

WHITE PAPER

Digital Tools Improving Recovery from SUD in West Virginia



Remote Communities, Limited Resources Fuel State's SUD Crisis

West Virginia, a state with a population of approximately 1.76 million, is situated in the rugged terrain of the Appalachian Mountains.⁽¹⁾ The predominantly rural landscape features small towns, remote communities, and vast, open spaces.

Unfortunately, West Virginia faces one of the most severe substance use disorder (SUD) crises in the nation, consistently ranking among the highest in the U.S. for overdose death rates, which are two and a half times higher than the national average.⁽²⁾ A particularly troubling period occurred between 2019 and 2022 when overdose deaths rose by 60%.⁽³⁾ The state's rural nature, high poverty rates, and limited access to healthcare and SUD treatment have all contributed to a devastating public health emergency affecting families, workplaces, and entire communities.



A 2024 report by Mental Health America revealed that over 260,000 adults in the state, approximately 18%, struggle with SUD, yet only 6% received the care they needed.⁽⁴⁾ Substance use not only takes a personal toll on individuals, families, and communities; it imposes a crippling financial burden on the state. Estimates suggest that the SUD crisis costs West Virginia between \$8.8 billion and \$11 billion annually – almost one-eighth of the state's total economy or about \$4,800 per resident. These figures reflect the substantial expenses associated with healthcare, SUD treatment, criminal justice, lost productivity/opportunity cost, and other societal impacts, including the state's unprecedented rise in foster care placements. In the calendar year 2024, caregiver substance use disorder remained the leading reason for child removal. However, new analysis from the West Virginia Department of Human Services (DoHS), Quality Assurance Programs reveals a promising trend: the number of children removed solely due to parental substance use dropped by 54.5% from 2020 to 2024, while removals where substance use was a contributing factor declined by 39% from their peak in 2017.⁽⁵⁾



Due to the isolation that those with SUD were facing in 2020 because of COVID-19, West Virginia state officials searched for solutions to connect individuals with SUD to care and resources that support sustained recovery.⁽⁶⁾ This challenge was made more difficult by the shortage of healthcare workers and treatment options for the 52% of state residents living in rural areas.⁽⁷⁾ Dramatically reducing the overdose rate and improving access to SUD care for this dispersed population were top priorities for state officials as they explored options. The DoHS' Bureau for Behavioral Health (BBH) selected CHES Health's innovative eRecovery suite of digital tools to facilitate connections to SUD care and enhance treatment retention to ultimately improve recovery outcomes. For ease of access, the Connections recovery support app is now available at no cost to all state residents. This was made possible with funds from the US Department of Health and Human Services (DHHS) Substance Abuse and Mental Health Service Administration's (SAMHSA) State Opioid Response grant, as facilitated by BBH. Additionally, care providers were given access to the dashboard for clinician-led enrollment in the app, as well as access to its robust reporting capabilities.



Digital Tools Bridge Gaps in Care, Help in Combatting Isolation

West Virginia officials implemented eRecovery in direct response to the critical challenges residents faced—accessing care and achieving and maintaining recovery. eRecovery includes the evidence-based⁽⁸⁾ Connections smartphone app, which features a 24/7 peer engagement team that moderates community forums, leads virtual support meetings, encourages participation, and provides crisis support. The app also offers modules that deliver digital cognitive behavioral therapy (CBT) techniques, daily inspiration, educational resources, and other materials designed to engage individuals with SUD and keep them motivated on their path to recovery.

With limited options for SUD care, some West Virginia residents face long waits to be seen and struggle to find support between appointments. The burden of stigma and the fear of losing anonymity can lead individuals to avoid seeking help. In small towns and rural areas, they may worry that their families or neighbors will judge or alienate them. Some individuals are concerned about the potential negative impact on their employment. Overall, the lack of understanding regarding SUD can often result in discrimination against those who genuinely need assistance.

Connections may directly counter the profound isolation and loneliness that many state residents experience. Opportunities for in-person social interaction are limited in many areas if they exist at all. This lack of social connection can lead individuals to feel despair, making them more vulnerable to negative influences and risky behaviors. Additionally, Connections bridges these critical gaps in care, providing a virtual lifeline to people during the moments they most need assistance.

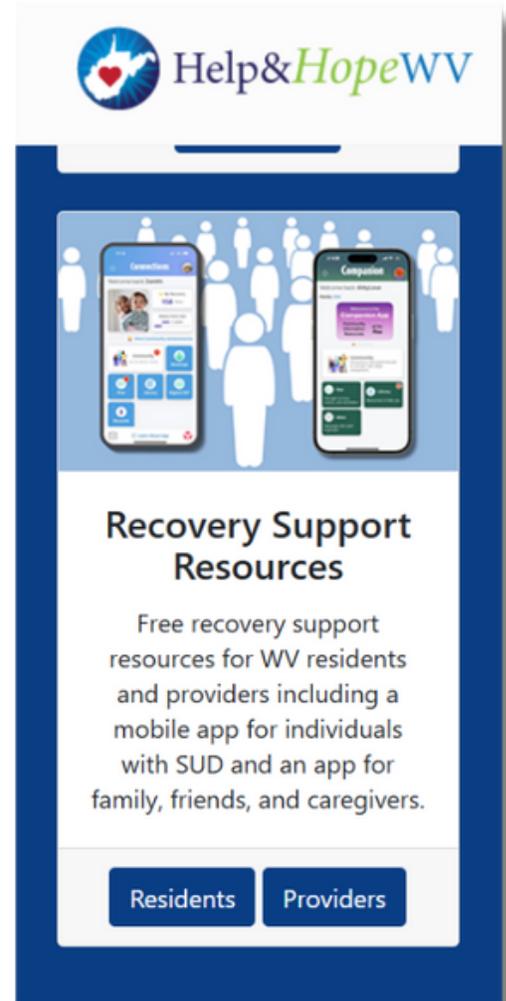
State Promotes Multiple Points of Access

Publicly Available Link Provides Direct Access to Residents

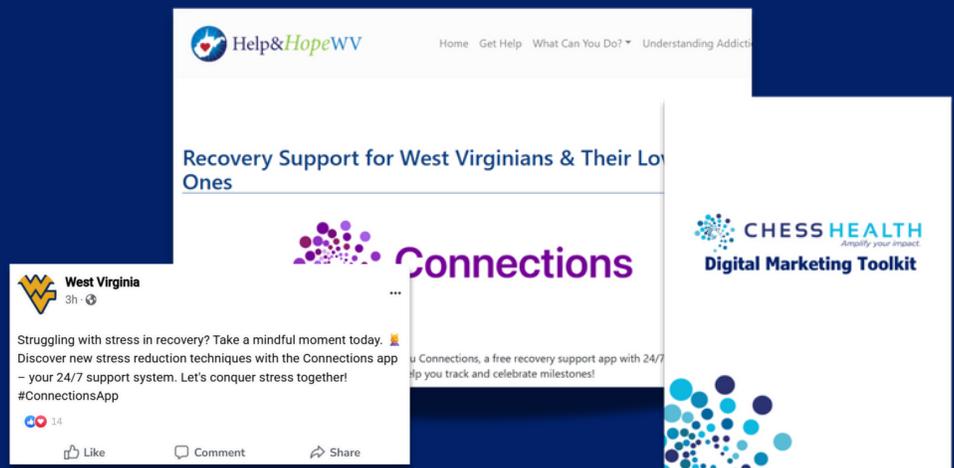
Once launched, West Virginia moved rapidly to promote the app across the state. A public access enrollment link, and corresponding QR Code, is available on websites such as the the DoHS's Help & Hope West Virginia, at community events, on posters in public spaces like courthouses, on social media, and with handouts and flyers posted in public spaces. The link enables residents seeking recovery to bypass traditional barriers and get support in the app immediately, whether they are working with a provider or not.

The public app received promotional support from organizations such as Healing Appalachia, which organizes concerts and events to foster communities of recovery in the region, as well as the Greater Wheeling chapter of the National Alliance on Mental Illness.

To support the broad-based promotional effort, the West Virginia University Health Affairs Institute (HAI) and BBH worked together to leverage a comprehensive outreach toolkit provided by CHES Health; this included customizable flyers, social media posts, email templates, and other outreach materials designed to raise awareness and drive engagement. By equipping local partners and community organizations with these resources, West Virginia ensured consistent messaging and accelerated adoption of the app across both urban and rural communities. This collaborative approach helped maximize visibility, reach underserved populations, and ultimately strengthen the state's broader efforts to remove barriers to recovery support.



To support customers, CHES Health provides a comprehensive marketing toolkit that includes customizable social media content, email templates, website copy, and press release support to help promote solutions effectively.



Providers Receive Own Version Plus Promotional Materials, Training, and Data

Beyond the public access link, there are provider-branded versions of the app, with access to eRecovery's robust data reporting and patient management tool.

To date, **more than 115 providers** across the state have taken advantage of the opportunity to access eRecovery resources at no cost to them through the support of BBH and its State Opioid Response grant funding. Providers who have chosen to utilize this tool recognize its value as an extension of their reach, thereby enhancing support for their patients and providing additional peace of mind for their staff, which in turn alleviates some of the stress and burden felt in this field. Even within organizations that have their own Peer Recovery Support Specialists, access to this tool has been recognized as an invaluable case management tool and self-care resource for peer groups.

One West Virginia provider utilizing these resources is Acadia Healthcare-Huntington Comprehensive Treatment Center (one of the state's nine Opioid Treatment Programs). Victoria Swain, clinical director at Acadia, stated that her facility promotes and encourages the use of the app with its clients to enhance recovery, build engagement, and establish a holistic, healthy support network for individuals with SUD.

"We utilize Connections during the hours that our group and individual counseling sessions are not available to be able to provide continuous care," Swain said. "With the app, we can provide peer-supported recovery access 24/7, every day of the week."

Swain also noted the variety of virtual support group meetings for different demographics including mothers in recovery, young adults, etc., ensuring that individuals with SUD can find a meeting that is appropriate for them.



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Victoria Swain

Chief Clinical Director,
Acadia

Providers were offered their own version of a marketing toolkit to promote resources to their client base while extending their own brand.

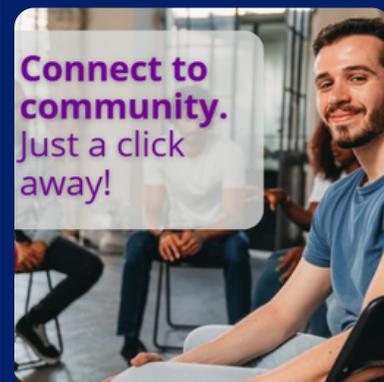


Welcome to Connections.

Connections is a FREE app for individuals with substance use disorder and common co-occurring mental health conditions with 24/7 peer support, a supportive recovery community, and tools to help you track and celebrate milestones!

"I love the support we get from this app each day. This has become such a part of my life, I really look forward to reading and engaging with people on here."

MIKE, A PATIENT IN RECOVERY



Employing Digital Tools to Meet the Needs of Vulnerable Populations

Women in Recovery

Reducing Isolation and Building Resilience for Women in Recovery

Supporting vulnerable populations with dedicated resources and programming is central to the eRecovery digital support program. An example of this is Seed Sower Village, a safe and supervised housing facility for women in active recovery, which requires its residents to use Connections, according to Jessica Ennis, program director and peer recovery support specialist. Clients can self-refer to Seed Sower, but many are also referred by the Department of Corrections, drug courts, day report centers, or other health care agencies. Seed Sower Village has 24/7 peer recovery support on staff, but leaders at the facility state that Connections serves as an essential extension of their services.

Residents, who range in age from 20 to 55, benefit from access to a broader, supportive community separate from the group of women they live with daily. “It’s helpful for them to have a community outside of here where they can get opinions and healthy support and feedback,” Ennis said.

She described a recent situation in which staff members were trying to help a new resident who was struggling to get along with the other women, and despite their best efforts, they were not able to break through to her. The resident brought her problems to the app community, and the advice she received turned her situation around. “We can say something all day, but sometimes if they hear it from somebody else, the light clicks on,” she said.

For program participants who are justice-involved, a key benefit is overcoming barriers to court-mandated program attendance. Individuals comply with mandates to attend meetings by logging into online support meetings available through the app. Engaging with the app also helps them progress through each of the necessary levels to gain new permissions, including increased access to their cell phones, within the facility. Because the app tracks their participation, staff at Seed Sower Village can easily see when someone has done the work to advance to the next phase.

Staff also receive timely notifications about potential resident struggles, creating a comprehensive support network for recovery. “I like how it notifies me if someone is struggling or having a bad day,” Ennis said. “Sometimes you get wrapped up in things, and you don’t always get to the daily check-ins with everyone, so it’s nice to know if someone needs additional support.”

As women transition out of Seed Sower Village’s year-long program, they are encouraged to keep using Connections as a lifeline to support.

Justice-Involved Individuals

Strengthening Re-Entry Support with 24/7 Crisis Help

Another primary focus of the eRecovery rollout was West Virginia's network of 31 Day Report Centers (DRCs), which are nonresidential, community-based facilities that provide supervision and support to individuals on probation or parole. DRCs assist in facilitating the integration of parolees back into the community while helping them meet court-ordered obligations.

DRCs utilize the provider-based version of the app, enabling case managers to easily track participation and share progress with probation officers. Additionally, the virtual support meetings offered within the app help clients meet their parole requirements while still respecting their privacy rights. Connections is HIPAA-compliant to protect provider-client communications and data. Parole officers can access only the specific information needed to confirm that clients have completed required activities, without gaining access to other confidential information.

Adoption among justice-involved individuals has been robust, with participants generating tens of thousands of views, engagements, and posts within the community.

Approximately 81% of individuals enrolled in Connections through the criminal justice system actively use the app and report a nearly 100% confidence rate in their ability to maintain sobriety using the app's daily check-in feature.



Broad Community Adoption

There has been broad-based adoption of the recovery support tools by drug courts, police departments, and Day Report Centers (DRC).

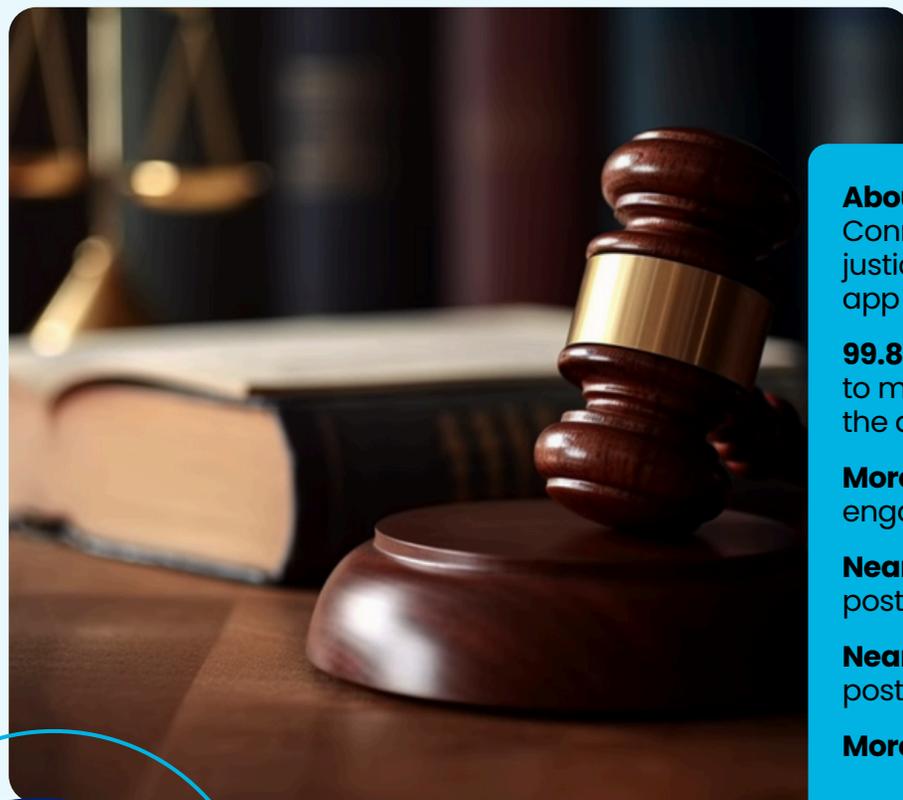
- Cabell County Adult Drug Court
- Doddridge County DRC
- Doddridge County Adult & Juvenile Probation
- Fayette County DRC
- Fayette County Family Treatment Court
- Greenbrier County DRC
- Greenbrier County Family Treatment Court
- Harrison County DRC
- Lee DRC
- Martinsburg Police Social Worker
- Mason County Teen Court
- McDowell County Alternative Sentencing (DRC & FTC)
- Nicholas Co. DRC
- Raleigh County Family Treatment Court
- Randolph County Adult Drug Court
- South Branch Valley DRC
- Southeastern Regional Adult Drug Court
- Southwestern Regional DRC
- Summers Monroe County DRC
- Tucker County DRC
- WV Peers in Jails

The Southwestern Regional Day Report Center (SRDRC) was among the first in the state to implement the app. Spanning four former coal counties, the remote location made it difficult to maintain contact with clients, and the lack of support meetings in the area meant clients could not meet attendance requirements.

Initially, Jerrica Evans, a therapist at SRDRC, believed her clients might view the app as just another obligation. However, after using it herself and receiving positive feedback from her clients, she recognized how the app enhanced her ability to maintain engagement and support her clients in their ongoing recovery and crisis situations.

If a distress call comes through as a message in the discussion groups, members of CHES Health's certified peer engagement team jump in immediately, which gives providers like Jerrica peace of mind. "With their cell phones in hand, recovery is available anytime they need it, any time they need help," Jerrica said.

Although Connections launched in West Virginia during the early days of the COVID-19 pandemic and the corresponding lockdowns, its popularity with clients has not waned as things reopened. SRDRC's Executive Director, Michelle Akers, stated that engagement remains high. "They still want the Connections app," she said.



About 81% of individuals enrolled in Connections through the criminal justice system are regular users of the app

99.8% confidence rate in their ability to maintain their sobriety reported on the app's daily check-in

More than 13,000 community engagements

Nearly 30,000 views of community posts

Nearly 11,000 messages and wall posts

More than 31,000 surveys taken

91 uses of the crisis support button

Data from May 2020 - May 2025

Individuals with Hepatitis C

Boosting Education and Testing for Individuals with Hepatitis C

In late 2024, the West Virginia Collegiate Recovery Network implemented CHES Health's Rewards Engine, a digital contingency management solution to incentivize participation in its hepatitis C (HCV) testing and treatment program. West Virginia has nine times the national average⁽⁹⁾ for positive HCV cases, a viral liver infection, which can lead to cirrhosis of the liver and liver cancer, among intravenous drug users. The state needed to increase testing and treatment for HCV to combat the problem, but much like the issues with SUD care, it was not always easy for individuals in remote and rural areas to access testing and treatment. To support increased participation, the program offered rewards for individuals who chose to get tested.

The Rewards Engine was employed to combat this public health challenge, providing a \$25 incentive for individuals to get tested for HCV. Another \$25 is provided for completing treatment when needed. The Rewards Engine streamlines the process for delivering rewards with an efficient, automated program that also provides comprehensive reporting and audit trails.

Teresa Warner, project director of the initiative, said that by offering incentives, they hoped to reach more people early on before HCV caused liver damage and other side effects. "We want to educate people about the treatment, so they understand there is hope and a cure," she said. From October 2024 through March 2025, the program distributed contingency management funds to 456 individuals in Cabell and Kanawha counties who were tested and/or treated for HCV. Throughout this period, the program identified a 55% positivity rate among those tested, highlighting the critical need for continued screening and treatment efforts in these communities.



Lennie the Liver

The Live(r) program mascot

Extending Support to Families and Loved Ones Impacted by SUD Crisis with the Companion App

The Connections app was performing well in reaching individuals in need of SUD recovery support. However, state officials recognized that the devastating impacts of SUD extended well beyond these individuals. Families, friends, and loved ones of people with SUD also lacked support in the state, and there was some noted crossover between individuals with SUD and other chronic health conditions, namely Hepatitis C. Expanding to offer new components of CHES Health's eRecovery solution proved to be a key part of the answer.

State Plays Consulting Role in Companion App Development

To address the critical unmet needs of families and support networks, CHES Health collaborated closely with HAI to develop the Companion app, a new feature of the eRecovery solution that allows families and loved ones of individuals struggling with SUD to access educational resources, connect, share experiences, and learn from others facing similar challenges.

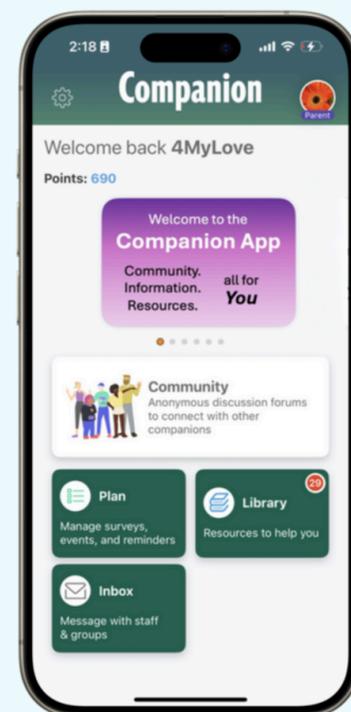
Physicians and clinicians in West Virginia served as key consultants in the app's development, which functions independently of the Connections app to ensure the privacy and autonomy of individuals in recovery and their support systems.

West Virginia launched the Companion app statewide in late 2024. Similar to the Connections app, the Companion app is free of charge and accessible to everyone in West Virginia.

Christena Ross, MS, PMP, of the West Virginia University Health Affairs Institute, said, "With West Virginia leading the nation in overdose deaths, we knew families needed a place to turn. The Companion app was created to support those who love someone with SUD, offering connection, resources, and community to help them cope through the journey."

Additionally, the support of family and loved ones plays a pivotal role in improving treatment outcomes, which provides benefits to individuals in recovery from SUD and business advantages for the organizations serving them. A SAMHSA study found that every \$1 spent on family-based treatment yields \$5 in savings to society.⁽¹⁰⁾

In 2024, CHES Health collaborated with customers, including West Virginia, to develop a marketing toolkit that would further support the promotion of this tool. The toolkit includes website copy, social media posts, email outreach, and print posters and flyers that can be personalized to the state or partnering organization, offering turnkey, effective outreach solutions.

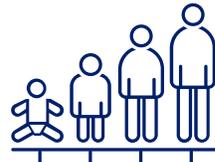


Impact

Key Utilization Metrics

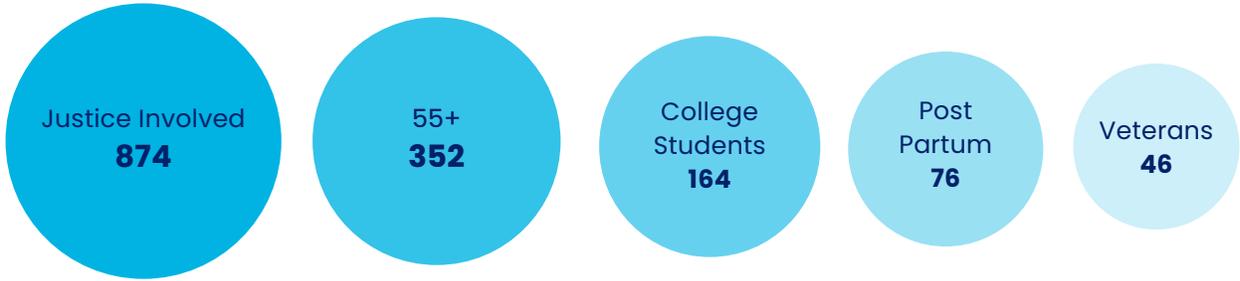
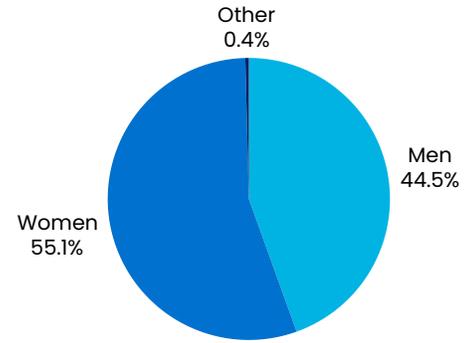
- 12,000+** individuals enrolled
- 177 days** of average app use
- 2,000+** support group meetings hosted
- 2,310** crisis support/escalation instances
- 130,000+** surveys completed and submitted

Demographics



39 Years Old

Median Age Range



Community Engagement

300,000+ topics, comments, and messages posted



Discussion Participation
Engaged in the community discussion forums.



Safe Sharing
Felt safe sharing their feelings in community discussions.

User Satisfaction & Feedback



Would recommend the app to a friend in recovery



Said Connections gave them confidence in their recovery



Said Connections strengthened their motivation to achieve recovery



Said Connections helped them to stay in recovery

Recovery Improvement

Reduction in Risk Factors



Reduction in feelings of depression.



Reduction in relapse risk factors.

Increase in Protective Factors:



Increase in activities related to work, school, or volunteering relating to improvement in quality of life.



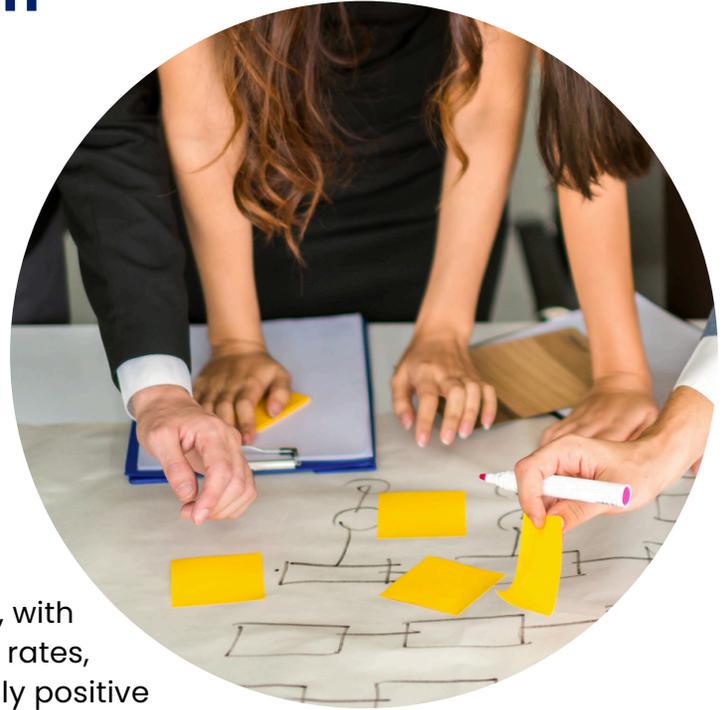
Increase in factors indicative of recovery strength.

Data represents the timeframe from May 2020 to February 2025 unless otherwise stated. Data is derived from app user profiles and survey response data, which is not obligatory, so it is not comprehensive of all individuals using the app. Data reported under recovery improvement is from high-acuity app users.

Results Reveal Roadmap for Organizations Dealing with SUD Crisis

West Virginia's deployment of CHES Health's eRecovery suite of tools demonstrates how digital solutions can effectively bridge gaps in services, offering consistency and a unified approach that meets the needs of varied populations, including those in rural and underserved communities. With the full suite of eRecovery tools, including the Connections and Companion apps and the Rewards Engine, the state has created a support ecosystem that expands beyond and enhances traditional care models.

The results are impressive, with nearly 6,000 people onboarded, high engagement rates, significant use of crisis support, and overwhelmingly positive user feedback. Most significantly, justice-involved individuals report a near-perfect confidence rate in maintaining sobriety—a significant achievement in a state hit hard by addiction.



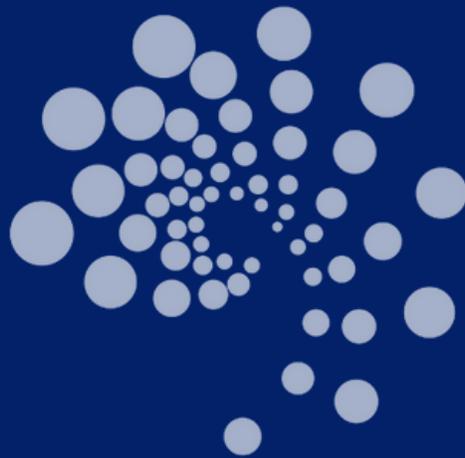
The DoHS reports a 40% decrease in overdose deaths from January to October 2024 compared to the same period in 2023, with the reduction expected to remain above 36% as pending cases are finalized. Year-over-year data for the 12 months ending in November 2024 shows a 37.7% drop in drug overdose deaths across the state, surpassing the national average decrease of 26.5%. This progress means 468 more lives were saved, with 468 people continuing their path to recovery and stability. ⁽¹¹⁾

Dr. Stephen Loyd, director of the DoHS' Office of Drug Control Policy (ODCP), said the drop in overdose deaths is a direct result of the state's multi-faceted approach, which includes eRecovery, to provide effective prevention and treatment strategies.

The key partnership between West Virginia and CHES Health represents a transformative approach to addressing substance use disorders and public health challenges through accessible, cost-effective digital tools that meet individuals where they are, whether in recovery, supporting a loved one, or managing a co-occurring health condition. West Virginia's strategy offers hope to other regions facing similar challenges that seek to mitigate the devastating effects of SUD.

Additional Reading

1. <https://www.census.gov/quickfacts/fact/table/WV/PST045224>
2. <https://healthaffairsinstitute.org/featured-work/chess-health-connections-companion-apps-support-individuals-with-substance-use-disorder-and-their-loved-ones/>
3. <https://dhhr.wv.gov/vip/Documents/SUDORS%20v2024%20final.pdf>
4. <https://mhanational.org/wp-content/uploads/2024/12/2024-State-of-Mental-Health-in-America-Report.pdf>
5. <https://www.weirtondailytimes.com/news/local-news/2024/08/lawmakers-receive-sobering-report-on-west-virginias-substance-use-disorder-crisis/>
6. [https://dhhr.wv.gov/office-of-drug-control-policy/news/Documents/FINAL%20-%20West%20Virginia%202020-2022%20Council%20Substance%20Use%20Plan-January%202020%2C%202020%20\(as%20filed\).pdf](https://dhhr.wv.gov/office-of-drug-control-policy/news/Documents/FINAL%20-%20West%20Virginia%202020-2022%20Council%20Substance%20Use%20Plan-January%202020%2C%202020%20(as%20filed).pdf)
7. <https://www.capito.senate.gov/news/press-releases/west-virginia-delegation-urges-hrsa-to-better-classify-rural-appalachia-for-federal-healthcare-resources>
8. <https://www.chess.health/evidence/>
9. <https://pubmed.ncbi.nlm.nih.gov/31876587/>
10. <https://library.samhsa.gov/sites/default/files/tip-39-treatment-family-therapy-pep20-02-02-012.pdf>
11. <https://dhhr.wv.gov/News/2025/Pages/West-Virginia-Department-of-Human-Services-Continues-Progress-in-Reducing-Overdose-Deaths.aspx#:~:text=Year%2Dover%2Dyear%20figures%20for,and%20create%20more%20memories%20together>



CHESSE HEALTH