened to kill an Evanston police officer.

In Wrigleyville, he swung a broomstick and seriously wounded a man who'd refused to give him money, police say. The broomstick incident landed Graham in the Cook County Jail.

That's where he was when prosecutors charged him with killing Long.

Since his arrest, Graham has had more than a dozen court hearings. Each time, he shuffles in to the courtroom from a holding area, accompanied by sheriff's deputies. Some days, he looks like he's wearing knickers because his long white tube socks are

pulled up over his tan jail uniform. Other times, his hair is gathered into little balls on the back of his head.

At his first hearing, he was held in contempt of court and removed after shouting that Long had “pushed me first” and yelling, “I didn’t murder nobody.”

He told the judge, “Take me back to my cell; I don’t want to hear nothing!” and shouted “Welcome to America!”

An assistant public defender told the judge that Graham “does not present a danger to the community,” but the judge ordered Graham detained until trial.

Since then, Graham has mostly been quiet during his brief hearings, sometimes wishing the judge a good day.

In November 2023, the public defender’s office asked for an evaluation of Graham because he was exhibiting “mental health concerns,” including outbursts and physical aggressiveness. The judge hasn’t decided yet whether Graham is mentally fit to stand trial.

The Cook County public defender’s office declined to comment on his case.

People who have worked in psychiatric services for decades say much more needs to be done to find and treat the small number of mentally ill people who, like Graham, are homeless and have exhibited dangerous behavior.

Dinwiddie, the Northwestern doctor, says it will take a huge shift to move from viewing their actions as a crime problem to instead seeing them as a public health concern.

“Severely and persistently mentally ill [people] are much more likely to be victims rather than perpetrators of violent crime,” he says. “They need treatment, whether or not they’re going to ever commit a violent crime. By doing that, in a broad way, it will have the effect of decreasing violent crime by the tiny minority of the severely mentally ill that commit it.”

Betty Bogg, chief executive officer of Connection for the Homeless in Evanston, which runs a shelter where Graham stayed, would not talk about him, citing privacy concerns. But she says she agrees about the need for more mental health treatment and permanent housing.

"Henry was fine a lot of the time," he says, "but occasionally was not. We tried for a good amount of time to work through [the] violent outbursts and to say, 'You know, you're welcome to be here. You can use our restroom, you can wash up, you can have a good time, [have] food, water, hang out here with us. But not when you're being hostile toward other people who need this to be a welcoming place for them, too.'

"We ended up needing to call the police a couple of times just to say, 'Hey, we need some help here. We have a person here who's being violent beyond our ability to handle by ourselves.' "

Balke says he was stunned when he heard the news of Graham's arrest for murder.

He sees what happened as a multilayered tragedy — for those, like Long, who were victimized and for their families and also for society and for people like Graham, who, he says, are ill, not evil.

"What if we had had some kind of mechanism put in place for Henry, to be able to say, 'We know that you're going to struggle with this. We know that you're probably not going to be able to follow through on this court order. We're going to take care of you. We're going to put you in a place where you've got some stable housing, and you've got a counselor that you'll be meeting with. If you need to be in some kind of a drug program, we'll get you in that. We'll provide you with education so you can go and get a job.'

"And he never would have ended up in this situation where he was hurting somebody else," Balke says.

Russell Long and Janelle Keck have fun in front of a mural at the South Loop Club, 701 S. State St. | Provided

Keck, Long's friend, agrees with Balke that society needs to address mental illness and homelessness.

But she's also angry.

She had dated Long, whom she met years ago at the Empty Bottle bar in Ukrainian Village. They shared a love of live music and city life.

But she says: "We were better as friends. Here's how to put it: He was Jerry Seinfeld. I'm Elaine, and we had a George, and together all of us were Kramers. You know, we had Kramer moments."

Keck says Long, a native of downstate Dixon who lived in Chicago for decades, was the protector of their friend group, the guy they teasingly called "Batman" for constantly updating them on crime alerts he saw on the Citizen app.

He'd bought a condo on Wabash Avenue near the river, the perfect spot to walk to his job at Northern Trust. He'd pop in to Rossi's, a bar on State Street where he'd play goofy music on the jukebox just to annoy the bartender, Keck says.

"He was, like, 'I pay taxes. I pay for a good view. I want to walk. I want to enjoy this. I want to sip coffee and look at the river turn green every year and watch the dumb little ducks.'"

She says she still has a hard time processing that Long, always so vigilant, still ended up being killed for no reason.

"It doesn't get more disgusting than that," Keck says.

She says Long complained that, starting when the COVID-19 pandemic shut down businesses, it had gotten harder to go for a walk downtown without being harassed by people with obvious mental health issues.

"I don't know what happened, where it changed, where we cross the streets instead of giving them money," Keck says. "Instead of being passive and kind and understanding, we know that there's a lot more under the surface that could harm us."

She says, "I have no pity for the stories anymore. I'm done. You killed my friend."

Keck says there's one good thing that's happened as a result of Long's death, as small a consolation as it is: His friends have grown closer.

"They understand that life is short, and no matter how much money you make and how handsome you are, you're still on the firing line," she says. "So make the most out of your relationships while you're here. And don't take people for granted."

For accused mentally ill killers and their victims in Chicago, help comes too little too late

People with mental illnesses are far likelier to be victims than to commit crimes. But a small number of unprovoked, midday killings show big gaps in care for severely mentally ill, violent people.

Family still grieves for grad student prosecutors say was killed by a man 'terrorizing downtown' Chicago

Anat Kimchi — killed in a random attack while visiting Chicago in 2021 — was studying criminal justice because she wanted to help make the system operate more fairly.

A killer's brother and mother: Fix mental health system so others don't die

"There are no resources," Corneal Westbrooks says, recalling his struggles with his younger brother Jawaun, now in prison for fatally stabbing a bank employee.

Cheerful day on North Michigan Avenue turns into a 'nightmare' for young flight attendant

Mariana was in downtown Chicago on a layover when Bruce Diamond, a man with a decades-long history of mental illness and criminal convictions, threw a heavy birch bark log at her head.

Unprovoked killings in downtown Chicago show a need for more mental health resources

Many ways to improve treatment are expensive and could be in peril if Medicaid funding is slashed by the Trump administration, experts say. One of the biggest problems with Illinois' mental health treatment system is a lack of coordination, they say.

'He literally fell through the cracks'

Mauro Galvan, who has severe mental illness, was a danger to himself and others, according to his relatives, who say the state should have done more in releasing him from Elgin Mental Health Center than just drop him on the sidewalk outside the Pacific Garden Mission.

