Recovery Iowa- Spirit Lake 360

Report provided to the Iowa Department of Public Health,

Substance Abuse Bureau

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PUBLIC SCIENCE COLLABORATIVE

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Overview

At the request of the Iowa Department of Public Health, Bureau of Substance Abuse, the Public Science Collaborative (PSC) developed community-specific reports to support recovery efforts in Iowa. Recognizing the need to strengthen substance use recovery efforts throughout the state, we identified a large number of existing recovery-oriented resources in Spirit Lake which we describe and map in the pages that follow. We developed additional maps to identify at-risk neighborhoods that will benefit from targeted health interventions and additional community resources.

For additional questions or information about this report, the data tools described, or the Public Science Collaborative, please reach out to the principal investigators of this study, Dr. Shawn Dorius at sdorius@iastate.edu, or Dr. Cassandra Dorius at cdorius@iastate.edu.

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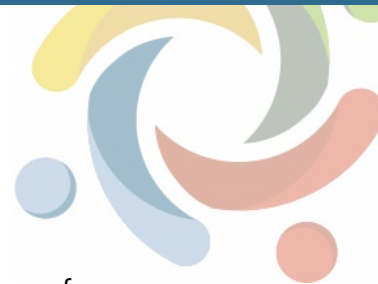
What is Recovery?

Though substance use recovery is an evolving concept that has been defined in a number of ways over the years, an emerging consensus is that recovery is a voluntary path toward improved personal wellbeing coupled with a diminished risk of substance use relapse. As noted by Bill White (2007):

> *Recovery is the experience through which individuals, families, and communities impacted by severe **alcohol and other drug** (AOD) problems utilize internal and external resources to voluntarily resolve these problems, heal the wounds inflicted by AOD related problems, actively manage their continued vulnerability to such problems, and develop a healthy, productive, and meaningful life.*

In White's view, resources help individuals, families, and communities in two ways. First, they help address alcohol and other drug-related problems (for example, addiction, unemployment, housing instability, family separation), and second, they support health, productivity, and meaning in post-treatment life. The appeal of this view is that it is explicit and direct in its recognition that recovery involves not only internal resources such as mental, emotional, and genetic factors but also external ones. In thinking about where to focus federal and state resources to develop a network of community-based recovery centers in Iowa, the key question is, "*What kinds of external resources matter most for sustained SUD recovery*?"

If we knew which resources were most helpful to long-run recovery, we could target towns and cities with large stocks of 'recovery resources' to grow Recovery Community Centers.

What is a Recovery Community Center?

Recovery Community Centers (RCCs) represent low-cost, member-driven, voluntarist, locally managed, and community-engaged pathways to sustainable recovery for people with substance use disorder, or SUD. RCCs accomplish these goals by linking people to existing resources and infrastructure and promoting a vibrant recovery culture based in a **physical community center where people in recovery can visit, engage with others in recovery, and access resources**. RCCs are an innovative, safe, and helpful source of community recovery support that provides linkages to existing local services and resources that support recovery for people with a substance use or mental health disorder. RCCs support recovery by helping people in the community who have a history of substance use to develop recovery capital, the personal resources that enable people to live healthy, productive, and community engaged lives. RCCs do this by connecting members of the recovery community, called peers, with different types of services such as recovery coaching, medication assisted treatment, connection to employment services and child care, recovery-oriented housing, or education and workforce development training services. Located in the heart of the community, Recovery Community Centers improve the ability of the local recovery community to care for one another, and they also help destigmatize the lives of people in recovery.

The RCC model of recovery is validated by academic studies and is promoted by both the SUD community and public health officials. However, finding the right communities for RCC development in Iowa has proven difficult, underscoring the fact that Iowa is one of just a few states in the U.S. that has yet to adopt the recovery community model.

Is Your Community Recovery Ready?

What is the RRCI and how was it created? We consulted scientific literature on substance use recovery and engaged key stakeholders who work directly with people in recovery around the country and in Iowa. This helped us to identify 17 unique community-based resources that we collected for almost all of Iowa's 944 cities and towns. In total, we found nearly 16,000 community features that support recovery. We mapped and analyzed these resources so we could identify a short list of 'Recovery Ready' communities across the state, culminating in the first-of-its-kind index: **The Recovery Ready Community Index (RRCI)**.

The RRCI encompasses four dimensions: breadth, depth, size, and strength. Breadth of recovery resources was measured by counting the number of different types of recovery resources in each county and community. For example, is there at least one hospital, one treatment center, and one drug drop off location in town. Depth of recovery resources was measured by first counting the total number of resources in each category and then ranking cities accordingly. This gives added importance to places that have, for example, more than one medication assisted treatment provider and many different recovery houses in town. Size of local recovery culture was measured by the total number of weekly mutual aid and peer support meetings per week in each city (e.g. total number of NA and AA meetings). Finally, the strength of the recovery community was measured as the difference between the total number of weekly peer support meetings and the number of meetings expected, based upon the total population of each town. These four dimensions were used to create the Recovery Ready Community Index. The RRCI is the simple average of each town's ranking across the four dimensions or recovery readiness. Places that ranked high on all four dimensions are labeled as especially recovery ready.

How recovery ready is your community? Are you well-positioned to support a Recovery Community Center in your community? Relative to all cities, Spirit Lake ranks high in terms of its recovery readiness. **According to the Recovery Ready Community Index (RRCI), Spirit Lake scored 42.2, placing it in the top 30 communities in Iowa** (Iowa's RRCI state average is 32.7). Boasting 11 mutual aid and peer support meeting locations each week, the size of the recovery culture in Spirit Lake is among the largest in the state. Spirit Lake also has an especially strong recovery culture, meaning that the 12 peer support meetings each week (held at the locations noted previously) are more than would be expected for a town of this size. Spirit Lake also scored high on the breadth score (12), indicating that it has a wide variety of different recovery resources to support its residents on the individual recovery journey. In short, Spirit Lake is well-positioned to support a thriving recovery culture, including the development of a recovery community center.

Another way to understand recovery resources in Spirit Lake is to compare it to other towns of roughly similar size. Spirit Lake far exceeded the state average (illustrated with a solid line in Figure

1) but not the average of the 50 largest communities (illustrated with a dashed line in Figure 1). When we compared it to the similarly-sized cities of Sergeant Bluff and DeWitt, Spirit Lake stands out as especially strong on total number of recovery resources, total weekly mutual aid meetings, health resources, and community resources. This may not be surprising, given that Spirit Lake was one of the highest rated towns in Iowa on the RRCI. Compared to Sergeant Bluff, another city of similar size, Spirit Lake scores higher in each of the four categories of interest. In terms of total resources, Spirit Lake is poised to leverage considerable recovery resources to support its population of res idents with a history of substance use.

Figure 1. *Recovery Ready Community Index: Comparison of Spirit Lake to Other Iowa Communities on 'Recovery Readiness'*
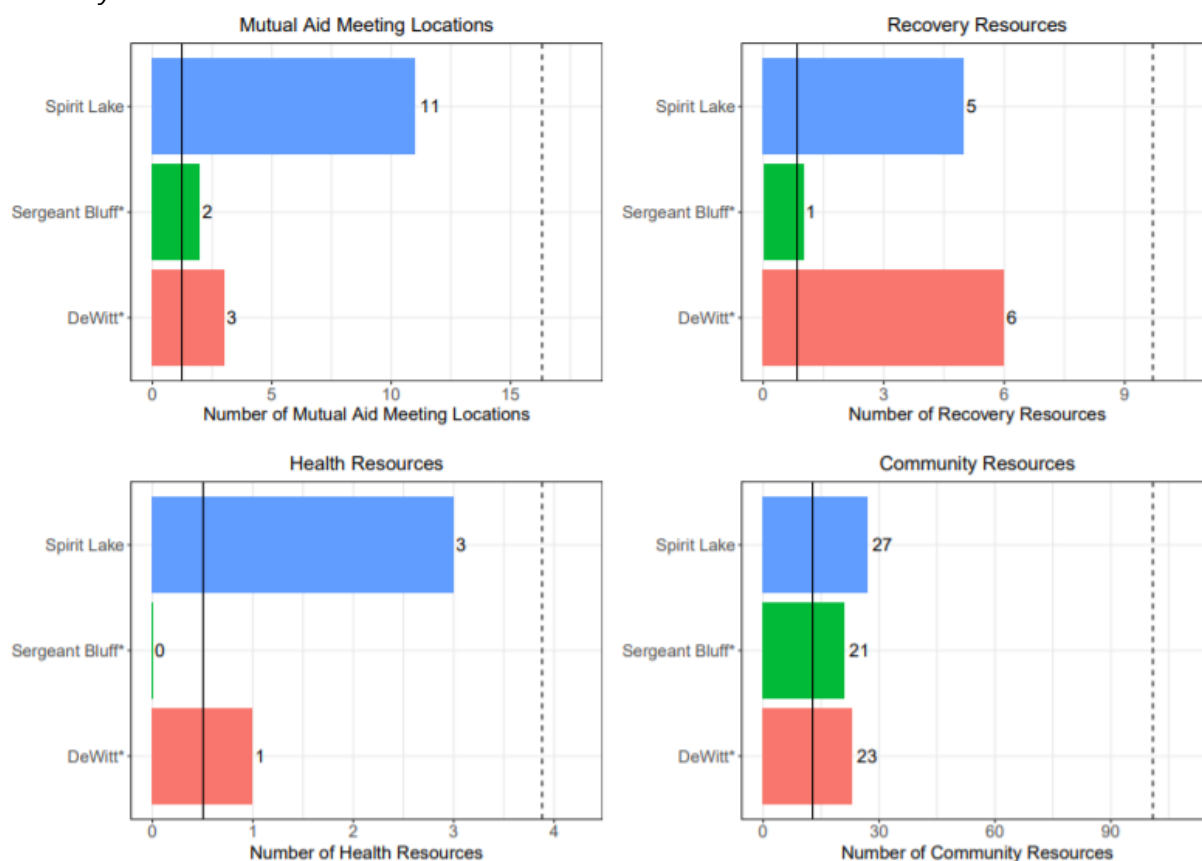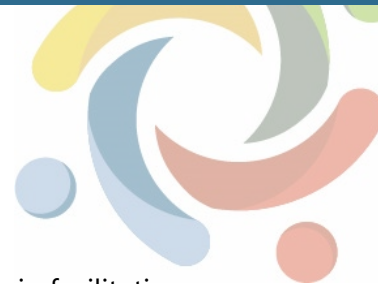
## What Peer Support Meetings are Available in Your Area?

Recovery meetings, such as Alcoholics and Narcotics Anonymous, play a significant role in facilitating the recovery process. Despite the importance of these meetings there is no coherent 'one stop shop' to find the meeting you need, when you need it. People usually need to go through several steps, such as searching for meetings on Google, or looking for a specific meeting time/place on a local listings' website. It can be hard enough to connect with peer support during the best of times, but doubly so when you are in crisis and questioning your recovery. Magnifying the challenge of finding the right meeting at the right time is being new to a community, unfamiliar with the members of a local meeting, and being in a moment of duress.

We developed the PSC Meeting Finder Tool to make it easier to find local meetings. We do this by presenting a map-based list of meetings all throughout Iowa and we update the map every single day. It's a simple interface that helps people to find the appropriate meetings nearby, right now. Users can filter meetings by time of day, day of week, or whether childcare is available, for example, to find the right meeting at the right time. Having a responsive design, PSC Meeting Finder runs efficiently and quickly on many different kinds of computers and mobile devices such as smartphones. Figure 2 is a screen capture of the PSC Meeting Finder where you can see the location of all known peer support meetings in your community. A web version of this map is available at: http://public-science.org/reportmaps/spirit_lake/mf.php. A full listing of these resources is provided as a table with meeting, type, group name, number of meetings per week, and location of meetings in Appendix 2.

As illustrated in Figure 2, Spirit Lake has about 11 peer support meeting locations in a given week. These meetings are sponsored by Alcoholics Anonymous and Narcotics Anonymous. Meetings are located throughout the community, but are heavily centered on the downtown area. The map reveals some places where there are few or no weekly meetings, which may help local peer support groups to identify new places to sponsor a meeting and support local recovery.

**Figure 2.** *Spirit Lake Peer Support Meetings*
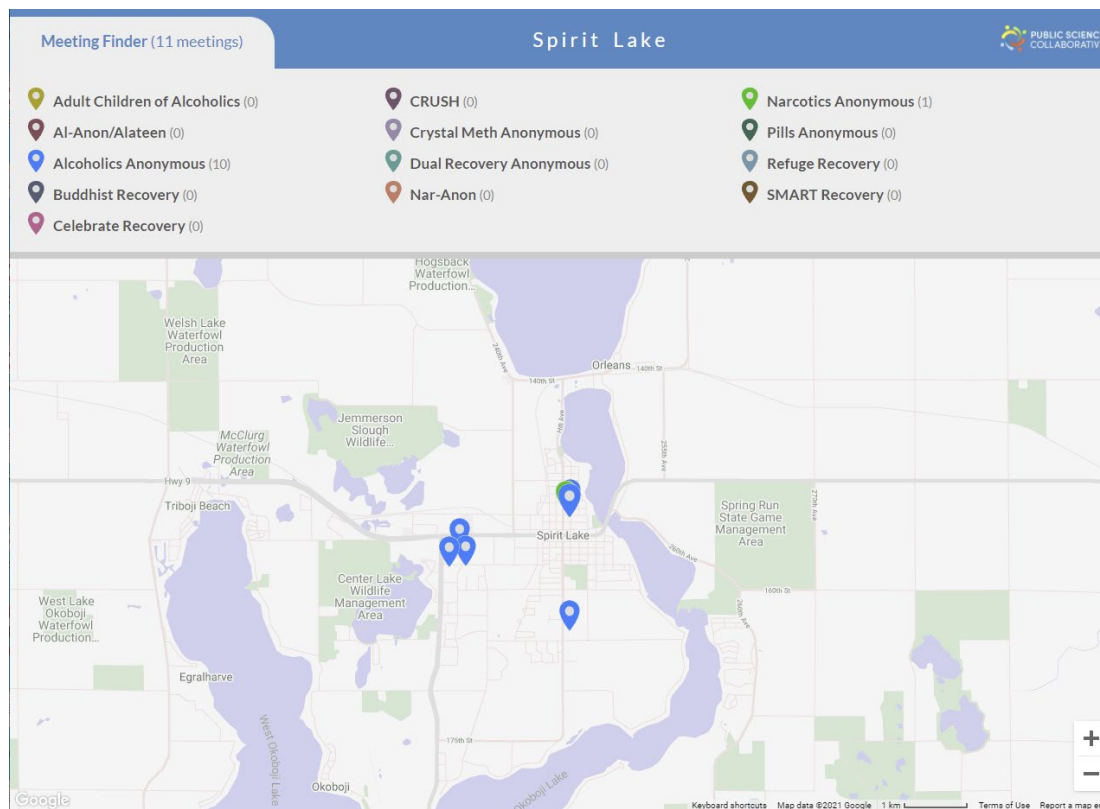
Note: Larger markers indicate the locations that host more than one meeting per week. (Min=1, Max=9). For example, in Spirit Lake there are 12 total meetings hosted each week in the 11 locations identified above.

What Recovery Resources Are Available in Your Area?

Despite their importance, community-based recovery resources can be hard to find. Whether a person is new to the community or a long-term resident, some resources remain unknown to many people in the community. The PSC Recovery Resource Locator aims to help solve this problem. Figure 3 is a screen capture of the PSC Recovery Resource Locator where you can see the location of some of the great resources your community offers to its recovery community. A web version of this map is available at: http://public-science.org/reportmaps/spirit_lake/rr.php. A full listing of these resources is provided as a table with resource name, type, and location in Appendix 3.

Figure 3. *Recovery Resources in Spirit Lake*
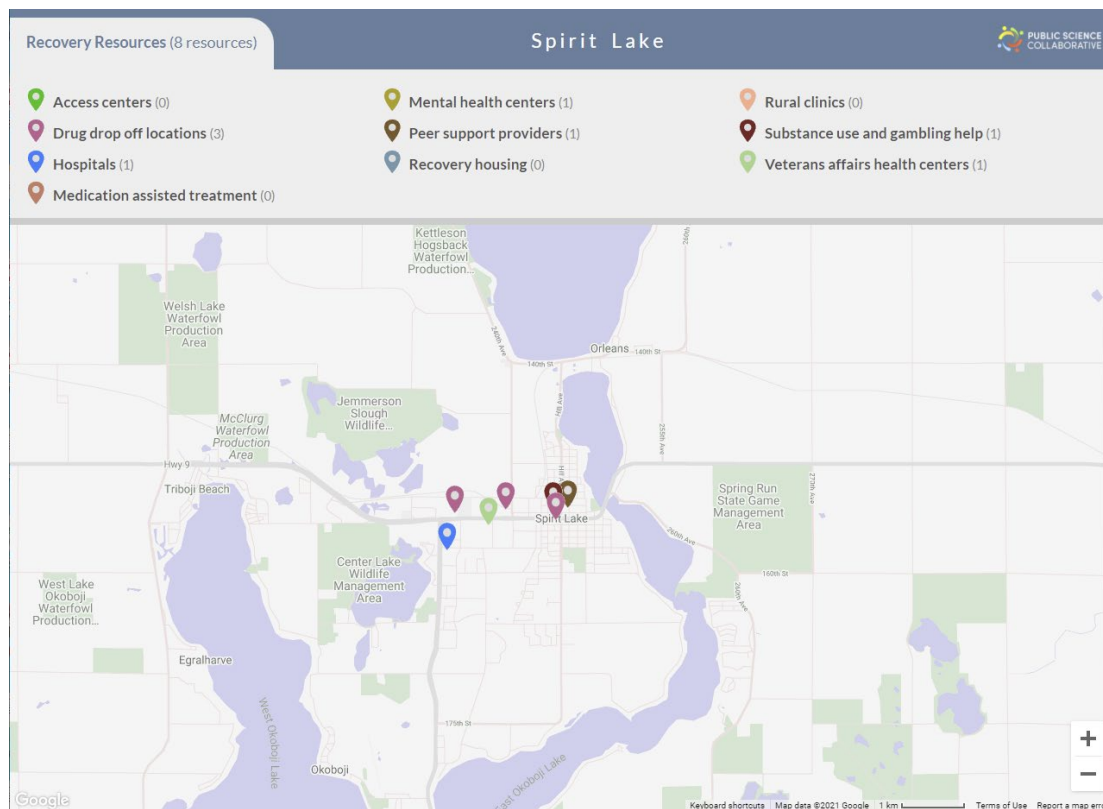
Spirit Lake has nearly 10 recovery resources available for its residents to live their best lives and to support those in recovery from substance use disorders. Recovery resources include access centers, drug drop off locations, medication assisted therapy, mental health centers, peer support providers, recovery housing, SUD and gambling support, and Veterans Affairs health clinics. There are at least three drug drop off locations to allow individuals to dispose of their unneeded prescription drugs to limit abuse of these substances. In addition to medical professionals, many mental health providers are available to support the mental health challenges associated with SUD. Rounding out the available recovery resources are the two or more SUD treatment facilities and Veterans Affairs health clinics in the community. This list of recovery resources available in Spirit Lake show that the community may be poised to address the needs of community members touched by SUD.

What Community Resources are Available in Your Area?

In addition to peer support meetings and clinical care, people in recovery benefit from other community resources. For example, having easy access to parks and natural areas has been shown to support substance use recovery. Participation in community groups, including religious organizations, may be a source of strength and support for many people in recovery. We have identified many additional community assets that can help people in their own recovery journey. The state of Iowa has a wide range of public and private institutions and organizations dedicated to providing health and human services, support, and activities to improve quality of life and wellbeing
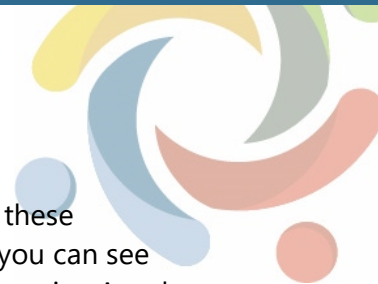
of all Iowans. The PSC Community Resource Locator is a utility for discovering many of these resources. Figure 4 is a screen capture of the PSC Community Resource Locator where you can see the location of some of the great resources your community offers to its recovery community. A web version of this map is available at: http://public-science.org/reportmaps/spirit_lake/cr.php. A full listing of these resources is provided as a table with resource name, type, and location in Appendix 4.

Figure 4. *Community Resources in Spirit Lake*
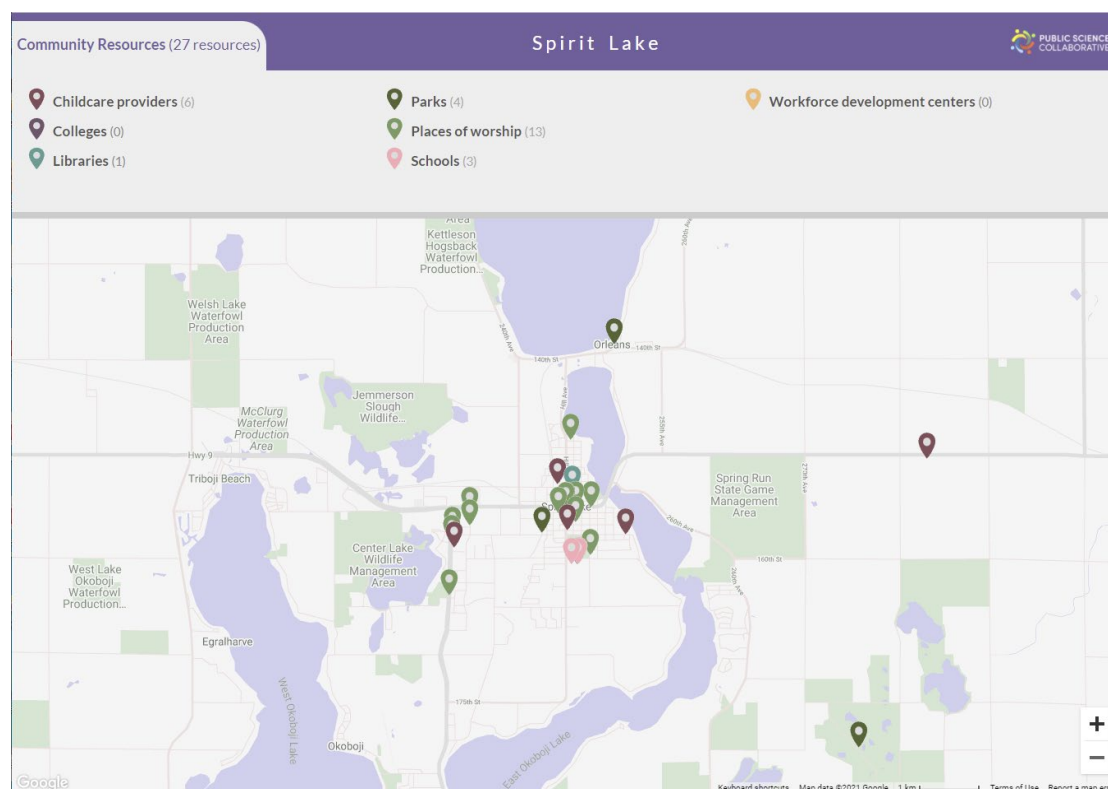
Spirit Lake has many community resources available to support its residents in recovery from substance use disorders. In fact, the community boasts about 30 community resources, including childcare providers, universities and technical colleges, libraries, parks, places of worship, K-12 schools, and workforce development centers. Childcare resources are plentiful with about five providers in the community, but this may have changed since the data were collected before the Covid-19 pandemic. There are many educational resources available with three K-12 schools. Additionally, we found there was a public library and several parks in the city. Where Spirit Lake shined was in the availability of places of worship with approximately a dozen available across the area. With all of these resources in the community, Spirit Lake has a lot of potential to support those in the community who are recovering from substance use disorders.

Which Neighborhoods in Your Community Need Additional Health Resources and Support?

The Public Science Collaborative has developed data resources to help community organizations, local governments, and public health practitioners to more effectively target substance use prevention, treatment, and recovery interventions to the places in greatest need of resources. Geographic 'hot spots' identify places where local residents are at especially high risk for substance use disorder. We estimated statistical models using administrative data from the Treatment Episode Admissions Dataset (TEDS-A) and the National Survey of Drug Use and Health (NSDUH) to measure significant relationships between substances of misuse and socio-demographic characteristics known to affect health equity and substance use vulnerability. Neighborhood characteristics associated with each substance (e.g. methamphetamine, benzodiazepines) were overlaid with Census Bureau estimates of these same neighborhood characteristics, by census tract. Once mapped, these data help us to identify places with especially high concentrations of at-risk characteristics in need of targeted resources to reduce health inequities. You can learn more about the underlying models for this index in Appendix 1. The resulting maps are included in the pages below.

According to our models and maps, neighborhoods in Spirit Lake have distinctive risk profiles, with some at high (or low) risk of harmful use of a specific substance, such as heroin, opioids, or methamphetamine. These maps can guide public health outreach efforts and enable more targeted, substance-specific interventions based upon known neighborhood risk factors. We also developed a city map to identify overall substance use vulnerability, which can be used to support generalized substance use prevention, treatment, and recovery interventions. According to our maps, several neighborhoods in Spirit Lake are vulnerable to opioid or methamphetamine use. While the Spirit Lake community doesn't rate very high on the Substance Use Vulnerability Index, drug-specific interventions *and* general health resources could benefit these places and their residents and help prevent an increase in usage in the future.

Figure 5. *Spirit Lake Substance Use Vulnerability Index Overall*
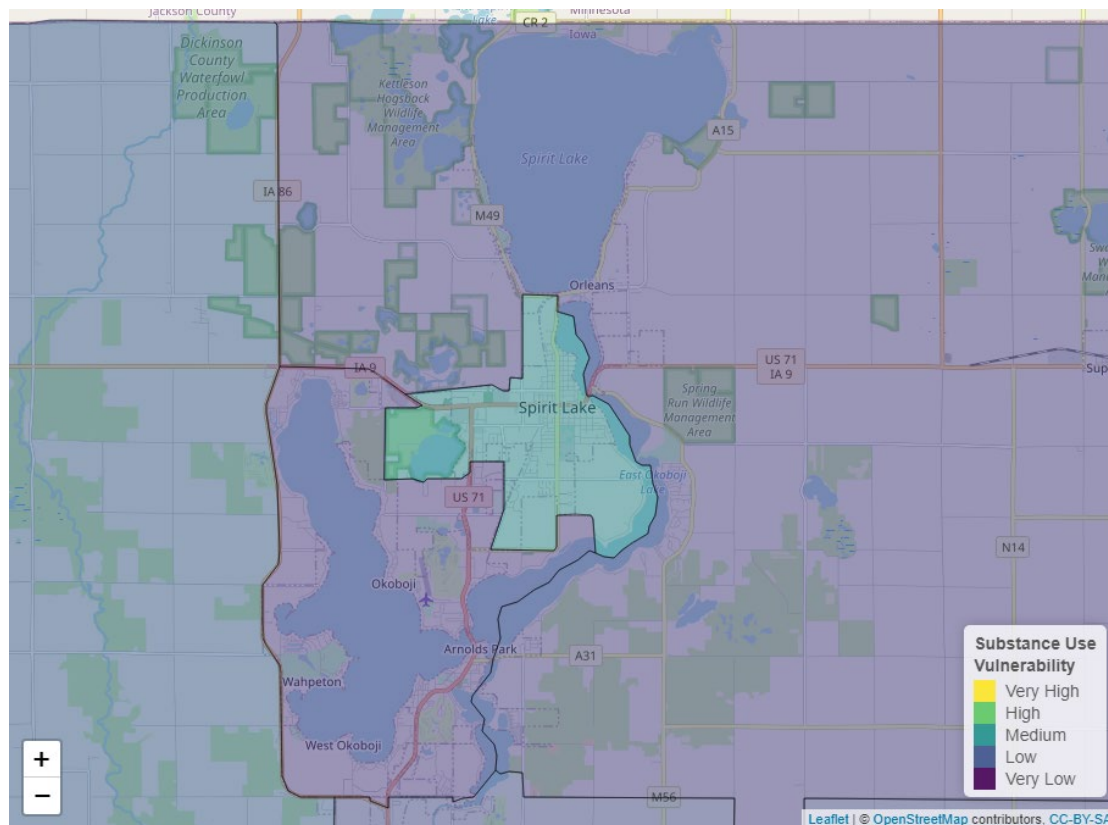
The overall level of substance use vulnerability in Spirit Lake is low to middling (see Figure 5). The biggest area of concern is the downtown area of town, which contains the high school. This area has a medium level of risk according to the vulnerability index. The southern half of town and the surrounding area have moderately low levels of overall substance risk.

Figure 6. *Neighborhood Vulnerability Index, Opioid Use*
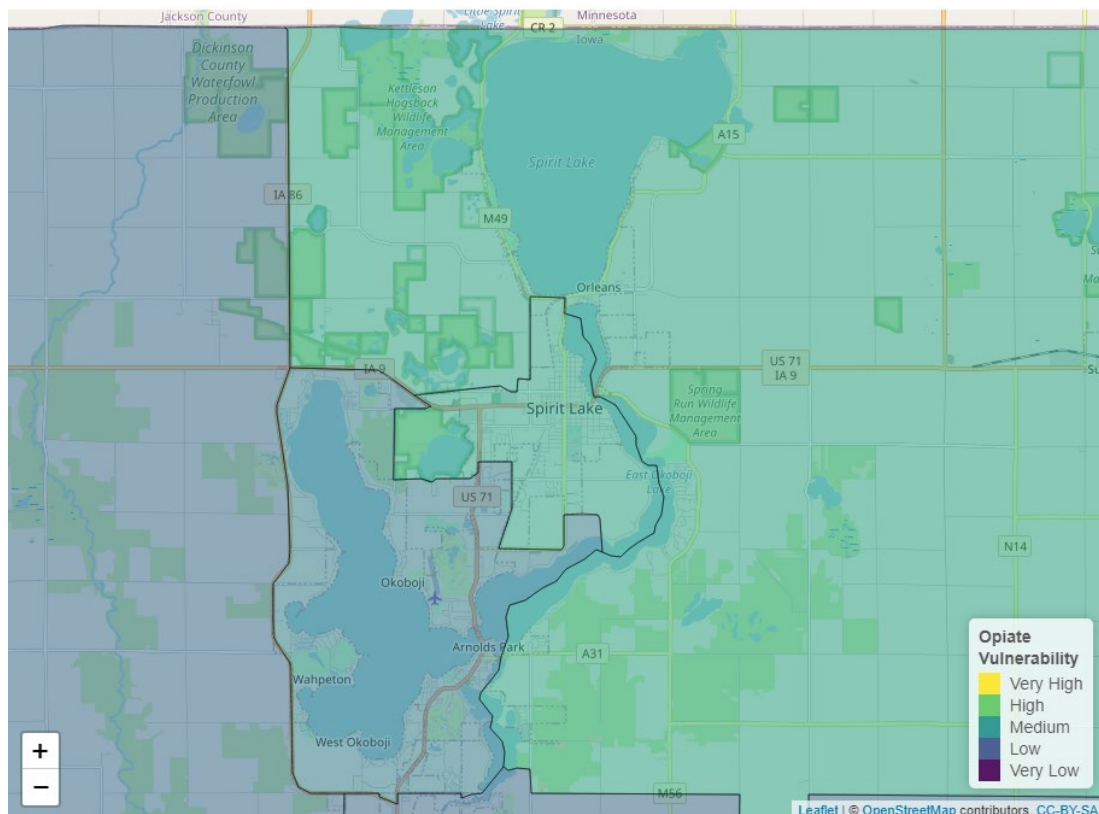
The level of vulnerability to opioid use splits this community in two (see Figure 6). Okoboji and the area to the west have a low level of risk when it comes to opioids. Conversely, Spirit Lake and the areas to the east have a higher than average level of opioid vulnerability in comparison to other Iowa communities. This could be a concern for the community going forward.

Figure 7. *Neighborhood Vulnerability Index, Heroin Use*
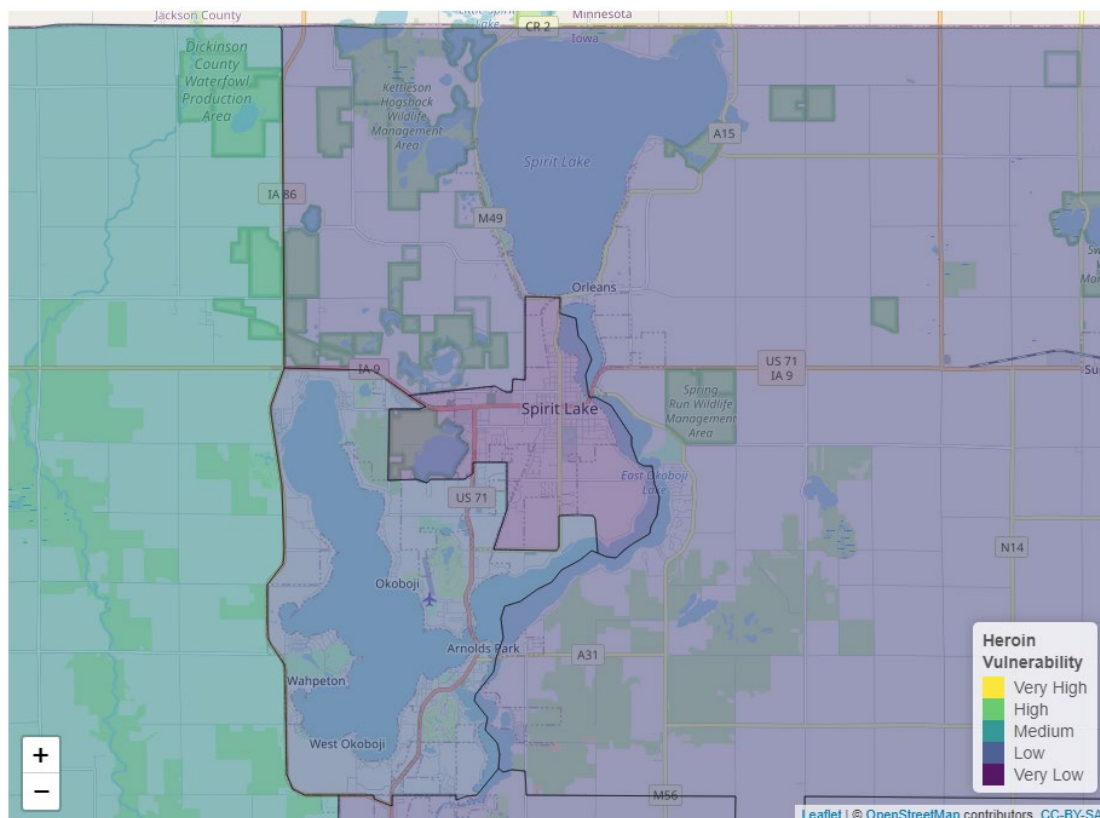
There is very low heroin use vulnerability in Spirit Lake, Okoboji, and the surrounding areas (see Figure 7).

There is a moderate level of methamphetamine vulnerability in the Spirit Lake community (see Figure 8). The population of the downtown area is close to a high-risk population, which should be noted going forward. The areas surrounding Spirit Lake also have a moderate amount of vulnerability to methamphetamine. The people surrounding Lake Okoboji are at a lower level of risk overall.

Figure 8. Neighborhood Vulnerability Index, Methamphetamine Use
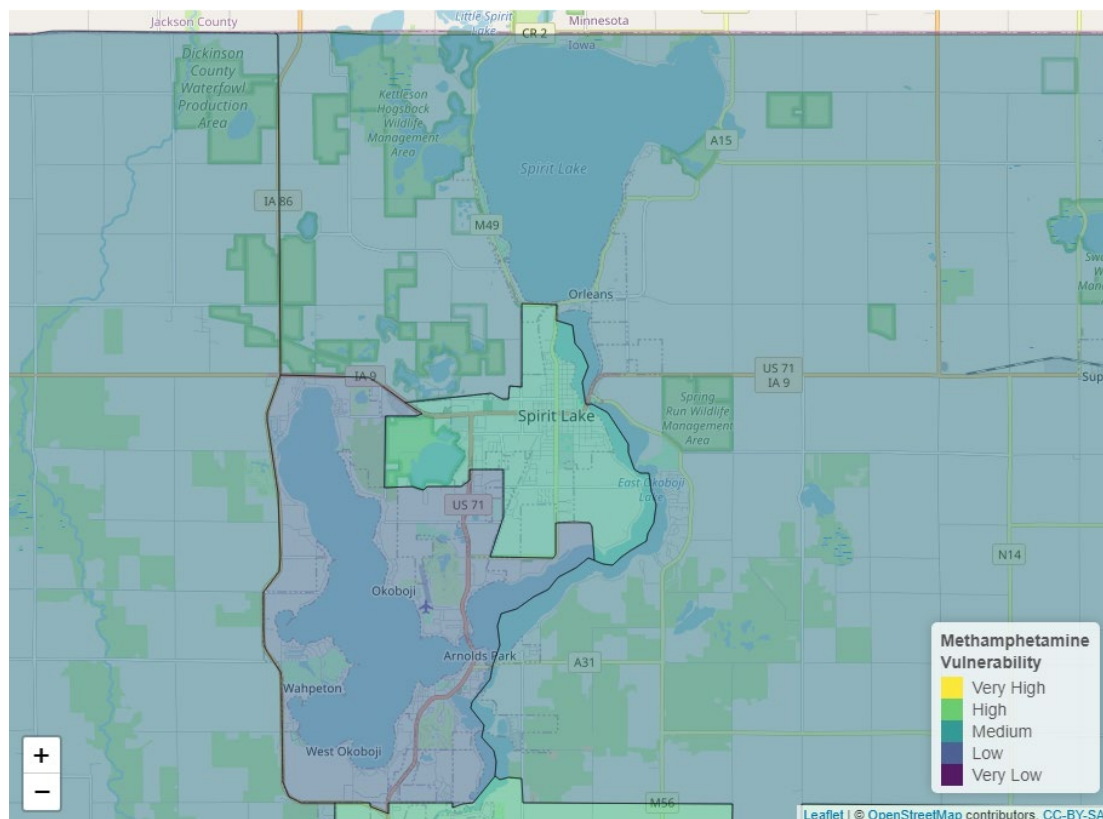
What's Driving Health Disparities in Your Community?

In addition to the neighborhood vulnerability maps above, the Public Science Collaborative created a neighborhood map to understand health disparities in Spirit Lake that draws on well-established social determinants of health. By social determinants, we refer to health risks that are social in origin and tend to be unevenly distributed within a city or town. For example, in places with high average levels of education and low unemployment rates, residents tend to also have better overall health (e.g. longer life span and more healthy years of living). In places where average incomes are low and the rates of single parenting are high, people often have worse health, including higher death rates due to overdose and fewer healthy days. Knowing something about where the social determinants of health support wellbeing and where their scarcity decreases wellbeing can help local community organizations and governments to better target investments to reduce health disparities between neighborhoods.

Figure 9. Neighborhood-Level Health Disparities, Social Determinants
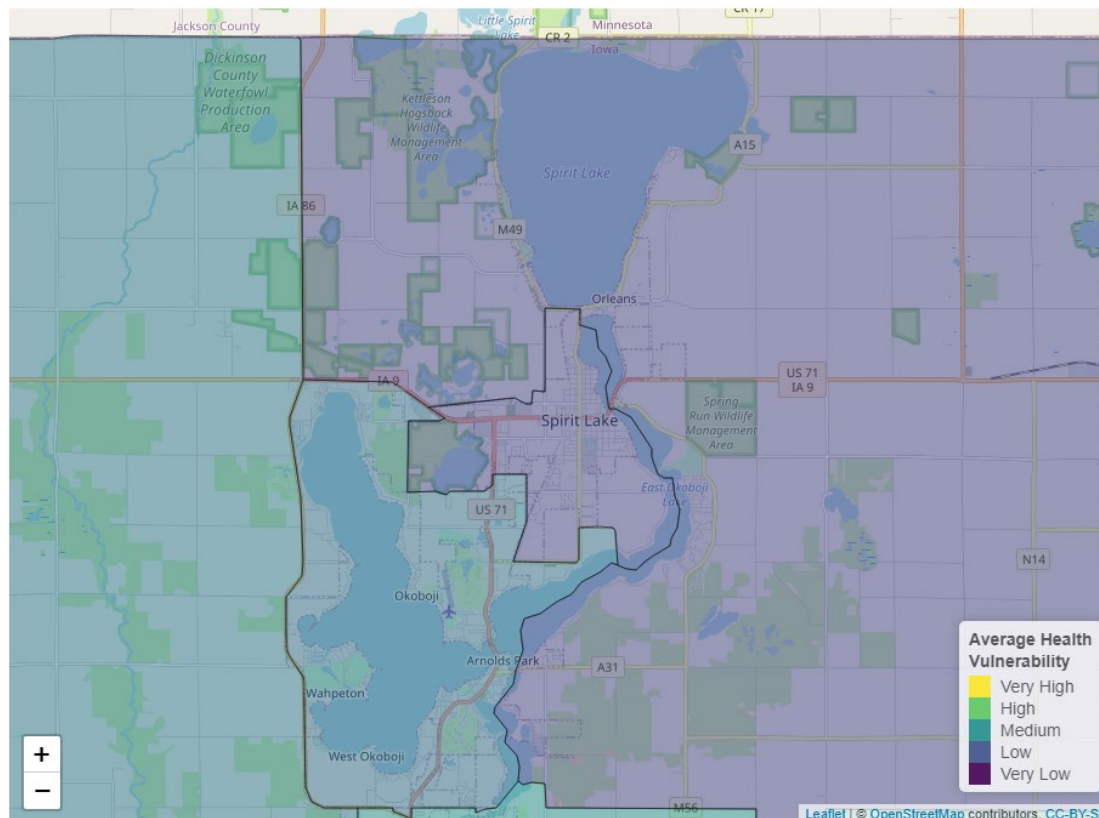
According to the social determinants we considered, Spirit Lake is at a very low risk of health disparity (see Figure 9). The area to the south containing Okoboji is at a higher level of vulnerability, but still on the low end. The big difference between the two areas is the level of uninsured population in each neighborhood. 5% of people living near Okoboji are uninsured, double that of the population living in Spirit Lake, though these numbers are both very low in comparison to other communities in Iowa.

APPENDIX 1: Data Used in this Report

Recovery Ready Community Index (RRCI)

Data Tool: Recovery Ready Community Index

Data: *PSC Meeting Finder Tool data; PSC Recovery Resources Locator Tool data; PSC Community Resources Tool data, U.S. Census Bureau American Community 5-year Estimates (ACS), 2015-2019*

The Recovery Ready Community Index was designed to give a holistic view of a community's "recovery readiness" and their ability to support people in recovery. The RRCI is constructed with four sub-measures: Breadth of Recovery Resources, Depth of Recovery Resources, Size of Recovery Culture, and Strength (Vibrancy) of Recovery Culture. You can read more about how the RRCI was developed on page two of this report. The specific recovery and community data collected to build the RRCI are detailed below and listed by name and source in Appendices 2, 3, and 4.

PSC Meeting Finder Tool

Interactive tool: http://public-science.org/meetingfinder/

Data updated daily: *Adult Children of Alcoholics, Al-Anon/Alateen, Alcoholics Anonymous (AA), Buddhist recovery, Celebrate Recovery, CRUSH, Crystal Meth Anonymous, Dual Recovery Anonymous, Nar-Anon, Narcotics Anonymous (NA), Pill Anonymous, Refuge Recovery, and SMART Recovery*

Under the hood, the PSC Meeting Finder Tool is a data pipelining system that fetches the information of the 13 different types of recovery meetings from their original sources, and integrates them into a state map (Following Figure). This system is composed of four major logical components: (1) automated robots that oversee and 'scrape' the peer-support websites for daily updates, (2) database infrastructure, (3) the web server infrastructure, and (4) PSC Meeting Finder Tool web-based application.

There are two types of automated program robots, called 'bots', utilized in this system: commander bots and scraper bots. The commander bot is in charge of running and logging the scraper bots, and reports to the system administrator when a scraper bot is unsuccessful. A scraper bot is in charge of scrapping the original listing websites, and populating the database with the cleaned data. The original listings might be unstructured and contain dirty data. It is the scraper bot's duty to make sure that the data that is inserted into the database is clean and structured. These data are then pulled into the users' browser by the PSC Meeting Finder Tool.

Figure 10. *PSC Meeting Finder Tool- Under the hood*
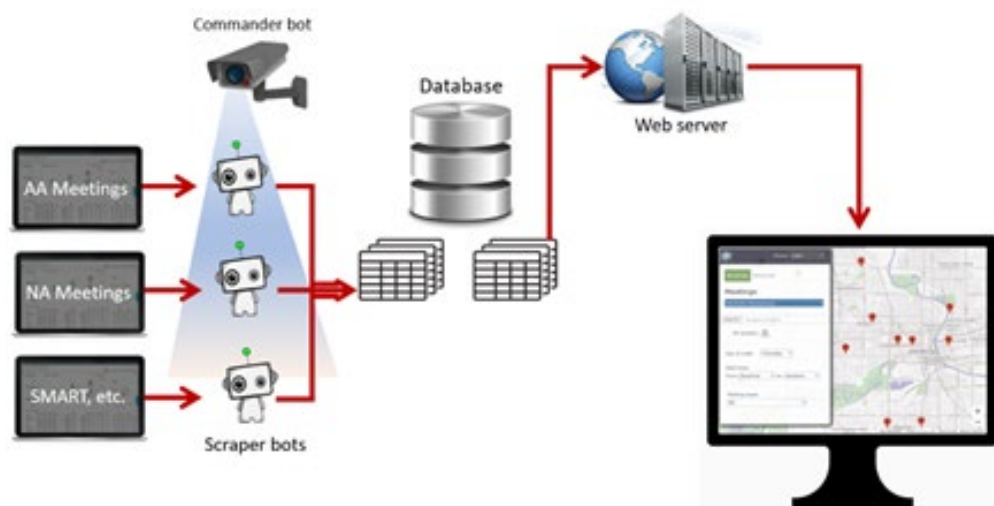
Recovery meetings data are gathered and cleaned from 13 web-based resources via our data pipeline system. Most of these resources utilize web scraping techniques (in Python by standard requests or packages such as Selenium and BeautifulSoup packages) as well as parsing PDF (Python: PyPDF2 package) files and XLS sheets (Python: csvkit). Table 1 identifies the name of the meeting, web resource, number of locations, and number of meetings per week.

Table 1. *Peer Support Meeting Information for Spirit Lake*

No.	Name of meeting	Web Resource	# of locations	# meetings per week
1	Adult Children of Alcoholics	https://adultchildren.org/	0	0
2	Al-Anon/Alateen	https://al-anon.org/	0	0
3	Alcoholics Anonymous	https://www.aa-iowa.org/	10	11
4	Buddhist recovery	https://www.buddhistrecovery.org/	0	0
5	Celebrate Recovery	https://locator.crgroups.info/	0	0
6	CRUSH	https://www.crushofiowa.com/	0	0
7	Crystal Meth Anonymous	https://www.crystalmeth.org/	0	0
8	Dual Recovery Anonymous	http://draonline.qwknetllc.com/	0	0
9	Nar-Anon	https://www.nar-anon.org/	0	0

10	Narcotics Anonymous	https://www.na-iowa.org/	1	1
11	Pill Anonymous	https://www.pillsanonymous.org/	0	0
12	Refuge Recovery	https://refugerecovery.org/	0	0
13	SMART Recovery	https://www.smartrecoverytest.org/	0	0
	Total		11	12

PSC Recovery Resource Locator Tool

Interactive tool: http://public-science.org/recoveryresources/

Data updated yearly: *Iowa Office of Drug Control Policy; Wikipedia of Iowa hospitals; Iowa Department of Public Health; Recovery and Resilience Coordinator with AmeriCorpAllTreatment.com; TransitionalHousing.org; WomenSoberHousing.com; Addicted.org; Recovery.org; Drug-rehabs.org; Iowa Association of Rural Health Clinics; U.S. Department of Veterans Affairs*

Recovery resources include access centers, drug drop off locations, hospitals, medication assisted treatment locations, mental health centers, peer support providers, recovery housing, rural clinics, SUD and problem gambling treatment locations, and Veterans Affairs health centers. To collect this data, we used a variety of public resources, including government agencies and recovery websites. Our collection of recovery resources is not necessarily exhaustive, but represents the data accessed through our initial effort and following the advice of substance use experts and researchers. This data was acquired through a variety of means, including simple downloads, manual data entry, computer reading of PDF files, and scraping websites. See the table below for the recovery resources data sources.

Table 2. *Recovery Resource Locator Tool Data Sources (Downloaded Sept 2020-May 2021)*

Resource	Data Source	Website Link
Access Centers	Manual Addition	
Drug Drop Off Locations	Iowa Office of Drug Control Policy	https://geodata.iowa.gov/datasets/rx-drop-off-locations-1?geometry=-101.674%2C40.504%2C-84.986%2C43.364
Hospitals	Wikipedia list of Iowa hospitals	https://en.wikipedia.org/wiki/List_of_hospitals_in_Iowa
Medication Assisted Treatment Locations	Iowa Department of Public Health	https://idph.iowa.gov/mat
Mental Health Centers	Iowa Department of Public Health	https://dhs.iowa.gov/sites/default/files/MHDDAccreditedProviders_32.pdf?0823202201508
Peer Support Providers	Todd Lange, Recovery and Resilience Coordinator with AmeriCorp	email
Recovery Housing	AllTreatment.com; TransitionalHousing.org; WomenSoberHousing.com; Addicted.org; Recovery.org; Drug-rehabs.org	AllTreatment.com; TransitionalHousing.org; WomenSoberHousing.com; Addicted.org; Recovery.org; Drug-rehabs.org
Rural Clinics	Iowa Association of Rural Health Clinics	https://iarhc.org/find-a-rural-health-clinic?view=map
SUD and Problem Gambling Treatment Locations	Iowa Department of Public Health	https://idph.iowa.gov/Portals/1/userfiles/166/Licensure/All%20Licensed%20Substance%20Use%20Disorder%20-%20Problem%20Gambling%20Program%27s%20List.pdf
Veterans Affairs Health Centers	U.S. Department of Veterans Affairs	https://www.va.gov/directory/guide/state.asp?STATE=IA&dnum=ALL

PSC Community Resource Locator Tool

Interactive tool: http://public-science.org/communityresources/

Data updated yearly: *Iowa Department of Human Services; Wikipedia of Iowa colleges; Institute of Museum and Library Services, Public Libraries Survey; MyCountyParks.com; USGS Geographic Names Information System; Iowa Dept of Education; Iowa Workforce Development*

Community resources include childcare providers, colleges, libraries, parks, places of worship, K-12 schools, and workforce development centers. To collect this data, we used a variety of public resources, including government agencies and recovery websites. Our collection of community resources is not necessarily exhaustive, but represents the data accessed following the advice of substance use experts and researchers. This data was acquired through a variety of means, including simple downloads, manual data entry, computer reading of PDF files, and scraping websites. See the table below for the community resources data sources.

Table 3. *Community Resource Locator Tool Data Sources (Downloaded Sept 2020-April 2021)*

Resource	Data Source	Website Link
Childcare Providers	Iowa Department of Human Services	http://ccmis.dhs.state.ia.us/ClientPortal/ProviderLocator.aspx
Colleges	Wikipedia list of Iowa colleges	https://en.wikipedia.org/wiki/List_of_colleges_and_universities_in_Iowa
Public Libraries	Institute of Museum and Library Services	https://www.imls.gov/research-evaluation/data-collection/public-libraries-survey
Parks	MyCountyParks.com	https://www.mycountyparks.com/County/Default.aspx
Places of Worship	USGS Geographic Names Information System	https://data.iowa.gov/Physical-Geography/Iowa-Church-Buildings/juvk-dad9
K-12 Schools	Iowa Department of Education	Public Schools: https://educateiowa.gov/documents/directories/2020/09/2020-21-iowa-public-school-building-directory Private Schools: https://educateiowa.gov/documents/directories/2020/09/2020-21-iowa-non-public-school-building-directory
Workforce Development Centers	Iowa Workforce Development	https://www.iowaworkforcedevelopment.gov/contact

Substance Use Vulnerability Index

Data Tool: Substance Use Vulnerability Index

Data: *Treatment Episode Data Set- Admission and Discharge (TEDS), 2000-2018*
                        National Survey on Drug Use and Health data (NSDUH), 2015-2019
                        U.S. Census Bureau American Community 5-year Estimates (ACS), 2015-2019

Geographic 'hot spots' of people at risk for substance use disorder were first predicted based on models of administrative data from Treatment Episode Data on admissions (TEDS) and the National Survey of Drug Use and Health (NSDUH) data that assessed significant relationships between key substances and socio-demographic characteristics known to affect health equity and substance use vulnerability (Tables 5-6 results below). Then, the significant predictions of risk for each substance were overlaid with Census Bureau's American Community Survey 5-year estimates of these population characteristics to provide a visual representation of places with especially high concentrations of people with at-risk characteristics. The Census characteristics described in Table 4 below are reported in Figures 5-8.

Table 4. *Substance Use Risk Index using U.S. Census Bureau American Community 5-year Estimates (2015-19)*

	Census Table	Description
Age	B06001	Data table includes population by age categories.
Sex	B01001	Data table includes population by sex.
Race	B03002	Data table includes primary race, by ethnicity.
Education	B15002	Data table includes educational attainment level for population 25+, by sex.
Poverty Status	S1701_C01	Data table includes poverty status by age bracket and for different income levels.
Employment	B23006	Data table includes employment status, by educational attainment level.
Marital Status	B12001	Data table includes marital status by sex.
Parental Status	B09002	Data table includes parental and childcare status.
Pop Density	B06001	Data table includes population (see above, also Sex).

Note: Data was collected using the Census API a and R tidycensus package.
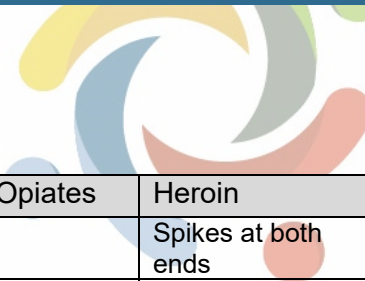
Table 5. *Substance Use Risk Index using TEDS Admission Data*

	Alcohol	Cannabis	Meth	Cocaine	Other Opiates	Heroin	Benzos
Age	Older, >35	Young, <35, <25	Middle age	>45	<25	Spikes at both ends	<25
Sex	Male	Male	Female			Male	Female
Race	Black, Hispanic	Black	White	Non-white	Asian, white	Non-white	White
Education		No college	No college	Some college	Some college	Some college	Some college
Poverty	Public Assistance	Public Assistance		Retired/Disabled	Wages/Salary, Retired/Disabled	Wages/Salary, Retired/Disabled	
Employment	Employed	Part time	Unemployed	Employed	Unemployed		Part time
Marital Status			Separated, Divorced, Widowed	Single	Married	Single	
Pop Density	Rural, Micro	Rural, Micro	Micro	Metro	Metro	Metro	Metro, Micro

Note: Empty cell indicates that no categories showed significantly increased risk.

Table 6. *Substance Use Risk Index using NSDUH Data*

	Alcohol	Cannabis	Meth	Cocaine	Other Opiates	Heroin	Benzos
Age	26-34	Young, <35, <25	Middle age	18-34	<50	26-49	18-34
Sex	Male	Male	Male	Male	Male	Male	Male
Race	White	White, Native American	White, Native American	White, Native American	White, Native American	White	White
Education	College	Some college, maybe	No college		No college	No college	
Income	>75,000	<20,000	<40,000	<20,000	<40,000	<20,000	
Employment	Employed	Unemployed	Unemployed	Unemployed	Unemployed	Unemployed	Unemployed
Marital Status	Single, separated	Single	Separated, Divorced	Single	Single	Single	Single
Pop Density	Metro	Metro	Non-metro	Metro	Metro	Metro	Metro

Note: Empty cell indicates that no categories showed significantly increased risk.

Social Determinants of Health Index

Data tool: Social Determinants of Health Index

Data: *U.S. Census Bureau American Community 5-year Estimates (ACS), 2015-2019*

The Social Determinants of Health Index was developed to promote health equity through providing a better understanding of the environments that create and ameliorate the multifactorial risk factors of substance misuse on priority populations. All data for the Substance Use Vulnerability Index comes from the U.S. Census Bureau American Community Survey 5-year estimates (2015-2019). The 5-year pooled dataset represents 60 months of data that enable more precise multi-year estimates. Because many of Iowa's counties have relatively small populations, the 5-year set of pooled data is the only type of ACS estimates that are available to use across all 99 counties. Following the standards set by *Washington State's Social Determinants of Health Website* (ww.doh.wa.gov/DataandStatisticalReports/HealthDataVisualization/ SocialDeterminantsofHealthDashboards/CensusTractSocialDeterminantsofHealth), PSC collected information on the educational attainment level, health insurance coverage, English proficiency, unemployment, and poverty status in each county and then used this information to calculate the average health index for each of Iowa's 99 counties.

Table 7. *Substance Use Risk Index using U.S. Census Bureau American Community 5-year Estimates (2015-2019)*

	Census Table	Description
Educational Attainment	S1501	Data table includes educational attainment level for population 25+, by sex.
Health Insurance Coverage	S2701_C05_001	Variable is percent of civilian noninstitutionalized population that is uninsured.
English Proficiency	S1601_C06_001	Variable is percent of population 5+ that speaks English less than very well.
Unemployment, 16+	S2301_C04_001	Variable is percent of population 16+ that is in the labor force, but is unemployed.
Poverty Status	S1701_C01	Data table includes poverty status by age bracket and for different income levels.

Note: Data was collected using the Census API and R tidycensus package.

APPENDIX 2: Peer Support Contacts in Your Area

Table 8. *Spirit Lake Peer Support Meeting Type, Name of Peer Support Group, Number of Meetings per Week, and Location of Meetings*

Meeting Type	Name	Meetings per week	Meeting Location
AA	As Bill Sees It Discussion Group	1	2100 Zenith Ave, Spirit Lake, IA 51360
AA	Beginners Group	1	1411 Hill Ave, Spirit Lake, IA 51360
AA	Big Book Group	2	702 16th St, Spirit Lake, IA 51360
AA	Brown Bag Group	1	1411 Hill Ave, Spirit Lake, IA 51360
AA	Iowa Great Lakes Women's Group*	1	2323 US-71, Spirit Lake, IA 51360
AA	Iowa Lakes Women's Group	1	2100 Zenith Ave, Spirit Lake, IA 51360
AA	Keep It Simple Group	1	3501 Hill Ave, Spirit Lake, IA 51360
AA	Men's Experience Strength & Hope Group	1	1408 Gary Ave, Spirit Lake, IA 51360
AA	Spirit Lake Beginners Group	1	1411 Hill Ave, Spirit Lake, IA 51360
AA	Twelve and Twelve Group	1	2011 23rd St, Spirit Lake, IA 51360
NA	NA	1	1411 Hill Ave, Spirit Lake, IA 51360

Note: Meeting type abbreviations are as follows: AA = Alcoholics Anonymous; and NA= Narcotics Anonymous.

APPENDIX 3: Recovery Resources in Your Area

Table 9. *Spirit Lake Recovery Resource Type, Name of Business, and Address of Business*

| Resource	Name	Address
Drug Drop Off Location	Dickinson County Sheriff's Office	1802 Hill Ave, Spirit Lake, Iowa 51360
Drug Drop Off Location	Hy-Vee Pharmacy (1628)	1500 18th Street, Spirit Lake, Iowa 51360
Drug Drop Off Location	Lewis Pharmacy - Spirit Lake	2202 17th Street, Spirit Lake, Iowa 51360
Hospital	Lakes Regional Healthcare	2323 Highway 71 South, Spirit Lake, IA 51360
Mental Health Center	Lakes Life Skills	900lake St., Spirit Lake, IA
Peer Support Provider	Plains Area Mental Health Center	710 Lake St., Spirit Lake, IA
SUD and Problem Gambling Treatment Location	Shade of The Tree	900 Lake Street Spirit Lake, 51360
VA Health Center	Spirit Lake VA Community Based Outpatient Clinic (CBOC)	1850 Royal Ave., Spirit Lake, IA 51360

APPENDIX 4: Community Resources in Your Area

Table 10. *Spirit Lake Community Resource Type, Name of Business, and Address of Business*

Resource	Name	Address
Childcare Provider	Sally Kness	2305 Akron Ave, Spirit Lake, IA 51360
Childcare Provider	Joyful Journeys Daycare/Preschool	2300 27th St, Spirit Lake, IA 51360
Childcare Provider	Spirit Lake Y Kids	2901 Hill Ave, Spirit Lake, IA 51360
Childcare Provider	Carousel Preschool and Daycare	904 15th St, Spirit Lake, IA 51360
Childcare Provider	Tammy Werner	2831 Hwy 9/71, Spirit Lake, IA 51360
Childcare Provider	Little Hands Childcare & Preschool Inc-Spirit Lake	713 22nd St, Spirit Lake, IA 51360
Library	Spirit Lake Public Library	702 16th St, Spirit Lake, IA 51360
Park	Ainsworth-Orleans Beach	25040 140th St, Orleans, IA 51360
Park	Iowa Great Lakes Trail	Lincoln Ave & 23rd St, Spirit Lake, IA 51360
Park	Spring Run Shooting Range	272nd Ave, Center Grove, IA 51360
Park	Twin Forks Canoe Access	Co Hwy M38, Iowa
Place of Worship	Saint Albans Episcopal Church	2011 23rd St, Spirit Lake, IA 51360
Place of Worship	Immanuel Lutheran Church	2300 27th St, Spirit Lake, IA 51360
Place of Worship	Spirit Lake United Methodist Church	1812 Gary Ave, Spirit Lake, IA 51360
Place of Worship	Spirit Lake Baptist Church	Spirit Lake, IA 51360
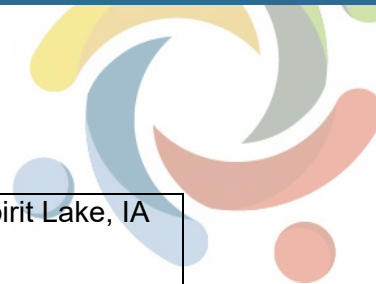
Place of Worship	Christs Fellowship Church	2504 Enterprise Ave, Spirit Lake, IA 51360
Place of Worship	First Presbyterian Church	3501 Hill Ave, Spirit Lake, IA 51360
Place of Worship	New Testament Baptist Church	21st St, Spirit Lake, IA 51360
Place of Worship	Kingdom Hall Jehovahs Witnesses	25171 IA-9, Spirit Lake, IA 51360
Place of Worship	Christian Family Worship Center	2805 Erie Ave, Spirit Lake, IA 51360
Place of Worship	Grace Lutheran Church	801 Hill Ave, Spirit Lake, IA 51360
Place of Worship	Good News Community Church	1010 Julia St, Okoboji, IA 51355
Place of Worship	Evangelical Free Church	2805 Erie Ave, Spirit Lake, IA 51360
Place of Worship	Lakeview Open Bible Church	2504 Enterprise Ave, Spirit Lake, IA 51360
School (K-12)	Spirit Lake High School	2701 Hill Ave, Spirit Lake, IA 51360
School (K-12)	Spirit Lake Middle School	609 28th St, Spirit Lake, IA 51360
School (K-12)	Spirit Lake Elementary School	2901 Hill Ave, Spirit Lake, IA 51360