

Using Data Driven Discovery to Advance Health Policy: A Review of Substance Use and its Correlates in Iowa's 99 Counties

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INDICATORS OF SUBSTANCE USE AND CORRELATES IN IOWA COUNTIES

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Executive Summary

The Iowa Department of Public Health requested an environmental data scan to access the practicality of implementing an Integrated Data System to monitor substance use and its effects on Iowa families. Iowa Department of Public Health was interested in learning the scope of publicly available data, data the department has, and expert opinions regarding the potential implementation and effectiveness of an Integrated Data System. To do this, The Iowa Department of Public Health collaborated with an Iowa State team to learn about successful implementation of Integrated Data Systems, results from the ethnographic assessment of substance use in Iowa, findings from an environmental data scan of publicly available data, and participate in a Data Discovery workshop to consult with Iowa Department of Public Health experts to identify additional data sets and factors that could influence implementation of a substance use surveillance system in Iowa.

The environmental data scan of publicly available data was completed by the team to locate county level data indicators that could be used to monitor substance use across Iowa. To locate these indicators, the team completed a literature review regarding substance use, reviewed results from the ethnographic study, and examined academic articles, websites, and reports related to substance use to identify variables and datasets previously used to monitor substance use. These articles included The Geography of Social Capital in America with The Social Capital Project, Pain in The Nation with Trust for America's Health and Well Being Trust, and Measuring Mobility with US Partnership on Mobility From Poverty, Sandford Social Psychological Answers to Real-world Questions, and The Urban Institute. Additionally, the Iowa State team reviewed publicly available data from The Iowa Department of Public Health such as indicators from Behavioral Risk Factor Surveillance System and Iowa Youth Survey, as well as national data sets including county level variables from United States Census Bureau's American Community Survey and Center for Disease Control and Prevention's Wide-ranging Online Data for Epidemiologic Research. The environmental data scan includes over 250 county level variables that could be used to monitor substance use in Iowa.

A Data Discovery Workshop was facilitated by the Iowa State team on October 29th, 2019 to brainstorm possible data sets, data elements, knowledge domains, and provide feedback regarding potential screening tools and implementation of a substance use surveillance system in Iowa. To do this, the Iowa State team met with Dr. Sallie Keller and her team from The Social Decision Analytics Division with the Biocomplexity Institute with The University of Virginia to learn their methodology behind facilitation of Data Discovery Workshops and its pedagogy. The Iowa State Team adjusted this pedagogy to become Iowa specific and implemented it with participants across the Iowa Department of Public Health. This process aided in identifying over 100 datasets and domains that could be used to develop an Iowa specific substance use surveillance system.

Based on the findings from the ethnographic study, environmental data scan of publicly available data and collaboration during the Data Discovery Workshop, The Iowa State team recommends implementing an Integrated Data System to monitor substance use among Iowa families. A wide range of data sets were identified between the data discovery workshop and environmental data scan of publicly available data that could be used to monitor substance use across the state of Iowa. Additionally, participants of the Data Discovery Workshop identified other departments and agencies that may have data that could also be used to develop a monitoring system. The team recommends developing a substance use surveillance system starting with themes related to social isolation, economic vulnerability, and trauma as these are early indicators of substance use development. These themes can be used to monitor substance use and its correlates to identify geographical hot spots more quickly and develop a more nuanced understanding of the impact of substance use on individual and families.

INDICATORS OF SUBSTANCE USE AND CORRELATES IN IOWA COUNTIES

Data Environment

Lead Facilitator reviewed examples of internal and external factors impacting substance use among Iowa families. These factors included laws, regulations, formal supports, resources, and individual and family characteristics. Workshop facilitators asked participants to discuss additional internal and external factors impacting this topic in small groups. Participants identified that lack of data, stigma around substance use, legislation, and the state's current ability to respond to the issue if scope of substance use is identified as internal and external factors related to substance use among Iowa families.

External and Internal Factors

- Stigma
- Language
- Othering
- Funding
- Lack of Data
- Invisible Topic
- Data sharing legality
- Legislation
- Ability to respond if scope of issue is identified

Workshop facilitators then asked participants what their desired outcomes were if a data monitoring system was established and effectively capturing data. Participants identified desire to increase prevention and intervention measures, improve system operations by reducing inefficiencies, developing performance measures, and sharing data across departments, and reduce stigma and increase social awareness of the effects of substance use.

Desired Outcomes

Prevention

- Prevent treatment
- Intervene earlier
- Develop preventative measures to decrease substance use overall

Improve treatment

- Increase number of people in treatment
- People to feel safe in recovery
- People to feel safe to talk about it
- Increase transitional supports
- Understand holistic contexts
- Improve view of psychological needs
- Target interpersonal violence
- Increase wellbeing
- Problem solve beyond community/family

Improve Accuracy

- Obtain accurate data
- Frame issues accurately
- Share data accurately across departments

Stigma

- Make it accessible/visible
- Increase social awareness
- Reframe reducing risk to promoting resiliency and wellbeing with understanding, cooperation, and protective factors

Improve system

- Identify inefficiencies
- Prioritize services, goals, & budget
- Develop performance measures
- Identify redundancies
- Create strategic plan (measures/goals)
- Strategically align relationships between goals, people, topics, divisions and impacts on each other
- Do dynamic analysis
- Better grants/awards
 - Use in grant application

Data Domain

Workshop facilitators requested participants consider additional data domains to help monitor ‘hot spots’ related to substance use around the state. Lead Facilitator provided examples of domains within substance use and health, social isolation, economic vulnerability, trauma and coping, and family & individual characteristics. Participants brainstormed additional domains in their small groups. Participants added domains related to disability, interpersonal violence, and specified additional treatment domains to consider when evaluating substance use among Iowa families.

Additional Data Domains

Substance Use & Health

- Treatment
 - Type
 - Duration
 - Engagement
 - Fidelity
- Family involvement in treatment
- Health screenings
 - primary care connection
- Criminal justice/courts
- Population health
- Access to insurance
- Wellness Index
 - Happiness
 - Well-being

Social isolation

- Social supports/access to
- Social networks
- Hobbies and interests
- Neighborhood cohesiveness
 - Watches/Definitions
- Community resources
- Social isolation versus connectedness

Economic Vulnerability

- Transportation
- Food security
- Access to insurance
- Access to childcare
- Economic trends

Trauma and Coping

- Stress levels
- Interpersonal violence
- Systemic inequalities
- Structural violence

Family and Individual Characteristics

- Race/ethnicity
- Disability

Other Domains

- Stigma
- Suicidal ideations/attempts
- Resilience-strength based
- Disability
- Education (affordable)
- Access to services (beyond substance use)
- Systemic inequalities/Structural violence (ways systems are set up that cause harm)
- Criminal justice
- Population health
- Criminal justice
- Lawyers
- Points of contact with court, criminal justice, mandated reporting systems, lawyers, attorneys
- Access to services (healthcare/mental health)
- Access to transportation
- Housing practices
- Department of education
- Racism, sexism, ageism, etc.
- Mandated reporting systems
- Community
- Criminal justice
 - Incarceration
 - Juvenile detention
- Community
- Info from pastors/church leaders
- Interaction with Systems- trauma-informed lens for communications between systems; how families touched by each systems/across system
- Environmental Index
 - Water
 - Air
 - Soil

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Data Inventory

A data inventory was developed after facilitators asked groups for their expert recommendations of what datasets they regularly work with or know of that can target surveillance of substance use and its effects on individuals and families. The participants recommended the below dataset and categorized them by domain.

Data Inventory

Substance Use & Health

- Alcohol Industry
- Pharmacy Data (Iowa Prescription Monitoring Program-PMP)
- Iowa Department of Public Health-Central Data Repository (CDR)-Substance Use Disorder treatment data use
- National Survey on Drug Use and Health (NSDUH)
- Iowa Youth Survey (IYS)
- Behavioral Risk Factor Surveillance System (BRFSS)
- Cannabidiol (CBD) Providers
- Primary Care
- Hospital Association
- Medicaid-3rd party insurance-paid claims
- Use of other programs (Title V, WIC, Title X)
- Outpatient/Inpatient Hospital Data (IPOP)
- Managed Care Organizations (MCO)
- National Outcomes Measures (NOMS)
- Treatment Episode Dataset (TED)
- Behavioral Health Barometer Report
- National Household Survey on Drug Abuse
- Inventory of Substance Abuse Treatment Services (I-STATS)
- Iowa Poison Control Center
- Emergency Medical Services Registry
- Center for Disease Control and Prevention (CDC)
- Hospital Records
- 911 calls
- Emergency Room logs
- Substance Abuse Registry
- Substance Use Treatment-release from treatment
- Naloxone Administration data
- Iowa Tracking Program
- Crisis Center Data
- Board of Pharmacy Data

Social Isolation

- Iowa Youth Survey (IYS)
- Iowa Service Management and Reporting tool (I-Smart)-internet based system for substance treatment to provide assessment and treatment
- Youth Risk Behavioral Surveillance System (YRBSS)
- Central Data Repository (CDR)
- Vital Reports
- Your Life IA
- Recovery Iowa
- College/regents Data
- Department of Transportation
- Gambling reports
- Regions Data
- Healthy Iowa
- Treatment Episode Data (TEDS) substance treatment admissions
- Substance Abuse and Mental Health Services Administration Performance Accountability and Reporting System (SPARS)
- Medical Data
- Naloxone Administration
- Emergency room data
- Criminal Justice (Iowa Correctional Offender Network-ICON)
- Interfaith Alliance of Iowa
- American Association of Retired Persons (AARP)
- National Association of Colored People (NAACP)-Chapter Level
- Services and Advocacy for GLBT elders
- One Iowa-LGBTQ
- Web-based Injury Statistics Query and Reporting System (WISQRS)
- Crime Victims Assistance Division (CVAP)
- Community Health Needs Assessment & Health Improvement Planning (CHNA & HIP)
- Homelessness prevention data
- Gambling data
- Integrated Provider Network Claims
- Department of education – suspensions and expulsions (preschool-grade 12)
- Social supports
- Social networks
- Hobbies and interests
- Neighborhood cohesiveness
 - Watches/Definitions

INDICATORS OF SUBSTANCE USE AND CORRELATES IN IOWA COUNTIES

Data Inventory Continued

Economic Vulnerability

- Good will Salvation Army
- Criminal Juvenile Justice Planning (CJJP)
- Department of corrections
- Pregnancy Risk Assessment Monitoring System (PRAMS)
- Homeless Shelter data system
- Community Meal Organizations
- Medical Examiner
- Poison Control Center
- Syringe Exchange
- Iowa Grants
- Access to Recovery (ATR) data outcomes
- Drug courts
- Reports from Medicaid Claims
- Managed Care Organization Data (MCO)
- National Survey of Child Health
- Lutheran Social Services
- Barriers to Prenatal Care Survey
- Emergency rooms
- Lawyers Associations
- Public Housing-Section 8
- Temporary Assistance for Needy Families (TANF)
- Family Investment Program (FIP)
- Family Development and Self Sufficiency (FADSS)
- Department of Human Services (DHS) – Child Care Assistance (CCA)-(# of active CCA claims versus application)
- Low Income Home Energy Assistance Program (LiHEAP)
- Iowa department of Public Health Data Reports-Epidemiological profiles
- Child and Adult Care Food Program
- Women Infant Children (WIC)
- Early Head Start and Head Start family's access
- Datausa.io
- United Way ALICE Report Data
- Gender Equity Department of Human Rights

Trauma and Coping

- Brain Injury Alliance
- Emergency rooms
- American Community Survey (ACS)
- Behavioral Risk Factor Surveillance System (BRFSS)-Adverse Childhood experiences
- National Child Abuse and Neglect Data System (NCANDS)
- Crime Victim Assistance Division (CVAD)
- Iowa Violent Death Reporting System
- National Intimate Partner and Sexual Violence Survey (NISVS)
- Web-based Injury Statistics Query and Reporting System (WISQRS)
- Police/Court records
- Domestic violence shelters
- Iowa Violent Death Reporting System (IVDRS)
- National Organization of Asian Pacific Islanders Ending Sexual Violence (NAPIESV)
- Criminal & Juvenile Justice Planning (CJJP)

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Data Inventory Continued

Family/Individual Demographics

- Vital Records
- Department of Human Services -child welfare
- Mandatory Reporters
- Churches/religious organizations
- Department of Education
- American Community Survey
- Department of Education
- Family Development and Self Sufficiency (FADSS), Maternal, Infant, and Early Childhood Home Visiting (MIECHV), & other Family Support data
- The National Survey on Child and Adolescent Wellbeing
- Healthdata.gov
- Tribal Health System Data
- Bureau of Indian Associations
- Iowa workforce needs assessment
- Iowa workforce development
- Resource and Patient Management System (RPMS)
- Adoption and Foster Care Analysis and Reporting System (AFCARS)
- Child and Adult Care Food Program (CACFP)
- Dependency Count Measures
- Tribal Child Welfare Data
- Bureau of Indian Affairs
- Title V needs assessment
- Department of Education School Climate Survey
- Department of Human Services (DHS) childcare provider data
- Futures without violence (national, healthcare focused)
- The National Latin@ Research Center; A Research Center on Family and Social Change

Your Choice

- Department of transportation
- Justice Data Warehouse
- Conditions for Learning Survey
- Iowa School Health Profiles
- Datausa.io
- Disproportionate Minority Center (DMC) at Department of Human Rights (DHR)
- Pregnancy Risk Assessment Monitoring System (PRAMS)
- Web-based Injury Statistics Query and Reporting system (WISQRS-CDC)
- National Guard Data

Data Screening

Lead Facilitator provided examples of ways to screen data. These examples included considerations regarding cost, geography, accessibility, and representativeness of data sets. Groups brainstormed additional questions below when screening potential data sets for substance use surveillance. Participants considered how geofencing, data purpose, and data ownership impact data set fit in evaluating substance use among Iowa families.

Determines Fit

Data considerations

- Geofencing
- Purpose/intent
 - Is data connected to other topics?
 - Were respondents directed to skip certain questions based on answers to topics?
- Data required vs optional to complete
- Mode of data collection
 - Inclusive/unbiased
 - Administered or collected
- Quality of identifiers
 - Does it include family composition?
- Comprehensive
 - Does it capture the story?

Geography questions

- Cover every county?

Accessibility

- Open or available legal agreement?
- Cost (one time or reoccurring)
- Community ownership/partners

Population

- Age span
- urban vs rural
- Representativeness / Skewedness
- Inclusive-does it include:
 - people with disabilities
 - equal number of men/women
 - different racial/ethnic groups

Time

- How far back does it go, is it current, collected in last 5 years?
- Timeliness & time series

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Data Screening Continued

Finally, groups were asked to pick one data set and assess its usefulness in monitoring substance use and its effects with the below categories. Each group completed one dataset screen. The results can be seen below.

Dataset	<i>Substance Use Treatment-Release from treatment</i>	<i>Treatment Episode Dataset (TEDS)</i>	<i>Medicaid Claims</i>
Geography	Individual.	Address level.	Statewide and cover's every Iowa on Medicaid (50% of Iowans). Tied to where person lives and receives services. Still connected to those that go out of state.
Time Frame	Treatment data (intake/outtake). Longitudinal.	Downloaded every 7 days. Licensed treatment programs input data according to licensure standards. Every state required to do this for funding.	Completed claim data is updated in real time BUT claims can take up to 1 year to complete.
Availability	Unsure.	Available now, being updated currently.	Unclear about who owns data and if it is shareable. The data includes identifiers which make certain data not reportable
Quality	Mandatory AND voluntary. Self-report.	Self-report (clinician asks client) everyone is asked same question. Asked at intake and treatment reviews (multiple time responses). Systematic entry process. Participants are often court-mandated but not all.	
Right Population?	'Spot-on'	Includes demographics, (race, ethnicity) drug of choice, discharge status, anyone who enters treatment services, and juveniles.	This data would not capture all Iowans and would only capture substance use if it was reported or recorded on claims. In most cases, it would be on claim if claim request was linked to Medicaid claim.

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Outcome	Variable
Substance Use	<div> <p><i>Cigarette/E-cigarette</i></p> <ul style="list-style-type: none"> • age of initial routine cigarette use (18+)¹ • age when last smoked cigarettes routinely (18+)² • average cigarettes smoked per day (18+)³ • smoked 100+ cigarettes in life (18+)⁴ • smoked every day/somedays/not at all (18+)⁵ • stopped smoking for 1 day + with intent to quit in past year (18+)⁶ • length of time since last smoke (18+)⁷ • ever used e-cigarette/electronic vaping⁸ • current use and frequency of e-cigarettes/electronic vaping⁹ • number of years smoked tobacco products across lifetime (18+)¹⁰ • chewing tobacco, snuff, snus use (18+)¹¹ • smoking information for students in grades 6, 8, 11: <ul style="list-style-type: none"> - ever smoked/used tobacco (not including electronic cigarette)¹² - how many cigarettes smokes¹³ - stopped smoking for 1 day + with intent to quit in past 12 months¹⁴ - age when smoked entire cigarette for first time¹⁵ - age when first used smokeless tobacco¹⁶ - number of days smoked cigarettes/cigars/smokeless tobacco/with water pipe or hookah/menthol cigarettes in past 30 days¹⁷ - age when first used electronic cigarettes, JUUL, vape pen etc.¹⁸ - number of days used electronic cigarettes in past 30 days¹⁹ <p><i>Marijuana</i></p> <ul style="list-style-type: none"> • primary marijuana use/type in past 30 days (18+)²⁰ • primary reason or marijuana use in past 30 days (18+)²¹ • ever used/used in last 30 days (students in grades 6, 8, 11)^{22 23} • age when first tried (students in grades 6, 8, 11)²⁴ <p><i>Drug Distribution System</i></p> <ul style="list-style-type: none"> • number of oxycodone and hydrocodone pills distributed per person per year by distributor, pharmacies, and manufacturer²⁵ • monthly Iowa liquor Sales by zip code, store, category, volume (liters & gallons), cost, and retail value²⁶ • drugs labs by county²⁷ • Iowa liquor stores²⁸ • Iowa liquor products²⁹ </div> <div> <p><i>Alcohol</i></p> <ul style="list-style-type: none"> • number of days alcoholic drinks consumed in past month/week (18+)³⁰ • number of alcoholic drinks consumed in past 30 days (18+)³¹ • times men drank 5+drinks/women drank 4+ drinks in past 30 days (18+)³² • highest number of days in past 30 days (18+)³³ • times driven when had too much to drink during past 30 days (18+)³⁴ • alcohol information for students in grades 6, 8, 11: <ul style="list-style-type: none"> - age first drank alcohol³⁵ - had at least 1 alcoholic drink in past 30 days³⁶ (beer/other alcohol)^{37 38} - number of days had 5+ drinks³⁹ - source of alcohol⁴⁰ <p><i>Drug Use Among Students in Grades 6, 8, 11</i></p> <ul style="list-style-type: none"> • ever driven vehicle after using alcohol/drugs⁴¹ • days sniffed glue, spray, or gases to get high in past 30 days⁴² • days used over the counter medicine different than prescribed or not prescribed in past 30 days^{43 44} • days taken steroid pills/shots without a doctor's prescription in past 30 days⁴⁵ • days used cocaine in past 30 days⁴⁶ • days used methamphetamine in past 30 days⁴⁷ • days used amphetamines (not including methamphetamine) in past 30 days⁴⁸ • days used illicit or prescription opioid in past 30 days⁴⁹ <p><i>Drinking and Driving</i></p> <ul style="list-style-type: none"> • Operating While Intoxicated (OWI) driver's license revocations⁵⁰ <p><i>Substance Related Mortality</i></p> <ul style="list-style-type: none"> • alcohol-impaired driving accidents by blood alcohol content⁵¹ • mortality rates related to substance use⁵² <p><i>Substance Related Crime</i></p> <ul style="list-style-type: none"> • drug/narcotic violations and drug equipment violations⁵³ • type of drug of offense⁵⁴ </div>

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Indicator	Variable
Health	<p><i>General Mental Health (18+)</i></p> <ul style="list-style-type: none"> • days of poor mental health in past month (18+)⁵⁵ • days poor mental/physical health prevented daily activities in past month (18+)⁵⁶ • ever told had a depressive disorder (18+)⁵⁷ • able to get help when you need it (18+)⁵⁸ • difficulty concentrating/remembering/making decisions due to physical, mental, or emotional condition (18+)⁵⁹ • experienced confusion/memory loss happening more often or getting worse in past year (18+)⁶⁰ • given up on chores/activities due to confusion/memory loss in past year (18+)⁶¹ • need day-to-day assistance to help with chores/activities due to confusion/memory loss (18+)⁶² • confusion/memory loss interfere with work, volunteer, or social activities in past year (18+)⁶³ • discussed confusion/memory loss with health care professional (18+)⁶⁴ <p><i>General Physical Health (18+)⁶⁵</i></p> <ul style="list-style-type: none"> • disease cases/outbreak by year/county⁶⁶ • number of poor physical health days in past month (18+)⁶⁷ • adults with fair/poor health (%) (18+)⁶⁸ • age-adjusted premature mortality (death before 75)⁶⁹ • deaths of despair mortality (drugs/alcohol/suicide)⁷⁰ • adult obesity (%) (20+)⁷¹ • adult smokers (%) (18+)⁷² • babies born low-birth weight (%) ⁷³ • number of days poor mental/physical health prevented daily activities in past month (18+)⁷⁴ • self-report of weight w/o shoes (lbs & kilos) (18+)⁷⁵ • self-report height w/o shoes (ft, in, m, cm) (18+)⁷⁶ • pregnancy status⁷⁷ • have cough most days during past 3 months (18+)⁷⁸ • cough phlegm/mucus most days in past 3 months (18+)⁷⁹ • shortness of breath when hurrying on level ground/walking up slight hill/stairs (18+)⁸⁰ • breathing test to diagnose breathing problem (18+)⁸¹ • number of permanent teeth removes (18+)⁸² • deaf or serious difficulty hearing⁸³ • blind or difficulty seeing with glasses⁸⁴ • serious difficulty walking/climbing stairs⁸⁵ • difficulty dressing/bathing⁸⁶ • difficulty doing errands alone like shopping/visiting doctor due to physical, mental, or emotional condition⁸⁷ • times fell in past 12 months (18+)⁸⁸ • fall cause injury/how many falls caused injury that limited daily activities for at least 1 day⁸⁹ <p><i>High Risk Situation</i></p> <ul style="list-style-type: none"> • participated in at least one high risk situation in past year including injected drug not prescribed to you, treated for sexually transmitted disease, or given/received money or drugs in exchange for sex⁹⁰ <p><i>Health Care Barriers</i></p> <ul style="list-style-type: none"> • unable to see doctor due to cost in past year (18+)⁹¹ • reasons for medical care delay (other than cost) in past year (18+)⁹² • not take medicine due to cost in past year (18+)⁹³ • currently have health care bills (18+)⁹⁴ • adults without health insurance (%) ⁹⁵ <p><i>Provider Information</i></p> <ul style="list-style-type: none"> • number of health care professionals see⁹⁶ • one or more health care providers (18+)⁹⁷ • times seen by doctor, nurse, health care professional in past year (18+)⁹⁸ • satisfaction with health care received (18+)⁹⁹ • length of time since last routine checkup (18+)¹⁰⁰ • last visited dentist/dental clinic (18+)¹⁰¹ <p><i>Sleep</i></p> <ul style="list-style-type: none"> • number of days trouble sleeping in last two weeks (18+)¹⁰² • number of days unintentionally fall asleep during day in last two weeks (18+)¹⁰³ • average hours of sleep in 24 hours (18+)¹⁰⁴ • ever told snore loudly (18+)¹⁰⁵ • anyone ever observed you to stop breathing during sleep (18+)¹⁰⁶ <p><i>Caregiver Status</i></p> <ul style="list-style-type: none"> • provide regular care/assistance to friend/family with health problem/disability in past 30 days¹⁰⁷ • relationship to person giving care¹⁰⁸ • length of time provided care¹⁰⁹ • average hours/week providing care/assistance¹¹⁰ • type of health problem, long term illness, disability of person cared for¹¹¹ • manage personal care with medication/feeding/dressing/bathing in past 30 days¹¹² • manage household tasks such as cleaning/managing meals/meal prepping in past 30 days¹¹³ • supported needed most not getting as caregiver¹¹⁴ • expect to provide care/assistance to friend/family with health problem/disability in next two years¹¹⁵

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Indicator	Variable
Social Isolation	<p><i>Business Capital</i></p> <ul style="list-style-type: none"> •total number of businesses and businesses by type (examples: agriculture, forestry, fishing, and hunting. Mining, quarrying, and oil and gas extraction. Utilities. Construction. Arts, entertainment, and rec etc. (except public administration).¹¹⁶ •active businesses by type (foreign/domestic non-profit, professional, profit etc.)¹¹⁷ •organic farms/businesses¹¹⁸ •active/inactive retail business¹¹⁹ <p><i>Safety Services</i></p> <ul style="list-style-type: none"> •fire department census¹²⁰ •assisted living programs¹²¹ <p><i>Community Support Factors</i></p> <ul style="list-style-type: none"> •education outreach events¹²² •vacant housing¹²³ •teen births per 1,000 (mothers under 20)¹²⁴ •religious congregations and adherence per 1,000¹²⁵ •confidence in institutions sub-index¹²⁶ •average number of close friends reported by adults¹²⁷ <p><i>Time Spent On ... by Youth in Grades 6, 8, and 11</i></p> <ul style="list-style-type: none"> •religious services, programs, activities¹²⁸ •working/volunteering^{129 130} •extracurriculars¹³¹ •homework assignments/reading for fun^{132 133} •on electronic devices¹³⁴ <p><i>Political Engagement</i></p> <ul style="list-style-type: none"> •monthly voter registration¹³⁵ •registered politician/campaigns/entities¹³⁶ <p><i>Support for Aging Populations</i></p> <ul style="list-style-type: none"> •registered retirement facilities¹³⁷ •cemetery care¹³⁸ •aging service consumer profile¹³⁹ <p><i>Social Capital and Social Disorganization</i></p> <ul style="list-style-type: none"> •family and residential instability¹⁴⁰ •teen motherhood (%)¹⁴¹ •non-marital births (%)¹⁴² •number of civic and social associations, business associations, political associations, labor organizations¹⁴³ •number of bowling centers, fitness and recreation centers, golf courses, sports teams¹⁴⁴ •number of non-profit organizations¹⁴⁵ •voter turnout (%)¹⁴⁶ •decennial census mail-back participation rate¹⁴⁷

INDICATORS OF SUBSTANCE USE AND CORRELATES IN IOWA COUNTIES

Indicator	Variable
Economic Vulnerability	<p><i>Income</i></p> <ul style="list-style-type: none"> •past year income below/above poverty level by age¹⁴⁸ •children in poverty¹⁴⁹ •household income (quintile upper limits)¹⁵⁰ •income level (18+)¹⁵¹(16+)¹⁶⁹ <ul style="list-style-type: none"> -% under poverty level by age, gender, and family type¹⁶⁹ -income by family/non-family households¹⁶⁹ -median earnings for workers (male/female)¹⁶⁹ -income with SSI, Food Stamps, retirement, SNAP and cash public assistance¹⁶⁹ •wage by occupation¹⁵² <p><i>Housing</i></p> <ul style="list-style-type: none"> •owner/renter occupied with/without children (0-17)¹⁵³ •own or rent home (18+)¹⁵⁴ •people per home¹⁹⁴ •home value¹⁹⁴ •home mortgage costs¹⁹⁴ •housing cost (with/without mortgage & as % of income)¹⁹⁴ •rent costs (gross & income %) ¹⁹⁴ •did not move within past year¹⁴⁰ •same county move in past year¹⁴⁰ •different county move in same state in past year¹⁴⁰ •different state move¹⁴⁰ •aboard move¹⁴⁰ •home size/age¹⁹⁴ •mean age of housing¹⁵⁵ •occupied/vacant housing units (by owner/renter)¹⁹⁴ •length of stay in home¹⁹⁴ •assessed property values by tax district and year¹⁵⁶ •consolidated property tax rates¹⁵⁷ •severe housing problems¹⁵⁸ <ul style="list-style-type: none"> -homes without plumbing/kitchen facilities¹⁹⁴ -home with 1 persons + per room¹⁹⁴ -housing cost burden greater than 50% of monthly income¹⁹⁴ <p><i>Employment</i></p> <ul style="list-style-type: none"> •labor force type by age and gender¹⁵⁹ •employment status (18+)¹⁶⁰ •employment by occupation, industry, class (16+)¹⁶⁹ •unemployment (16+)¹⁶⁹ •unemployment by month (%)¹⁶¹ •unemployment insurance claims weekly/monthly/annually^{162 163 164*} •unemployment benefit payments/recipients by county monthly/annually^{165 166} •unemployment by industry^{167 *} •unemployment compensation by year^{168*} •children with parents in workforce (0-17)¹⁶⁹
	<p><i>Resources</i></p> <p><i>transportation</i></p> <ul style="list-style-type: none"> •type of work transportation (16+)¹⁶⁹ •household vehicles available¹⁹⁴ •mean travel time to work¹⁶⁹ •Iowa registered transportation fees¹⁷⁰ <p><i>utilities</i></p> <ul style="list-style-type: none"> •home heating fuel types¹⁹⁴ •homes without telephone service¹⁹⁴ •people per home¹⁹⁴ •drinking water violations¹⁷¹ <p><i>technology</i></p> <ul style="list-style-type: none"> •household with/without computing devices¹⁷² •households with/without internet subscriptions¹⁷² •type of internet subscription by household income in past year¹⁷² •households with more than 1 telephone (18+)¹⁷³ •number of household residential phone numbers (18+)¹⁷⁴ •number of personal cell phones (18+)¹⁷⁵ •computer and internet use by household¹⁷⁶ <p><i>health insurance/benefits</i></p> <ul style="list-style-type: none"> •type of healthcare plan (18+)¹⁷⁷ •Medicare coverage (18+)¹⁷⁸ •Medicaid payments & recipients by month/vendor¹⁷⁹ •without health coverage in past year (18+)¹⁸⁰ •time since last healthcare coverage (18+)¹⁸¹ •primary health insurance coverage type (18+)¹⁸² •health insurance pay for all/part of most recent cancer treatment¹⁸³ •ever denied health/life insurance coverage due to cancer¹⁸⁴ •uninsured adults/children by demographics¹⁸⁵ •health insurance coverage in/out of labor force¹²⁴ •received/not received SSI, cash public assistance, food stamps/SNAP by family type and nonfamily type¹⁸⁶ <p><i>Economic System</i></p> <ul style="list-style-type: none"> •state and local government spending per capita^{187*} •business involved in economic development¹⁸⁸ •lottery sales, proceeds, and prizes^{189*} •lottery retailers¹⁹⁰ <p><i>General Economic Well-Being</i></p> <ul style="list-style-type: none"> •median house-hold income¹⁹¹ •poverty (%)¹⁹² •debt in collection (%)¹⁹³ •housing costs exceeding 35% or more¹⁹⁴ •ratio of 80th % household income to 20th % income¹⁹⁵ •children in households receiving means tested benefits (%)¹⁹⁶ •prime-age male labor force participation¹⁹⁷ •teen idleness (%)¹⁹⁸ •housing owner-occupied¹⁹⁹

INDICATORS OF SUBSTANCE USE AND CORRELATES IN IOWA COUNTIES

Indicator	Variable
Trauma & Coping	<p><i>Adult Incarceration & Probation</i></p> <ul style="list-style-type: none"> •prison admissions²⁰⁰ •prison release (includes demographics and offense information)²⁰¹ •prison recidivism 3 years after release^{202 *} •current prison population^{203*} •adults incarcerated (%)²⁰⁴ •probation admissions²⁰⁵ •recidivism of offenders admitted to probation²⁰⁶ <p><i>Juvenile Detention</i></p> <ul style="list-style-type: none"> •juvenile detention secure placements²⁰⁷ •judicial districts²⁰⁸ <p><i>Adverse Childhood Experiences</i></p> <ul style="list-style-type: none"> •number of Adverse Childhood Experiences^{209*} •type/frequency/county of child abuse²¹⁰ •child welfare assessment²¹¹ •confirmed child abuse victims by year, county, age group²¹² •children in foster care²¹³ •domestic abuse by year and county <ul style="list-style-type: none"> -victim characteristics²¹⁴ -offender characteristics²¹⁵ -type of referral²¹⁶ -children present, children harmed²¹⁷ -number of victims by month²¹⁸
	<p><i>Mortality</i></p> <ul style="list-style-type: none"> •infant mortality rate²¹⁹ •homicide fatality²²⁰ •suicide²²¹ •vehicle accidents²²² •accidental deaths due to:²²³ <ul style="list-style-type: none"> -falls²²³ -firearm²²³ -drowning²²³ -accidental exposure to fire, flame, smoke²²³ -poisoning and other²²³ <p><i>Crime</i></p> <ul style="list-style-type: none"> •crime rates by category and county²²⁴ <ul style="list-style-type: none"> -crimes against persons (assault, homicide, rape etc.)²²⁴ -crimes against property (robbery, arson, shoplifting theft etc.)²²⁴ -crimes against society (drug violations, gambling, prostitution etc.)²²⁴ •police officer suspensions/revocations²²⁵ •adult/juvenile arrests ^{226*}

INDICATORS OF SUBSTANCE USE AND CORRELATES IN IOWA COUNTIES

Indicator	Variable
Family	<p><i>Family Characteristics</i></p> <ul style="list-style-type: none"> • married-couple/single-parent families²²⁷ • children living with two/one parent, both parents in labor force, and father/mother only in labor force (children 0-17)²²⁸ • number of grandparents living with grandchildren¹⁷⁶ • number of grandparents responsible for grandchildren (year, responsibilities, gender, and marital status), and school enrollment and educational attainment type¹⁷⁶ • received or not received SSI, cash public assistance, food stamps/SNAP by family type (married couple, male householder no wife present, female householder no husband present) and nonfamily type.²²⁹ <p><i>Child Characteristics</i></p> <ul style="list-style-type: none"> • child classification of native/foreign born living with one/two parents native/foreign born (children<18)²³⁰ • children living with married couples, male householder without wife present, and female householder without husband present categorized by age group (children<18).²³¹ • children's ages, race/ethnicity, relationship to householder, nativity, presence of other adults in home, school enrollment, disability status, median family income (past year), receiving public assistance (past year), poverty status (past year), living in homes owner/renter occupied²³² • gender of child in household²³³ • relationship to child in household²³⁴ • child asthma^{235 236} <p><i>Household Characteristics</i></p> <ul style="list-style-type: none"> • family, male householder no wife present family, female householder no husband present family with and without children under 18.²³⁷ • householders living with biological children, adopted children, stepchildren, grandchildren, other relatives, foster children, or unrelated children (children <18)²³⁸ • adults living in household (18+)^{239 240} • adult men living in household (18+)²⁴¹ • adult women living in household (18+)²⁴² <p><i>Teenage Characteristics (15-19)</i></p> <ul style="list-style-type: none"> • school enrollment²⁴³ • marital status²⁴³ • fertility²⁴³ • household type²⁴³ • in labor force²⁴³ • idleness-not in school or labor force²⁴³ <p><i>Births and Fertility</i></p> <ul style="list-style-type: none"> • age groups (within 15-50), race/ethnicity, nativity, educational attainment, poverty status in past 12 months, labor force status, public assistance income in past 12 months, and births to unmarried women²⁴⁴ • number of women (aged 15-50) who did/did not have birth in past 12 months classified by married/unmarried and educational attainment²⁴⁵ • fertility by total number of births, births to unmarried women, and births by age groups (within 15-50)¹⁷⁸

INDICATORS OF SUBSTANCE USE AND CORRELATES IN IOWA COUNTIES

Indicator	Variable
Demographic	<p><i>General</i></p> <ul style="list-style-type: none"> •urban/rural^{246 247} •metropolitan type²⁴⁸ •gender (18+)²⁴⁹ •birth rate/death rate²⁵⁰ •marital status (18+)²⁵¹ (15+) by gender²⁵² •total population by <ul style="list-style-type: none"> -age -gender -race/ethnicity -voting age population by gender, -total housing units ²⁵³ •veteran population (18+)¹⁷⁶ •disability status by age group¹⁷⁶ •residence change within last year (county, state, country moves) ¹⁴⁰ •ancestry ¹⁷⁶ •ever active duty in US Armed Forces, military, National Guard, armed forces²⁵⁴ <p><i>Households</i></p> <ul style="list-style-type: none"> •median year house built²⁵⁵ •number of children (<18) in household (18+)²⁵⁶ •family household type (with own children under 18, married couple families, married couple families with own children under 18, male householder family no wife present family, male householder family no wife present family with children under 18, female householder family no husband present family, female householder family no husband present family with children under 18, non-family households, nonfamily households living alone, non-family households living along (65+) ¹⁷⁸ •households with one or more people under 18, households with one or more people 65+, average household size, and average family size ¹⁷⁸ •population in household relationship types (householder, spouse, child, other relatives, nonrelatives, unmarried partners) ¹⁷⁸ <p><i>Sexual Orientation and Gender</i></p> <ul style="list-style-type: none"> •sexual orientation/gender identity^{257 258} •transgender²⁵⁹ <p><i>Immigration Status</i></p> <ul style="list-style-type: none"> •place of birth (by state, US, territory, and world-region) ¹⁴⁸ •year foreign born entered US (native and foreign born) ¹⁴⁸ <p><i>Education Status</i></p> <ul style="list-style-type: none"> •education status (18+)²⁶⁰ <ul style="list-style-type: none"> -by gender, age group, and education (18+)²⁶¹ •math & reading proficiency by school year, district, and grade²⁶² •4-year graduation rates by cohort/district²⁶³ <p><i>Language</i></p> <ul style="list-style-type: none"> •language²⁶⁴ •language spoken in home (age 5+)¹⁷⁶ <p><i>Financials</i></p> <ul style="list-style-type: none"> •Iowa Revenue by function/department (human services, education, etc.)^{265 *} •Iowa Budget expenditures^{266*} <p><i>Environment</i></p> <ul style="list-style-type: none"> •land area, water area, housing density, and population density²⁶⁷ •air pollution, water quality, potential housing/health vulnerability²⁶⁸ •mean temperature (Fahrenheit)²⁶⁹ •mean elevation^{270*}

Table Note: Data only available at state level is indicated with asterisk (*)

INDICATORS OF SUBSTANCE USE AND CORRELATES IN IOWA COUNTIES

- ¹ Age first started smoking cigarettes regularly (18+). **Behavioral Risk Factor Surveillance System. Module: 13 Question 1**
- ² Age last smoked cigarettes regularly (18+). **Behavioral Risk Factor Surveillance System. Module: 13 Question 2**
- ³ Average number of cigarettes smoked per day when smoking cigarettes regularly (18+). **Behavioral Risk Factor Surveillance System. Module: 13 Question 3**
- ⁴ Smoked at least 100 cigarettes (5 packs) in entire life (yes, no, don't know/not sure, refused, not asked/missing) (18+). **Behavioral Risk Factor Surveillance System. Core: 9 Question 1**
- ⁵ Smoking days in row (every day, some days, not at all, don't know/not sure, refused, not asked/missing) (18+). **Behavioral Risk Factor Surveillance System. Core: 9 Question 2**
- ⁶ Stopped smoking in past 12 months for one day or more with intent to quit (yes, no, don't know/not sure, refused, not asked/missing) (18+). **Behavioral Risk Factor Surveillance System. Core: 9 Question 3**
- ⁷ Length of time since last smoke including 1-2 puffs (within past month, 3 months, 6 months, year, 5 years, 10 years, 10 years or more, never smoked regularly, don't know/not sure, refused, not asked/missing) (18+). **Behavioral Risk Factor Surveillance System. Core: 9 Question 4**
- ⁸ Ever used e-cigarette or other electronic vaping product, even one time, in entire life (yes, no, don't know/not sure, refused, not asked/missing) (18+). **Behavioral Risk Factor Surveillance System. Module: 6 Question 1**
- ⁹ Current/frequency of e-cigarettes or other electronic vaping (every day, some days, not at all, don't know/not sure, refused, not asked/missing) (18+). **Behavioral Risk Factor Surveillance System. Module: 6 Question 2**
- ¹⁰ Number of years smoked tobacco products cross lifetime (18+). **Behavioral Risk Factor Surveillance System. Module: 10 Question 5**
- ¹¹ Currently use chew, snuff, or snus (everyday, some days, not at all, don't know/not sure, refused, not asked/missing) (18+). **Behavioral Risk Factor Surveillance System. Core: 9 Question 5**
- ¹² Ever smoked tobacco or used tobacco products-not including electronic cigarettes (yes, no). Youth that answered no did not answer remaining questions about tobacco. Data includes information by county, grade, and gender for grades 6, 8, 11. **Iowa Youth Survey. Section B Question B27**
- ¹³ Number of cigarettes smoked in past 30 days of youth that answered they had smoked/used tobacco product. Data includes information by county, grade, and gender for grades 6, 8, 11. **Iowa Youth Survey. Section B Question B28**
- ¹⁴ Number of times tried to quit for one day or longer in past 12 months of youth that answered they had smoked/used tobacco product. Data includes information by county, grade, and gender for grades 6, 8, 11. **Iowa Youth Survey. Section B Question B29**
- ¹⁵ Age when first smoked a whole cigarette of youth that answered they had smoked/used tobacco product. Data includes information by county, grade, and gender for grades 6, 8, 11. **Iowa Youth Survey. Section B Question B30**
- ¹⁶ Age when used smokeless tobacco (chewing tobacco, snuff, plug, dipping tobacco, snus, orbs) of youth that answered they had smoked/used tobacco product. Data includes information by county, grade, and gender for grades 6, 8, 11. **Iowa Youth Survey. Section B Question B31**
- ¹⁷ Number of days smoked cigarettes, cigars, smokeless tobacco, smoked with water pipe/hookah, menthol cigarettes of youth that answered they had smoked/used tobacco product. Data includes information by county, grade, and gender for grades 6, 8, 11. **Iowa Youth Survey. Section B Question B32-B36**
- ¹⁸ Age when used e-cigarette, JUUL, vape-pen, e-hookah, mod-box, or other electronic cigarette for first time of youth that answered they had smoked/used tobacco product. Data includes information by county, grade, and gender for grades 6, 8, 11. **Iowa Youth Survey. Section B Question B37**
- ¹⁹ Number of days used e-cigarettes (vape-pens, JUUL, hookah-pens, e-hookah, e-cigars, e-pipes, personal vaporizers or mods) of youth that answered they had smoked/used tobacco product. Data includes information by county, grade, and gender for grades 6, 8, 11. **Iowa Youth Survey. Section B Question B38**
- ²⁰ Primary type of marijuana use in past 30 days (smoke, eat, drink, vaporize, dab, other, don't know/not sure, refused, not asked/missing) (18+). **Behavioral Risk Factor Surveillance System. Module: 7 Question 2**
- ²¹ Primary reason for marijuana use in past 30 days (medical, non-medical, both, don't know/not sure, refused, not asked/missing) (18+). **Behavioral Risk Factor Surveillance System. Module: 7 Question 3**
- ²² Ever used marijuana (pot, grass, hash, bud, weed). Data includes information by county, grade, and gender for grades 6, 8, 11. **Iowa Youth Survey. Section B Question B39**
- ²³ Used marijuana (pot, grass, hash, bud, weed) in past 30 days). Data includes information by county, grade, and gender for grades 6, 8, 11. **Iowa Youth Survey. Section B Question B40**
- ²⁴ Age when first tried marijuana (pot, grass, hash, bud, weed). Data includes information by county, grade, and gender for grades 6, 8, 11. **Iowa Youth Survey. Section B Question B41**
- ²⁵ Number of oxycodone and hydrocodone pills distributed per person per year by distributor, pharmacies, and manufacturer. **Drug Enforcement Environment Administration Pain Pill Database. Retrieved October 21, 2019, from <https://www.washingtonpost.com/graphics/2019/investigations/dea-pain-pill-database/#download-resources>**
- ²⁶ Monthly Iowa Liquor sales by zip code, store, category, volume (liters & gallons), cost, and retail value. **Iowa Department of Commerce, Alcoholic Beverages Division. Retrieved October 21, 2019, from <https://data.iowa.gov/Sales-Distribution/Iowa-Liquor-Sales/m3tr-qhgy>**
- ²⁷ Drug Labs in United States. Data shows address, city, state, or suspected clandestine laboratory or dumpsite. **National Clandestine Laboratory Register. Retrieved October 21, 2019, from <https://www.dea.gov/scan-lab>**
- ²⁸ Iowa Liquor Stores. Data shows zip code, city, state, address, store name etc. Updated monthly. **Alcoholic Beverages Divisions (commerce). Retrieved October 21, 2019, from <https://data.iowa.gov/Regulation/Iowa-Liquor-Stores/ykb6-ywnd>**
- ²⁹ Iowa Liquor Products. Data shows product item number, category type, description, vendor, vendor name, volume of bottle (ml), bottle cost, bottle retail cost, age proof, number of bottles in pack, etc. **Alcoholic Beverage Division (Commerce). Retrieved October 21, 2019 from <https://data.iowa.gov/Sales-Distribution/Iowa-Liquor-Products/gckp-fe7r>**
- ³⁰ Days per week or month drank at least 1 drink of any alcoholic beverage including beer, wine, malt beverage, or liquor (days per week, days per month, don't know/not sure, no drinks in past 30 days, refused, not asked/missing) (18+). **Behavioral Risk Factor Surveillance System. Core: 10 Question 1**
- ³¹ On days drank alcoholic beverage, how many drinks did you drink in past 30 days-one drink is 12-ounce beer, 5-ounce wine, or drink with one shot of liquor (within past month, 3 months, 6 months, year, 5 years, 10 years, 10 years or more, never smoked regularly, don't know/not sure, refused, not asked/missing) (18+). **Behavioral Risk Factor Surveillance System. Core: 10 Question 2**
- ³² Times men had 5+ drinks and women had 4+ drinks alcoholic beverages in past 30 days (18+). **Behavioral Risk Factor Surveillance System. Core: 10 Question 3**
- ³³ Largest number of drinks had during past 30 days (18+). **Behavioral Risk Factor Surveillance System. Core: 10 Question 4**
- ³⁴ Number of times driven when had too much to drink in past 30 days (18+). **Behavioral Risk Factor Surveillance System. Core: 13 Question 2**
- ³⁵ Age first drank (more than a few sips) of alcohol (beer, wine, liquor). Data includes information by county, grade, and gender, as well as never category for grades 6, 8, 11. Youth answered never did not complete remaining alcohol questions. **Iowa Youth Survey. Section B Question B15**

- ³⁶ Had at least one drink of alcohol in past 30 days (yes, no) of youth that answered they had consumed alcohol. Data includes information by county, grade, and gender for grades 6, 8, 11. Youth answered no did not complete remaining alcohol questions. **Iowa Youth Survey. Section B Question B16**
- ³⁷ Consumed beer in past 30 days (yes, no) of youth that answered they had consumed at least one drink on past 30 days. Data includes information by county, grade, and gender for grades 6, 8, 11. **Iowa Youth Survey. Section B Question B18**
- ³⁸ Consumed other alcohol in past 30 days (yes, no) of youth that answered they had consumed at least one drink on past 30 days. Data includes information by county, grade, and gender for grades 6, 8, 11. **Iowa Youth Survey. Section B Question B19**
- ³⁹ Number of days youth drank more than 5 drinks in past 30 days (yes, no) of youth that answered they had consumed alcohol in past 30 days. Data includes information by county, grade, and gender for grades 6, 8, 11. **Iowa Youth Survey. Section B Question B17**
- ⁴⁰ Source of alcohol in past 30 days (youth answered yes/no for the following categories: youth bought, someone provided money to buy, parent guardian provided, got at a party, friend under 21 provided it, friend over 21 provided it) of youth that answered they had consumed alcohol in past 30 days. Data includes information by county, grade, and gender for grades 6, 8, 11. **Iowa Youth Survey. Section B Question B20-25**
- ⁴¹ Number of times driven motor vehicle after using any amount of alcohol or other drugs of youth that answered they had consumed alcohol in past 30 days. Data includes information by county, grade, and gender for grades 6, 8, 11. **Iowa Youth Survey. Section B Question B26**
- ⁴² Number days sniffed glue, breathed contents of gases/sprays to get high in past 30 days. **Iowa Youth Survey. Section B Question B42**
- ⁴³ Number days used over the counter medications different from directions in past 30 days. **Iowa Youth Survey. Section B Question B43**
- ⁴⁴ Number days used prescription medications that were not prescribed for you by doctor in past 30 days. **Iowa Youth Survey. Section B Question B44**
- ⁴⁵ Number days taken steroid pills or shots without doctor's prescription in past 30 days. **Iowa Youth Survey. Section B Question B45**
- ⁴⁶ Number days used cocaine in past 30 days. **Iowa Youth Survey. Section B Question B46**
- ⁴⁷ Number days used methamphetamines (crank) in past 30 days. **Iowa Youth Survey. Section B Question B47**
- ⁴⁸ Number days used amphetamines other than methamphetamines (like stimulants, uppers, speed) in past 30 days. **Iowa Youth Survey. Section B Question B48**
- ⁴⁹ Number days used illicit opioid (heroin) or used prescription opioid (oxycodone, hydrocodone, oxycontin, codeine, etc) for non-medical reasons in past 30 days. **Iowa Youth Survey. Section B Question B49**
- ⁵⁰ Iowa Operating While Intoxicated (OWI). **Iowa Department of Transportation. Retrieved October 21, 2019, from <https://iowadot.gov/myd/stats/owirevocations.pdf>**
- ⁵¹ Persons killed, by county and highest driver blood alcohol concentration (BAC) in crash. Drivers involved in fatal crashes, by county and blood alcohol concentration of the driver. Drivers killed in fatal crashes, by county and blood alcohol concentration of the driver surviving drivers in fatal crashes, by county and blood alcohol concentration of the driver. **National Highway Traffic Safety Administration. Retrieved October 21, 2019, from <https://www-fars.nhtsa.dot.gov/States/StatesAlcohol.aspx>**
- ⁵² Drug poisonings (overdose) unintentional. Drug poisonings (overdose) suicide. Drug poisonings (overdose) homicide. Drug poisonings (overdose) undetermined. All other drug-induced causes. Alcohol poisonings (overdose). All other alcohol-induced causes. **Mortality Data. CDC WONDER. Drug/Alcohol Induced Causes. D (Drug Induced) D1-D4, D9. A (Alcohol-Induced Causes) A1 & A9.**
- ⁵³ Number of reported group A offenses by reporting agency. Data table includes number of offenses reported by county police offices. Data includes crime type and rate per 100,000 of crime against persons, crime against property, and crime against society for Iowa county. **Federal Bureau of Investigation's Uniform Crime Reporting located with Iowa Department of Public Safety. Table 1**
- ⁵⁴ Number of reported group A offenses by reporting agency. Data table includes number of offenses reported by county police offices. Data includes crime type and rate per 100,000 of crime against persons, crime against property, and crime against society for Iowa county. **Federal Bureau of Investigation's Uniform Crime Reporting located with Iowa Department of Public Safety. Table 14**
- ⁵⁵ Thinking about mental health, including stress, depression, emotional problems, how many days mental health not good in past 30 days (18+). **Behavioral Risk Factor Surveillance System. Core: 2 Question 2**
- ⁵⁶ Number of days poor physical/mental health prevented daily activities in past 30 days (18+). **Behavioral Risk Factor Surveillance System. Core: 2 Question 3**
- ⁵⁷ Ever told had depressive disorder (yes, no, don't know, refused, not asked/missing) (18+). **Behavioral Risk Factor Surveillance System. Core: 6 Question 10**
- ⁵⁸ Frequency able to get help for day-to-day activities when you need it (always, usually, sometimes, rarely, never, don't know/not sure, refused, not asked/missing) (18+). **Behavioral Risk Factor Surveillance System. Module: 4 Question 4**
- ⁵⁹ Serious difficulty concentrating, making decisions, remembering due to physical, mental, or emotional condition (yes, no, don't know, refused, not asked/missing) (18+). **Behavioral Risk Factor Surveillance System. Core: 8 Question 23**
- ⁶⁰ Experienced confusion or memory loss that is getting worse or happening more often in past year (yes, no, don't know/not sure, refused, not asked/missing) (18+). **Behavioral Risk Factor Surveillance System. Module: 4 Question 1**
- ⁶¹ Frequency of experiencing confusion or memory loss that caused you to give up on day-to-day house activities/chores such as cooking, cleaning, taking medication, driving, or paying bills in past year (always, usually, sometimes, rarely, never, don't know/not sure, refused, not asked/missing) (18+). **Behavioral Risk Factor Surveillance System. Module: 4 Question 2**
- ⁶² Frequency of confusion or memory loss that caused you to need assistance with day-to-day house activities/chores such as cooking, cleaning, taking medication, driving, or paying bills in past year (always, usually, sometimes, rarely, never, don't know/not sure, refused, not asked/missing) (18+). **Behavioral Risk Factor Surveillance System. Module: 4 Question 3**
- ⁶³ Frequency of confusion/memory loss interfering with work, volunteer, or engagement in social activities outside home in past 12 months (always, usually, sometimes, rarely, never, don't know/not sure, refused, not asked/missing) (18+). **Behavioral Risk Factor Surveillance System. Module: 4 Question 5**
- ⁶⁴ You or someone else discussed memory loss/confusion with health care professional (yes, no, don't know/not sure, refused, not asked/missing) (18+). **Behavioral Risk Factor Surveillance System. Module: 4 Question 6**
- ⁶⁵ How is general health (excellent, very good, good, fair, poor, don't know/not sure, refused, missing/not asked) (18+). **Behavioral Risk Factor Surveillance System. Core: 1 Question 1**
- ⁶⁶ Disease cases and outbreaks by year and county. Data includes case outbreak count by pathogen by county. **Iowa Department of Public Health, Center for Acute Disease Epidemiology. Retrieved on October 21, 2019 from <https://data.iowa.gov/Health-Statistics/Disease-Cases-and-Outbreaks-by-Year-and-County/45xi-rj9h>**
- ⁶⁷ Thinking about physical health, including illness/injury, how many days physical health not good in past 30 days (18+). **Behavioral Risk Factor Surveillance System. Core: 2 Question 1**
- ⁶⁸ Percentage of adults reporting fair or poor health (age-adjusted). Data calculated from self-report from Behavioral Risk Factor Surveillance System survey (18+). **Behavioral Risk Factor Surveillance System via County Health Rankings & Roadmaps. Retrieved October 21, 2019, from <https://www.countyhealthrankings.org/app/iowa/2019/measure/outcomes/2/data>**

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⁶⁹ Age-adjusted rate of premature death (before 75). Data calculated from National Center for Health Statistics. National Center for Health Statistics via County Health Rankings & Roadmaps. Retrieved October 21, 2019, from <https://www.countyhealthrankings.org/app/iowa/2019/measure/outcomes/1/data>

⁷⁰ Drug poisonings (overdose) unintentional. Drug poisonings (overdose) suicide. Drug poisonings (overdose) homicide. Drug poisonings (overdose) undetermined. All other drug-induced causes. Alcohol poisonings (overdose). All other alcohol-induced causes. Mortality Data. CDC WONDER. Drug/Alcohol Induced Causes. D (Drug Induced) D1-D4, D9. A (Alcohol-Induced Causes) A1 & A9.

⁷¹ Adult obesity. Data includes calculations of body mass index greater or equal to 30kg/m2 from self-report data of height and weight from Behavioral Risk Factor Surveillance System survey (20+). Behavioral Risk Factor Surveillance System via County Health Rankings & Roadmaps. Retrieved October 21, 2019, from <https://www.countyhealthrankings.org/app/iowa/2019/measure/factors/11/data>

⁷² Adult smoking. Data includes measurement of adults who reported smoking every day or most days and who have smoked at least 100 cigarettes in lifetime in Behavioral Risk Factor Surveillance System survey (18+). Behavioral Risk Factor Surveillance System via County Health Rankings & Roadmaps. Retrieved October 21, 2019, from <https://www.countyhealthrankings.org/app/iowa/2019/measure/factors/9/data>

⁷³ Percent of babies with low-birth rate. Data calculated from National Center for Health Statistics. National Center for Health Statistics via County Health Rankings & Roadmaps. Retrieved October 21, 2019, from <https://www.countyhealthrankings.org/app/iowa/2019/measure/outcomes/37/data>

⁷⁴ Number of days poor physical/mental health prevented daily activities in past 30 days (18+). Behavioral Risk Factor Surveillance System. Core: 2 Question 3

⁷⁵ Self-report of weight without shoes (pounds & kilos) (18+). Behavioral Risk Factor Surveillance System. Core: 8 Question 18

⁷⁶ Self-report of height without shoes (feet, inches, meters, centimeters) (18+). Behavioral Risk Factor Surveillance System. Core: 8 Question 19

⁷⁷ Pregnancy status (yes, no, don't know/not sure, refused, not asked/missing) (18+). Behavioral Risk Factor Surveillance System. Core: 8 Question 20

⁷⁸ Cough most days during past 3 months (yes, no, don't know/not sure, refused, not asked/missing) (18+). Behavioral Risk Factor Surveillance System. Module: 10 Question 1

⁷⁹ Cough up phlegm/mucus most days during past 3 months (yes, no, don't know/not sure, refused, not asked/missing) (18+). Behavioral Risk Factor Surveillance System. Module: 10 Question 2

⁸⁰ Shortness of breath when hurrying on level ground or walking up slight hill/stairs (yes, no, don't know/not sure, refused, not asked/missing) (18+). Behavioral Risk Factor Surveillance System. Module: 10 Question 3

⁸¹ Ever given breathing test to diagnoses breathing problem (yes, no, don't know/not sure, refused, not asked/missing) (18+). Behavioral Risk Factor Surveillance System. Module: 10 Question 4

⁸² Number of permanent teeth removed (1-5, 6+, all, don't know, none, refused, not asked/missing) (18+). Behavioral Risk Factor Surveillance System. Core: 7 Question 2

⁸³ Deaf or serious difficulty hearing (yes, no, don't know/not sure, refused, not asked/missing) (18+). Behavioral Risk Factor Surveillance System. Core: 8 Question 21

⁸⁴ Blind or difficulty seeing with glasses (yes, no, don't know/not sure, refused, not asked/missing) (18+). Behavioral Risk Factor Surveillance System. Core: 8 Question 22

⁸⁵ Serious difficulty walking or climbing stairs (yes, no, don't know/not sure, refused, not asked/missing) (18+). Behavioral Risk Factor Surveillance System. Core: 8 Question 24

⁸⁶ Serious difficulty bathing or dressing (yes, no, don't know/not sure, refused, not asked/missing) (18+). Behavioral Risk Factor Surveillance System. Core: 8 Question 25

⁸⁷ Difficulty doing errands along like shopping or doctors visit due to physical, mental, or emotional condition (yes, no, don't know/not sure, refused, not asked/missing) (18+). Behavioral Risk Factor Surveillance System. Core: 8 Question 26

⁸⁸ Times fallen in past 12 months (18+). Behavioral Risk Factor Surveillance System. Core: 12 Question 1

⁸⁹ Fall cause injury. Number of falls that caused injury that limited daily activities for at least 1 day (18+). Behavioral Risk Factor Surveillance System. Core: 12 Question 2

⁹⁰ High risk situations in past year-injected any drug other than prescribed drug, treated for a sexually transmitted disease, had sex in exchange for money or drugs. (yes, no, don't know/not sure, refused, not asked/missing) (18+). Behavioral Risk Factor Surveillance System. Core: 17 Question 3

⁹¹ Unable to see a doctor in past year due to cost (yes, no, don't know, refused, not asked/missing) (18+). Behavioral Risk Factor Surveillance System. Core: 3 Question 3

⁹² Delay in medical care in past year for reasons other than cost (unable to get through on telephone could not get appointment soon enough, had to wait too long to see doctor upon arrival to appointment, doctors office/clinic not open when arrived, did not have transportation, other, don't know/not sure, no-did not delay getting medical care/did not need medical care, refused, not asked/missing) (18+). Behavioral Risk Factor Surveillance System. Module: 3 Question 3

⁹³ Time in past year did not take medicine due to cost, not including over the counter medications (yes, no, don't know/not sure, refused, not asked/missing) (18+). Behavioral Risk Factor Surveillance System. Module: 3 Question 6

⁹⁴ Currently have healthcare bills being paid off time-including when bills are paid with credit cards, personal loans, or bill paying arrangements with hospital/other providers (yes, no, don't know/not sure, refused, not asked/missing) (18+). Behavioral Risk Factor Surveillance System. Module: 3 Question 8

⁹⁵ Selected characteristics of health insurance coverage in the United States. Data table includes insured/uninsured by age group, gender, race/ethnicity, household types, nativity/civilian status, education, disability status, employment status, work experience, household income, and ratio of income to poverty level. American Community Survey, 5-year estimates. American FactFinder Table S2701

⁹⁶ Number of healthcare providers. Behavioral Risk Factor Surveillance System. Core: 2 Question 3

⁹⁷ Have one or more personal doctor or health care provider (yes-only one, more than one, no, don't know, refused, not asked/missing). Behavioral Risk Factor Surveillance System. Core: 3 Question 2

⁹⁸ Number of times seen by nurse, doctor, or mental health professional in past year (18+). Behavioral Risk Factor Surveillance System. Module: 3 Question 5

⁹⁹ Satisfaction with healthcare received (very satisfied, somewhat satisfied, not at all satisfied, don't know/not sure, not applicable, refused, not asked/missing) (18+). Behavioral Risk Factor Surveillance System. Module: 3 Question 7

¹⁰⁰ Length of time since last routine checkup (within 1 year, 2 years, 5 years, 5+, don't know, never, refused, not asked/missing) (18+). Behavioral Risk Factor Surveillance System. Core: 3 Question 4

¹⁰¹ Length of time since last dentist (within 1 year, 2 years, 5 years, don't know, never, refused, not asked/missing) (18+). Behavioral Risk Factor Surveillance System. Core: 7 Question 1

¹⁰² Number of days trouble falling asleep, staying asleep, or sleeping too much in last two weeks (18+). Behavioral Risk Factor Surveillance System. Module: 8 Question 1

¹⁰³ Number of days unintentionally fell asleep during the day in last two weeks (18+). Behavioral Risk Factor Surveillance System. Module: 8 Question 2

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- ¹⁰⁴ Average number of hours of sleep in 24-hour period (18+). **Behavioral Risk Factor Surveillance System. Core: 5 Question 1**
- ¹⁰⁵ Ever told snore loudly (yes, no, don't know/not sure, refused, not asked/missing) (18+). **Behavioral Risk Factor Surveillance System. Module: 8 Question 3**
- ¹⁰⁶ Anyone ever observed you to stop breathing during sleep (yes, no, don't know/not sure, refused, not asked/missing) (18+). **Behavioral Risk Factor Surveillance System. Module: 8 Question 4**
- ¹⁰⁷ Provide regular care/assistance to friend/family member with health problem or disability (yes, no, don't know/not sure, refused, not asked/missing) (18+). **Behavioral Risk Factor Surveillance System. Module: 5 Question 1**
- ¹⁰⁸ Relationship to person providing regular care/assistance (18+). **Behavioral Risk Factor Surveillance System. Module: 5 Question 2**
- ¹⁰⁹ Length of time provided care (less than 30 days, 6 months, 2 years, 5 years, more than 5 years, don't know/not sure, refused, not asked/missing) (18+). **Behavioral Risk Factor Surveillance System. Module: 5 Question 3**
- ¹¹⁰ Average hours per week provided care (up to 8 hours, 9-19 hours, 20-39 hours, 40 hours +, don't know/not sure, refused, not asked/missing) (18+). **Behavioral Risk Factor Surveillance System. Module: 5 Question 4**
- ¹¹¹ Type of major health problem, illness, disability for person cared for (18+). **Behavioral Risk Factor Surveillance System. Module: 5 Question 5**
- ¹¹² Managed personal care such as medications, feeding, dressing, or bathing for person cared for (yes, no, don't know/not sure, refused, not asked/missing) (18+). **Behavioral Risk Factor Surveillance System. Module: 5 Question 6**
- ¹¹³ Managed household tasks such as cleaning, managing money, or preparing meals for person cared for (yes, no, don't know/not sure, refused, not asked/missing) (18+). **Behavioral Risk Factor Surveillance System. Module: 5 Question 7**
- ¹¹⁴ Support needed most that are not getting as caregiver (caregiving classes, help in service access, support groups, individual counseling, respite care, don't need any, don't know/not sure, refused, not asked/missing) (18+). **Behavioral Risk Factor Surveillance System. Module: 5 Question 8**
- ¹¹⁵ Expect to provide care/assistance to friend/family with health problem/disability in next 2 years (yes, no, don't know/not sure, refused, not asked/missing) (18+). **Behavioral Risk Factor Surveillance System. Module: 5 Question 9**
- ¹¹⁶ Geography Area Series: County Business Patterns, 2015 Business patterns. Data table includes total number of businesses and businesses by type (Agriculture, forestry, fishing, and hunting. Mining, quarrying, and oil and gas extraction. Utilities. Construction. Manufacturing. Wholesale trade. Retail trade. Transportation and warehousing. Information. Finance and insurance. Real estate and rental and leasing. Professional, scientific, and technical services. Management of companies and enterprises. Administrative and support and waste management and remediation services. Educational service. Health care and social assistance. Arts, entertainment, and recreation. Accommodation and food services. Other services (except public administration) Industries not classified). **United States Census Bureau Geography Area Series: Business Patterns. American FactFinder CB1500A11**
- ¹¹⁷ Active Iowa Business Entities. **Office of Secretary of State. Retrieved October 21, 2019, from <https://data.iowa.gov/Regulation/Active-Iowa-Business-Entities/ez5t-3qay>**
- ¹¹⁸ Iowa certified organic farms and businesses. Data includes name, address, crop/animal/handling status/date/certification, and operation certificate status and effective date. **US Department of Agriculture, Agricultural Marketing Services, Organic Integrity Database. Retrieved October 21, 2019, from <https://data.iowa.gov/Agriculture/Iowa-Certified-Organic-Farms-and-Businesses/dtpd-s9uh>**
- ¹¹⁹ Retail sales and retail use business registrations. Data includes name, location, tax type, permit information, and city/business codes. **Department of Revenue. Retrieved October 21, 2019, from <https://data.iowa.gov/Taxes-Tax-Credits/Retail-Sales-and-Retail-Use-Business-Registrations/9k3w-7fwi>**
- ¹²⁰ Iowa fire department census. Data includes name, location, type, active type of firefighters, and if department as non-firefighting volunteers and primary emergency management. **National Fire Department Census, U.S. Fire Administration, FEMA. Retrieved October 21, 2019, from <https://data.iowa.gov/Emergency-Management/Iowa-Fire-Department-Census/hv43-6ksq>**
- ¹²¹ Assisted living programs in Iowa. Data includes name, county, address, dementia specific, and occupancy number. **Iowa Department of Inspections and Appeals, Health Facilities Division. Retrieved October 21, 2019 from <https://data.iowa.gov/Health-Providers-Services/Assisted-Living-Programs-in-Iowa/67aj-bdft>**
- ¹²² Iowa Public Television's Educational Services (IPTV) Outreach events. Data includes number and location of events held by IPTV to engage with teachers, students, caregivers, and parents. **Iowa Public Television. Retrieved October 21, 2019, from <https://data.iowa.gov/Community-Adult-Ed/IPTV-Educational-Services-Outreach-Events/tfim-i7dt>**
- ¹²³ Vacant-Current Residence Elsewhere. Data table includes estimates of vacant housing by state and county. **American Community Survey, 5-year estimates. American FactFinder Table B02005**
- ¹²⁴ Teen birth rate for mothers under 20 (per1,000) by county, state, and year. **IA Dept of Public Health. Retrieved October 23, 2019, from <https://tracking.idph.iowa.gov/people-community/Reproduction-and-Birth/Birth-Rate-Mothers-Under-20>**
- ¹²⁵ Total number of congregations and adherence per 1,000. Data set includes congregations and membership at county and state level, as well as religion type. **U.S. Religion Census: Religious Congregations and Membership Study via The Association of Religion Data Archives (ARDA). Retrieved October 23, 2019, from <http://www.thearda.com/Archive/Files/Descriptions/RCMSMT10.asp>**
- ¹²⁶ Report of at least some confidence in corporations, media, and public schools. **Volunteer Supplement to Current Population Survey. Retrieved October 23, 2019, from <https://catalog.data.gov/dataset/current-population-survey-volunteers-supplement/resource/7ed60987-78d9-49de-9b07-edb88dd444d7>**
- ¹²⁷ Average number of close friends reported by adults. **Civic Engagement Supplement to Current Population Survey. Retrieved October 23, 2019, <https://catalog.data.gov/dataset/current-population-survey-civic-engagement-supplement>**
- ¹²⁸ Hours per week spent at religious services, programs, activities, during school year. Data includes information by county, gender, and hours spent per week for children in grades 6, 8, and 11. **Iowa Youth Survey. Section B Question B5**
- ¹²⁹ Hours per week working paid job during school year. Data includes information by county, gender, and hours spent per week for children in grades 6, 8, and 11. **Iowa Youth Survey. Section B Question B1**
- ¹³⁰ Hours per week volunteering by helping others or to improve community during school year. Data includes information by county, gender, and hours spent per week for children in grades 6, 8, and 11. **Iowa Youth Survey. Section B Question B2**
- ¹³¹ Hours per week in extracurricular activities during school year. Data includes information by county, gender, and hours spent per week for children in grades 6, 8, and 11. **Iowa Youth Survey. Section B Question B2**
- ¹³² Hours per week reading just for fun during school year. Data includes information by county, gender, and hours spent per week for children in grades 6, 8, and 11. **Iowa Youth Survey. Section B Question B4**
- ¹³³ Hours per week doing homework/school assignments during school year. Data includes information by county, gender, and hours spent per week for children in grades 6, 8, and 11. **Iowa Youth Survey. Section B Question B6**
- ¹³⁴ Hours per week volunteering using electronic devices not for schoolwork during school year. Data includes information by county, gender, and hours spent per week for iPad, tablet, television, Instagram, Facebook, other social media, YouTube, texting, smart phone use, x box, PlayStation, etc for grades 6, 8, and 11. **Iowa Youth Survey. Section B Question B7**
- ¹³⁵ State of Iowa-Monthly Voter Registration Totals by County. **Iowa Secretary of State, Monthly Voter Registration Totals, Report VR-019. Retrieved October 21, 2019, from <https://data.iowa.gov/Community-Demographics/State-of-Iowa-Monthly-Voter-Registration-Totals-by/cp55-uurs>**

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- ¹³⁶ Registered political candidates, committees, and entities in Iowa (updated monthly and registered with ethics & campaign disclosure board). Iowa Ethics & Campaign Disclosure Board, Active Committee Address Report. Retrieved October 21, 2019, from <https://data.iowa.gov/Campaigns-Elections/Registered-Political-Candidates-Committees-and-Ent/5dtu-swbk>
- ¹³⁷ Registered retirement facilities. Data includes facility name, address, zip code, and location details. Iowa Insurance Division. Retrieved October 21, 2019, from <https://data.iowa.gov/Regulation/Registered-Retirement-Facilities-in-Iowa/cvnj-m3t8>
- ¹³⁸ Iowa perpetual care cemeteries. Data includes cemetery name and location of cemeteries established after 2005 or established before 2005 and designated as perpetual care cemeteries. Perpetual care cemeteries are cemeteries that establish an irrevocable trust fund for facilities and land maintenance, repair. Iowa Insurance Division, Iowa Department of Commerce. Retrieved October 21, 2019, from <https://data.iowa.gov/Regulation/Iowa-Perpetual-Care-Cemeteries/qfme-aw7v>
- ¹³⁹ Iowa aging services consumer count by fiscal year, age group, and service. Iowa Department on Aging and Area Agencies on Aging, Iowa Aging Information System. Retrieved October 21, 2019, from <https://data.iowa.gov/Social-Services/Iowa-Aging-Services-Consumer-Counts-by-Fiscal-Year/3qxc-gxc2>
- ¹⁴⁰ Geographical mobility in the past year by age for current residence in the United States. Data table includes type of move by age group within past year across county, state, and country in 4-year increments. American Community Survey, 5-year estimates. American FactFinder Table B07001
- ¹⁴¹ Percent of teen motherhood for mothers under 20 by county, state, and year calculated with teen motherhood birth rate per 1,000 and state birth rate per 1,000. IA Dept of Public Health. Retrieved October 23, 2019, from <https://tracking.idph.iowa.gov/people-community/Reproduction-and-Birth/Birth-Rate-Mothers-Under-20> and <https://tracking.idph.iowa.gov/people-community/Reproduction-and-Birth/Live-Births-and-Deaths>
- ¹⁴² Percent of non-marital births calculated with data from table: fertility. Data table includes women 15-50 with births by race/ethnicity, nativity, educational attainment, poverty status in past 12 months, labor force status, public assistance income in past 12 months, and unmarried births. American Community Survey, 5-year estimates. American FactFinder Table S1301
- ¹⁴³ Number of civic and social associations, business associations, political associations, labor organizations. Penn State Retrieved October 23, 2019, from <https://aese.psu.edu/nercrd/community/social-capital-resources/social-capital-variables-for-2014/social-capital-variables-spreadsheet-for-2014/view>
- ¹⁴⁴ Number of bowling centers, fitness and recreation centers, golf courses, sports teams. Penn State Retrieved October 23, 2019, from <https://aese.psu.edu/nercrd/community/social-capital-resources/social-capital-variables-for-2014/social-capital-variables-spreadsheet-for-2014/view>
- ¹⁴⁵ Exempt organization business master file. Data can be located by state, county, and region. Data table includes name, location, and classification, activity, income, filing, and revenue information. Internal Revenue Service. Retrieved October 23, 2019, from <https://www.irs.gov/charities-non-profits/exempt-organizations-business-master-file-extract-eo-bmf>
- ¹⁴⁶ Voter percent. Percent calculated with average number of votes in the presidential election per citizen age 18+ and average population. Election Administration and Voting Survey U.S. Election Assistance Commission and American Community Survey Decennial Census. Retrieved October 23, 2019 from, <https://www.eac.gov/research-and-data/datasets-codebooks-and-surveys/> and American FactFinder Table DP-1.
- ¹⁴⁷ Mail-back response rates for 2010 census. 2010 census participation rates by county and state. The United States Census Bureau. Retrieved October 23, 2019, from <https://www.census.gov/data/datasets/2010/dec/2010-participation-rates.html>
- ¹⁴⁸ Poverty status in the past 12 months by age. Data table includes income in the past 12 months below poverty level and above poverty level by age. American Community Survey, 5-year estimates. American FactFinder Table B17020
- ¹⁴⁹ Child poverty variable reflects income in past 12 months below poverty level for under 6 years from table: poverty status in the past 12 months by age. Data table includes income in the past 12 months below poverty level and above poverty level by age. American Community Survey, 5-year estimates. American FactFinder Table B17020
- ¹⁵⁰ Household Income Quintile Upper Limits. Data table includes four upper quintiles and lower limit of top 5%. American Community Survey, 5-year estimates. American FactFinder Table B19080
- ¹⁵¹ Income level (18+). Behavioral Risk Factor Surveillance System. Core: 8 Question 17
- ¹⁵² Iowa Wage Data by Occupation. Data includes mean, entry, experienced, median, and percentile wages by occupation in Iowa. Iowa Workforce Development, Labor Market Information. Retrieved on October 21, 2019 from <https://data.iowa.gov/Workforce/Iowa-Wage-Data-by-Occupation/bs34-Subh>
- ¹⁵³ Tenure by families and presence of own children. Data table includes owner/rental information with children by age. American Community Survey, 5-year estimates. American FactFinder Table B25012
- ¹⁵⁴ Own or rent home (own, rent, other, don't know, refused, not asked/missing) (18+). Behavioral Risk Factor Surveillance System. Core: 8 Question 8
- ¹⁵⁵ Median year structure built. Data table indicates median year house structure was built. American Community Survey, 5-year Estimates. American Factfinder Table B25035
- ¹⁵⁶ Iowa Assessed Property Values by tax district and year (updated annually). Data includes property type and assessed value of residential, land, building, commercial, and industrial properties, as well as specifics related to gas, electric, open space, and military exemptions. Iowa Department of Management, Property Valuation System. Retrieved October 23, 2019, from <https://data.iowa.gov/Property-Assessment-Levy/Iowa-Assessed-Property-Values-By-Tax-District-and-/p8sk-8ig7>
- ¹⁵⁷ Consolidated property tax rates in Iowa by tax district and fiscal year. Data includes property tax by property type, location, school district, and tax code. Iowa Department of Management, Local Budget and Finance. Retrieved on October 21, 2019, from <https://data.iowa.gov/Property-Assessment-Levy/Consolidated-Property-Tax-Rates-in-Iowa-by-Tax-Dist/7uts-ky8c>
- ¹⁵⁸ Severe housing variable calculated from table: economic characteristics with variables of homes without plumbing/kitchen facilities, homes with 1.5 persons or more per room, homes with 1 person or less than/equal to 1.5 persons per room and housing cost burden greater than 50%/greater than 30%. American Community Survey, 5-year estimate via Comprehensive Housing Affordability Strategy (CHAS) Table 3
- ¹⁵⁹ Sex by age by employment status for the population 16 years and over. Data table includes share of women/men 16 and over categorized by age group and type of employment (civilian, armed forces, not in labor force) over the previous 12 months. American Community Survey, 5-year estimates. American FactFinder Table B23001
- ¹⁶⁰ Employment status (wage employed, self-employed, out of work >1 year, out of work <1, homemaker, student, retired, unable to work, don't know, refused, not asked/missing) (18+). Behavioral Risk Factor Surveillance System. Core: 8 Question 15
- ¹⁶¹ Percent unemployment rate by month and county. Data also includes number employed, in labor force, or unemployed by county and month, as well as data for seasonally adjusted and not seasonally adjusted data. Iowa Workforce Development. Retrieved October 22, 2019, from <https://www.iowaworkforcedevelopment.gov/local-area-unemployment-statistics>
- ¹⁶² Weekly Iowa unemployment insurance claims. Iowa Workforce Development-Labor Market Information Division. Retrieved October 21, 2019 from <https://data.iowa.gov/Economic-Statistics/Iowa-Unemployment-Insurance-Claims-Weekly-/njph-rx66>
- ¹⁶³ Monthly Iowa unemployment insurance payments claims. Iowa Workforce Development-Labor Market Information Division. Retrieved October 21, 2019 from <https://data.iowa.gov/Economic-Statistics/Iowa-Unemployment-Insurance-Benefit-Payments-and-C/jpje-kkb9>
- ¹⁶⁴ Annual Iowa unemployment insurance payments claims. Iowa Workforce Development-Labor Market Information Division. Retrieved October 21, 2019 from <https://data.iowa.gov/Economic-Statistics/Iowa-Unemployment-Insurance-Benefit-Payments-and-C/rmcch-sifx>

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- ¹⁶⁵ Monthly unemployment insurance payments and recipients by county. Iowa Workforce Development-Labor Market Information Division. Retrieved October 21, 2019 from <https://data.iowa.gov/Economic-Statistics/Iowa-Unemployment-Insurance-Benefit-Payments-and-R/aeyn-twpx>
- ¹⁶⁶ Annual unemployment insurance payments and UI recipients by county. Iowa Workforce Development-Labor Market Information Division. Retrieved October 21, 2019 from <https://data.iowa.gov/Economic-Statistics/Iowa-Unemployment-Insurance-Benefit-Payments-and-U/yhbr-3t8a>
- ¹⁶⁷ Monthly Iowa unemployment insurance benefit payments by industry. Iowa Workforce Development-Labor Market Information Division. Retrieved October 21, 2019 from <https://data.iowa.gov/Economic-Statistics/Iowa-Unemployment-Insurance-Benefit-Payments-by-In/b38f-jgn3>
- ¹⁶⁸ Iowa unemployment compensation fund status-benefits paid by year. Iowa Workforce Development-Labor Market Information Division. Retrieved October 21, 2019 from <https://data.iowa.gov/Workforce/Iowa-Unemployment-Compensation-Fund-Status-Benefit/bbux-m3a4>
- ¹⁶⁹ Selected economic characteristics. Data table includes variables related to age and type of employment, average type and time of work commutes, occupation types, industry types, work class, income and benefit categories, health insurance coverage, and specifics of income related to poverty level. American Community Survey, 5-year estimates. American FactFinder Table DP03
- ¹⁷⁰ Iowa feet summary by year, county, and vehicle type. Data includes registration numbers and annual fees of motor vehicles by year, location, and type. Iowa Department of Transportation. Retrieved October 21, 2019, from <https://data.iowa.gov/Transportation-Operations/Iowa-Fleet-Summary-By-Year-County-And-Vehicle-Type/6rrx-2vwt>
- ¹⁷¹ List of water systems in SDWIS (Safe Drinking Water Information System). Data includes active/inactive water systems, water systems, names, county/city served, water source type, and history of violations and monitoring. U.S. Environmental Protection Agency, Office of Ground Water and Drinking Water. Retrieved on October 22, 2019, from https://enviro.epa.gov/enviro/sdw_query_v3.get_list?wsys_name=&fac_search=fac_beginning&fac_county=&fac_city=&pop_serv=500&pop_serv=3300&pop_serv=10000&pop_serv=100001&sys_status=&pop_serv=&wsys_id=&fac_state=IA&last_fac_name=&page=1&query_results=&total_rows_found=
- ¹⁷² Types of computers and internet subscriptions. Data table includes number of households with one or more types of computing devices (desk or laptop, smartphone, tablet, other portable wireless computer, other compute, no computer), types of internet subscriptions (dial-up, broadband, cellular data plan, broadband such as cable, fiber optics or DSL satellite internet service, and without internet subscription, and type of internet subscription by household income in past 12 months. American Community Survey, 5-year estimates. American FactFinder Table S2801
- ¹⁷³ More than one telephone number, not including lines for cell phone, fax, computer, security system (yes, no, don't know, refused, not asked/missing) (18+). Behavioral Risk Factor Surveillance System. Core: 8 Question
- ¹⁷⁴ Number of residential telephone numbers (18+). Behavioral Risk Factor Surveillance System. Core: 8 Question 12
- ¹⁷⁵ Number of cell phones do you have for personal use (18+). Behavioral Risk Factor Surveillance System. Core: 8 Question 13
- ¹⁷⁶ Selected social characteristics in United States. Data table includes family household type (with own children under 18, married couple families, married couple families with own children under 18, male householder family no wife present family, male householder family no wife present family with children under 18, female householder family no husband present family, female householder family no husband present family with children under 18, non-family households, nonfamily households living alone, non-family households living along 65+), households with one or more people under 18, households with one or more people 65+, average household size, and average family size. Data table also includes population in household relationship types (householder, spouse, child, other relatives, nonrelatives, unmarried partners), marital status (15+) by gender (never married, now married and separated, separated, widowed, and divorced), Fertility by total number of births, births to unmarried women, and births by age groups (within 15-50), number of grandparents living with grandchildren, grandparents responsible for grandchildren (by year of responsibilities, gender, and marital status), and school enrollment and educational attainment type. Data table also includes veteran population (18+), disability status by age group, residence changes within last year (county, state, country moves), place of birth (by state, US, territory, and world-region), year foreign born entered US (native and foreign born), language spoken in home (age 5+), ancestry, and computer and internet use by household (with computer, with broadband internet subscription). American Community Survey, 5-year estimates. American FactFinder Table DP02
- ¹⁷⁷ Have any type of health plan, health insurance, Medicaid, HMO, government plans, Indian Health Insurance, etc (yes, no, don't know, refused, not asked/missing) (18+). Behavioral Risk Factor Surveillance System. Core: 3 Question 1
- ¹⁷⁸ Have Medicare (coverage plan for people 65+ or with disability) (yes, no, don't know/not sure, refused, not asked/missing) (18+). Behavioral Risk Factor Surveillance System. Module: 3 Question 1
- ¹⁷⁹ Iowa Medicaid Payments & Recipients by month/vendor (updated monthly). Data includes payment, provider type, vendor name/number, and client participation in Medicaid reimbursement. Department of Human Services. Retrieved October 21, 2019, from <https://data.iowa.gov/Health-Insurance/Iowa-Medicaid-Payments-Recipients-by-Month-and-Ven/b3t9-awkp>
- ¹⁸⁰ Without healthcare coverage in past year (yes, no, don't know/not sure, refused, not asked/missing) (18+). Behavioral Risk Factor Surveillance System. Module: 3 Question 4
- ¹⁸¹ Length of time since last healthcare coverage (18+). (less than 6 months, 1 year, 3 years, more than 3 years, never, don't know/not sure, refused, not asked/missing) (18+). Behavioral Risk Factor Surveillance System. Module: 3 Question 4.5
- ¹⁸² Primary source for health care coverage (purchased employer/union plan, plan bought by you/family member, Medicare, Medicaid/other state program/, TRICARE, Alaska Native/Indian Health Service/Tribal Health Services, Other, None, Don't know/not sure, refused, not asked/missing) (18+). Behavioral Risk Factor Surveillance System. Module: 3 Question 2
- ¹⁸³ Health insurance cover all or part of most recent cancer diagnosis treatment (yes, no, don't know/not sure, refused, not asked/missing) (18+). Behavioral Risk Factor Surveillance System. Module: 14 Question 9
- ¹⁸⁴ Ever denied health/life insurance due to cancer (yes, no, don't know/not sure, refused, not asked/missing) (18+). Behavioral Risk Factor Surveillance System. Module: 14 Question 10
- ¹⁸⁵ Selected characteristics of health insurance coverage in the United States. Data table includes insured/uninsured by age group, gender, race/ethnicity, household types, nativity/civilian status, education, disability status, employment status, work experience, household income, and ratio of income to poverty level. American Community Survey, 5-year estimates. American FactFinder Table S2701
- ¹⁸⁶ Receipt of supplemental security income (SSI), cash public assistance income, or food stamps/SNAP in the past 12 months by household type for children under 18 years in household. Data table includes family type (married couple, male householder no wife present, female householder no husband present) and nonfamily households that have and have not received SSI, cash public assistance, food stamps/SNAP. American Community Survey, 5-year estimates. American FactFinder Table B09010
- ¹⁸⁷ State and local government finances by level of government and by state. Data includes dollar amounts in thousands of state and local government spending. Data does not include county information. Census Bureau Annual Surveys of State and Local Government Finances. Table 1a Columns CE-CI
- ¹⁸⁸ Economic Development Projects-Closed. Businesses that received Iowa Economic Development Association funding for business growth. Data includes company name, county, city, status, type of program, funding agreement, award date, jobs projected/created/retained, and wage information for closed projects. Iowa Economic Development Authority, Contract Compliance Team. Retrieved October 22, 2019 from <https://data.iowa.gov/Business-Development/Economic-Development-Projects-Closed/njr7-k88p>

- ¹⁸⁹ Lottery sales, proceeds, and prizes. Data includes information by year. **Iowa Lottery Authority.** Retrieved October 21, 2019, from <https://data.iowa.gov/Sales-Distribution/Lottery-Sales-Proceeds-and-Prizes/b9m5-qwb9>
- ¹⁹⁰ Iowa Lottery Retailer List. Location and name of Iowa lottery retailers. **Iowa Lottery Authority.** Retrieved October 21, 2019, from <https://data.iowa.gov/Sales-Distribution/Iowa-Lottery-Retailer-List/pcyt-8zzk>
- ¹⁹¹ Selected economic characteristics. Data table includes variables related to age and type of employment, average type and time of work commutes, occupation types, industry types, work class, income and benefit categories, health insurance coverage, and specifics of income related to poverty level. **American Community Survey, 5-year estimates. American FactFinder Table DP03**
- ¹⁹² Variable calculated by share of families and people whose income past 12 months is below the poverty level from table: selected economic characteristics. Data table includes variables related to age and type of employment, average type and time of work commutes, occupation types, industry types, work class, income and benefit categories, health insurance coverage, and specifics of income related to poverty level. **American Community Survey, 5-year estimates. American FactFinder Table DP03**
- ¹⁹³ Debt in America. Data set includes type of debt by state, county, year, and debt type. Debt in collections variable calculated as share of people with a credit bureau record who have any debt in collections. **Urban Institute.** Retrieved October 24, 2019, from https://apps.urban.org/features/debt-interactive-map/?type=medical&variable=perc_debt_collect
- ¹⁹⁴ Selected housing characteristics. Data table includes variables related to housing occupancy, units and year built of structures, rooms, bedrooms, own vs rental, years in household, vehicles available, house heating fuel type, housing without plumbing, kitchen, or telephone services, occupants per room, home value, mortgage status, monthly owner costs, gross rent, and gross rent as percentage of income. **American Community Survey, 5-year estimates. American FactFinder Table DP04**
- ¹⁹⁵ Household Income Quintile Upper Limits. Data table includes four upper quintiles and lower limit of top 5%. **American Community Survey, 5-year estimates. American FactFinder Table B19080**
- ¹⁹⁶ Variable calculated by share of children under 18 in households receiving cash public assistance, SSI, or SNAP from table: children characteristics. Data table includes age, race, nativity, relationship to householder, presence of other adults in home, disability status, school enrollment, median family income, poverty status, housing tenure, and share of children under 18 in households receiving cash public assistance, SSI, or SNAP. **American Community Survey, 5-year estimates. American FactFinder Table S0901**
- ¹⁹⁷ Variable calculated by looking at share of men 25-54 who worked at some point over the previous 12 months from table: sex by age by employment status for the population 16 years and over data table. Data table includes share of women/men 16 and over categorized by age group and type of employment (civilian, armed forces, not in labor force) over the previous 12 months. **American Community Survey, 5-year estimates. American FactFinder Table B23001**
- ¹⁹⁸ Teen idleness variable calculated by share of teens 16-19 not in school & not in labor force pulled from table: characteristics of teenagers 15-19 years old. Data table includes population 15-19, school enrollment, marital status and fertility, household type, labor force, and idleness (not enrolled in school or labor force). **American Community Survey, 5-year estimates. American FactFinder Table S0902**
- ¹⁹⁹ Selected housing characteristics. Data table includes variables related to housing occupancy, units and year built of structures, rooms, bedrooms, own vs rental, years in household, vehicles available, house heating fuel type, housing without plumbing, kitchen, or telephone services, occupants per room, home value, mortgage status, monthly owner costs, gross rent, and gross rent as percentage of income. **American Community Survey, 5-year estimates. American FactFinder Table DP04**
- ²⁰⁰ Iowa Prison Admissions. Monthly data reflects race, gender, offense code/type, institution name, date of admission, date of release, location, and recidivism. **Iowa Department of Corrections.** Retrieved October 22, 2019, from <https://data.iowa.gov/Correctional-System/Iowa-Prison-Admissions/w4ib-vabz>
- ²⁰¹ Offenders released from Iowa prisons. Data includes gender, race, age, date of release, offense type/reason for reason, name of prison, number of months served, and location of crime. **Iowa Department of Corrections.** Retrieved October 22, 2019, from <https://data.iowa.gov/Correctional-System/Offenders-Released-from-Iowa-Prisons/runv-jsix>
- ²⁰² 3-year recidivism for Offenders released from Prison in Iowa. Data includes gender, race, age, date of release, original/return offense type/reason for reason, recidivism type, if recidivism occurred/did not occur, days between release/return, and days returned to prison. **Iowa Department of Corrections.** Retrieved October 22, 2019, from <https://data.iowa.gov/Correctional-System/3-Year-Recidivism-for-Offenders-Released-from-Pris/mw8r-vqy4>
- ²⁰³ Current Iowa Correctional System Prison Population. Data includes gender, race, education, age, offense code/type, months served, supervision status, prison start type, and admission type. **Iowa Department of Correction.** Retrieved October 22, 2019, from <https://data.iowa.gov/Correctional-System/Current-Iowa-Correctional-System-Prison-Population/xbcv-c6t2>
- ²⁰⁴ Rate of persons supervised by U.S. adult correctional system by correctional status. **Bureau of Justice Statistics Correctional populations in the United States. Table cpus16t04**
- ²⁰⁵ Iowa Probation Admissions. Data includes age, gender, race, offense type, supervised jurisdiction, and year/date of admission. **Iowa Department of corrections.** Retrieved October 22, 2019, from <https://data.iowa.gov/Correctional-System/Iowa-Probation-Admissions/4fjs-pxmt>
- ²⁰⁶ 3-year recidivism for offenders admitted to probation in Iowa. Data includes year, original/recent offence type, supervised jurisdiction, and if recidivism occurred/did not occur. **Iowa Department of Corrections.** Retrieved October 22, 2019, from <https://data.iowa.gov/Correctional-System/3-Year-Recidivism-for-Offenders-Admitted-to-Probat/e9zy-uibf>
- ²⁰⁷ Iowa juvenile detention secure placements. Data includes age of admission, gender, race, county, month/year of release, charge type, facility name, and days held. **Iowa Department of Human Rights, Iowa Justice Data Warehouse, Juvenile Detention Center Data.** Retrieved October 22, 2019, from <https://data.iowa.gov/Juvenile-Detention/Iowa-Juvenile-Detention-Secure-Placements/3kck-gq3y>
- ²⁰⁸ Iowa Judicial Districts. Data includes judicial district name, counties served, and name of community-based correction services. **Iowa Department of corrections.** Retrieved October 22, 2019 from <https://data.iowa.gov/Correctional-System/Iowa-Judicial-Districts/i76m-6bsm>
- ²⁰⁹ Share of children (0-17) whose parents report they experienced difficulty getting by on family income, parent/guardian divorce/separation, death of parent/guardian, parent/guardian time in jail, witness/heard parents/adults slap, hit, kick punch each other in the home, victim of violence/witnessed neighborhood violence, lived with anyone mentally ill, suicidal, or severely depressed, lived with anyone with problem with alcohol or drugs, and treated/judged unfairly due to race/ethnicity. **National Survey of Children's Health, Indicator 6.13**
- ²¹⁰ Iowa child abuse occurrences by year, county, and type of abuse. Data includes abuse type, number of occurrences, county, judicial district, and department of human services area. **Iowa Department of Human Services.** Retrieved October 22, 2019, from <https://data.iowa.gov/Child-Adult-Welfare/Iowa-Child-Abuse-Occurrences-by-Year-County-and-Ty/mh9d-fias>
- ²¹¹ Iowa child welfare assessments by disposition, county, and year. Data includes county, year, Department of Human Service-service area, judicial district, number of child welfare reports, unique children, and duplicate children in child welfare assessments. **Department of Human Services.** Retrieved October 22, 2019, from <https://data.iowa.gov/Child-Adult-Welfare/Iowa-Child-Welfare-Assessments-by-Disposition-Coun/er5e-kmgq>
- ²¹² Iowa Child Abuse Victims by year, county, and age group. Data includes judicial district, age group, and victim information for children assessed for abuse and were confirmed/founded as incidence of abuse. **Department of Human Services.** Retrieved October 22, 2019, from <https://data.iowa.gov/Child-Adult-Welfare/Iowa-Child-Abuse-Victims-by-Year-County-and-Age-Gr/n84y-ufum>

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- ²¹³ *Children in foster care 2016-2018.* Iowa Department of Human Services, Division of Results Based Accountability. Bureau of Research and Statistics. Retrieved October 23, 2019, from <https://www.iowadatacenter.org/data/dhs/foster-care>
- ²¹⁴ *Domestic abuse victims.* Data tables include gender, race, ethnicity, and age group by year and county. Federal Bureau of Investigation's Uniform Crime Reporting located with Iowa Department of Public Safety. Table 1da1
- ²¹⁵ *Domestic abuse offenders.* Data tables include gender, race, ethnicity, and age group by year and county. Federal Bureau of Investigation's Uniform Crime Reporting located with Iowa Department of Public Safety. Table 1da2
- ²¹⁶ *Domestic abuse incident characteristics.* Data tables includes whether incident required referral such as legal referral, shelter referral, medical referral, counseling referral, financial assistance referral, or other referral, as well as if children were present harmed, and if report was made by victim, other, or unknown. Federal Bureau of Investigation's Uniform Crime Reporting located with Iowa Department of Public Safety. Table 1da3
- ²¹⁷ *Domestic abuse incident characteristics.* Data tables includes whether incident required referral such as legal referral, shelter referral, medical referral, counseling referral, financial assistance referral, or other referral, as well as if children were present harmed, and if report was made by victim, other, or unknown. Federal Bureau of Investigation's Uniform Crime Reporting located with Iowa Department of Public Safety. Table 1da3
- ²¹⁸ *Final domestic abuse incident summary by county.* Data tables include number of victims per month, year, and county. Federal Bureau of Investigation's Uniform Crime Reporting located with Iowa Department of Public Safety. Table 2da
- ²¹⁹ *Infant mortality rate (per 1,000).* Iowa Department of Public Health. Retrieved October 23, 2019, from <https://tracking.idph.iowa.gov/People-Community/Reproduction-and-Birth/Infant-Mortality/Infant-Mortality-Data>
- ²²⁰ *Mortality by homicide assault. By firearm or other.* Mortality Data. CDC WONDER. ICD-10 113 Cause List. *U01-*U02, X85-Y09, Y87.1
- ²²¹ *Mortality by intentional suicide. By firearm or other.* Mortality Data. CDC WONDER. ICD-10 113 Cause List. U03, X60-X84, Y87.0
- ²²² *Vehicle mortality by motor vehicles, water, air, space, and other land vehicles.* Mortality Data. CDC WONDER. ICD-10 113 Cause List. V01-V99, Y85
- ²²³ *Accidental mortality by accidental discharge of firearm, fall, drowning, exposure to smoke, fire, flame, poisoning, or other.* Mortality Data. CDC WONDER. ICD-10 113 Cause List. W00-X59, Y86
- ²²⁴ *Number of reported group A offenses by reporting agency.* Data table includes number of offenses reported by county police offices. Data includes crime type and rate per 100,000 of crime against persons, crime against property, and crime against society for Iowa county. Federal Bureau of Investigation's Uniform Crime Reporting located with Iowa Department of Public Safety. Table 1
- ²²⁵ *Peace officers decertified by the Iowa Law Enforcement Academy by calendar year.* Data includes number of officers decertified or suspended. Iowa law enforcement academy. Retrieved October 22, 2019, from <https://data.iowa.gov/Law-Enforcement/Peace-officers-decertified-by-the-Iowa-Law-Enforce/m6hg-dubw>
- ²²⁶ *Arrestee age category by arrest offense.* Total number of arrests by juvenile (under 18) and adult. Federal Bureau of Investigation's Uniform Crime Reporting located with Iowa Department of Public Safety. Table 7a
- ²²⁷ *Subfamily Type.* Data table categorizes families by married couple/single-parent families. American Community Survey, 5-year estimates American FactFinder Table C11013
- ²²⁸ *Age of own children under 18 years in families and subfamilies by living arrangements by employment status of parents.* Data table includes children under 6 or between 6-17 classified as living with two/one parent, both parents in labor force, or father/mother only in labor force. American Community Survey, 5-year estimates. American FactFinder Table B23008
- ²²⁹ *Receipt of supplemental security income (SSI), cash public assistance income, or food stamps/SNAP in the past 12 months by household type for children under 18 years in household.* Data table includes family type (married couple, male householder no wife present, female householder no husband present) and nonfamily households that have and have not received SSI, cash public assistance, food stamps/SNAP. American Community Survey, 5-year estimates. American FactFinder Table B09010
- ²³⁰ *Age and nativity of own children under 18 years in families and subfamilies by number and nativity of parents.* Data table includes children 0-17 by age group, children native/foreign born, living with one/two parents, and one/both parents as native/foreign born. American Community Survey, 5-year estimates. American FactFinder Table B05009
- ²³¹ *Own children under 18 years by family type and age.* Data table includes age groups of children living with married couples, male householder without wife present, and female householder without husband present. American Community Survey, 5-year estimates. American FactFinder Table B09002
- ²³² *Children characteristics.* Data table includes age, race, nativity, relationship to householder, presence of other adults in home, disability status, school enrollment, median family income, poverty status, housing tenure, and share of children under 18 in households receiving cash public assistance, SSI, or SNAP. American Community Survey, 5-year estimates. American FactFinder Table S0901
- ²³³ *Gender of child (boy, girl, refused, not asked/missing) (18+).* Behavioral Risk Factor Surveillance System. Module: 22 Question 2
- ²³⁴ *Relationship type to child in household (parent, grandparent, foster, sibling, other, not related, refused, not asked/missing) (18+).* Behavioral Risk Factor Surveillance System. Module: 22 Question 6
- ²³⁵ *Doctor, nurse, or mental health provider ever said child has asthma (yes, no, don't know/not sure, refused, not asked/missing) (18+).* Behavioral Risk Factor Surveillance System. Module: 23 Question 1
- ²³⁶ *Child still have asthma (yes, no, don't know/not sure, refused, not asked/missing) (18+).* Behavioral Risk Factor Surveillance System. Module: 23 Question 2
- ²³⁷ *Median family income in the past 12 months (in 2017 inflation-adjusted dollars) by family type by presence of own children under 18 years.* Data table includes median family income in past 12 months by married-couple family, male householder no wife present family, female householder no husband present family with and without children under 18. American Community Survey, 5-year estimates. American FactFinder Table B19126
- ²³⁸ *Relationship to householder for children under 18 years in households.* Data table includes householder relationship types for children under 18, relationships include biological children, adopted children, stepchildren, grandchildren, other relatives, foster children, or other unrelated children. American Community Survey, 5-year estimates. American FactFinder Table B09018
- ²³⁹ *Number of adults living in household (18+).* Behavioral Risk Factor Surveillance System. Land line introduction. Core: 0 Question 7
- ²⁴⁰ *Number of adults living in household (18+).* Behavioral Risk Factor Surveillance System. Cell phone introduction. Core: 0 Question 10
- ²⁴¹ *Number of adult men living in household (18+).* Behavioral Risk Factor Surveillance System. Land line introduction. Core: 0 Question 8
- ²⁴² *Number of adult women living in household (18+).* Behavioral Risk Factor Surveillance System. Land line introduction. Core: 0 Question 9
- ²⁴³ *Characteristics of teenagers 15-19 years old.* Data table includes population 15-19, school enrollment, marital status and fertility, household type, labor force, and idleness (not enrolled in school or labor force). American Community Survey, 5-year estimates. American FactFinder Table S0902
- ²⁴⁴ *Fertility.* Data table includes women 15-50 with births by race/ethnicity, nativity, educational attainment, poverty status in past 12 months, labor force status, public assistance income in past 12 months, and unmarried births. American Community Survey, 5-year estimates. American FactFinder Table S1301
- ²⁴⁵ *Women 15-50 years who had a birth in the past 12 months by marital status and educational attainment.* Data table includes women who did/did not have birth in past 12 months classified by married/unmarried and educational attainment. American Community Survey, 5-year estimates. American FactFinder Table B13014

- ²⁴⁶ Live in metropolitan or nonmetropolitan county (metropolitan, nonmetropolitan, not defined, missing) (18+). **Behavioral Risk Factor Surveillance System. Module: 1 Question 2**
- ²⁴⁷ Live urban or rural county (urban, rural, not defined, missing) (18+). **Behavioral Risk Factor Surveillance System. Module: 1 Question 3**
- ²⁴⁸ Metropolitan type (ive in center city, outside center of city but inside city line, inside a suburban county, not in metropolitan) (18+). **Behavioral Risk Factor Surveillance System. Module: 1 Question 2**
- ²⁴⁹ Sex/sex at birth (male, female, don't know/not sure, refused) (18+). **Behavioral Risk Factor Surveillance System. Core: 8 Question 1**
- ²⁵⁰ Birth rate and death rate per 1,000 by state and county.. **Iowa Dept of Public Health. Retrieved October 23, 2019, from <https://tracking.idph.iowa.gov/people-community/Reproduction-and-Birth/Live-Births-and-Deaths>**
- ²⁵¹ Marital status (married, divorced, widowed, separated, never married, member of unmarried couple, refused, not asked/missing) (18+). **Behavioral Risk Factor Surveillance System. Core: 8 Question 6**
- ²⁵² Sex by marital status by age for the population 15 years and over. Data table includes marital status classifications of never married, married with spouse present, married spouse absent (separated or other), widowed, or divorced. **American Community Survey, 5-year estimates. American FactFinder Table B12002**
- ²⁵³ American Community Survey demographic and housing estimates. Data table includes total population by age, gender, race/ethnicity, voting age population by gender and total housing units **American Community Survey, 5-year estimates. American FactFinder Table DP05**
- ²⁵⁴ Ever served in active duty for United States Armed forces, military, National Guard, or military reserve (yes, no, don't know, refused, not asked/missing) (18+). **Behavioral Risk Factor Surveillance System. Core: 8 Question 14**
- ²⁵⁵ Median year structure built. Data table indicates median year house structure was built. **American Community Survey, 5-year Estimates. American Factfinder Table B25035**
- ²⁵⁶ Number of children under 18 in live in household (18+). **Behavioral Risk Factor Surveillance System. Core: 8 Question 16**
- ²⁵⁷ Sexual orientation/gender identify (gay, straight, bisexual, something else, I don't know the answer, refused, not asked/missing) (18+). **Behavioral Risk Factor Surveillance System. Module: 21 Question 1.a**
- ²⁵⁸ Sexual orientation/gender identify (lesbian/gay, straight, bisexual, something else, I don't know the answer, refused, not asked/missing) (18+). **Behavioral Risk Factor Surveillance System. Module: 21 Question 1.b**
- ²⁵⁹ Do you consider yourself transgender (yes-male to female, yes-female to male, yes-gender nonconforming, no, don't know/not sure, refused, not asked/missing) (18+). **Behavioral Risk Factor Surveillance System. Module: 21 Question 2**
- ²⁶⁰ Highest education status (never attended, elementary, some high school, high school graduate, some college/technical school, college graduated, refused, not asked/missing) (18+). **Behavioral Risk Factor Surveillance System. Core: 8 Question 7**
- ²⁶¹ Sex by age by educational attainment for the population 18 years and over. Data table includes education type by age group and gender. **American Community Survey, 5-year estimates. American FactFinder Table B15001**
- ²⁶² Math and reading proficiency in Iowa by school year, public school district, and grade level. **Iowa Department of Education, Adequate Yearly Progress. Retrieved October 22, 2019, from <https://data.iowa.gov/Primary-Secondary-Ed/Math-And-Reading-Proficiency-in-Iowa-by-School-Yea/f3h8-mnxi>**
- ²⁶³ 4-year graduation rates in Iowa by Cohort and Public-School District. Data includes total cohort, graduates, graduate rate, and district name/location. **Iowa Department of Education, Basic Educational Data Survey (BEDS) and SRI (easier files) NEED LINK**
- ²⁶⁴ Language (English, Spanish, other, missing) (18+). **Behavioral Risk Factor Surveillance System. Module: 1 Question 1**
- ²⁶⁵ State of Iowa Revenue. Data includes budget, fiscal period information, function, department, and revenue/appropriation name/code. **Department of Administrative Services. Retrieved October 22, 2019, from <https://data.iowa.gov/State-Government-Finance/State-of-Iowa-Revenue/urps-v5ck>**
- ²⁶⁶ State of Iowa Budget Expenditures. Data includes budget identifiers, fiscal period information, function, department, revenue/appropriation name/code, and governor's budget recommendations. **Department of Administrative Services. Retrieved October 22, 2019, from <https://data.iowa.gov/State-Government-Finance/State-of-Iowa-Budget-Expenditures/hqz2-xt9r>**
- ²⁶⁷ Population, housing units, area, and density: 2010-State-American Indian Area/Alaska Native Area/Alaska Native Regional Corporation. Data table reflect population, number of housing units, are in square miles (by water/land total) and density per square mile of land of population and housing. Data updated every 10 years. Most recent data from 2010. **2010 Census Summary File 1. American FactFinder Tables GCT-PH1**
- ²⁶⁸ Air pollution, water quality, potential housing/health vulnerability **Center for Disease Control Environmental Public Health Tracking Network Retrieved October 23, 2019, from <https://ephtracking.cdc.gov/DataExplorer/#/>**
- ²⁶⁹ Average temperatures by region, state, county. Data allows date ranges to be selected to view maximum and minimum air temperatures, along with daily maximum heat index in Fahrenheit. **North America Land Data Assimilation System, 2011 via CDC WONDER, Centers for Disease Control and Prevention**
- ²⁷⁰ Extreme and mean elevations by states and other areas. Last updated in 2012. **Census Bureau, Statistical Abstract of the United States. Table 366**