

**Public Health and Healthcare Readiness Assessments RFP
Attachment M – 2017 JRA
RFP 24-77468**

The 2017 JRA report has been provided in Attachment M for reference. However, this JRA was very limited in scope and approach and should not be used as a guide for the JRA expected out of this Contract.

2017 Indiana Statewide Public Health and Medical Risk Assessment

INTRODUCTION

The Indiana State Department of Health (ISDH) developed this statewide jurisdictional risk assessment utilizing guidance from Health and Human Services, Centers for Disease Control and Prevention, and Federal Emergency Management Agency.

The following assessment contains the following components:

- Hazard and Vulnerability Assessment Analysis
- Statewide Threat and Hazard Identification and Risk Assessment
- HHS emPOWER Assessment
- Healthcare Infrastructure Summary
- ATSDR Social Vulnerability Index
- County Health Rankings

The purpose of this assessment is to summarize the public health and medical hazards and risk, and to identify vulnerabilities throughout the state. This assessment utilizes a variety of sources for data from District, State, Federal, and Private resources.

HAZARD AND VULNERABILITY ASSESSMENT ANALYSIS

The following table represents an analysis of 10 District HCC HVAs completed during 2017 as part of the District Public Health and Medical Risk Assessment. For each HVA, the top 10 Hazards were compiled and ranked per frequency out of the 10 Districts. In addition, the number of alerts, notifications, or activations within the District were tallied for comparison.

Top District Hazards	Frequency	Real World Hazard	Alerts
Hazmat Incident	9	Workplace Violence / Threat	11
Fire	7	IT System Outage	8
Flood	7	Patient Surge	7
Mass Casualty	7	Power Outage	7
Tornado	7	Tornado	7
Inclement Weather	6	Fire	6
Bomb Threat	5	Hazmat Incident	4
Chemical Exposure	5	Inclement Weather	4
Patient Surge	5	Communication Failure	3
Active Shooter	4	Flood	3
IT System Outage	4	Gas / Emissions Leak	3
Acts of Intent	3	Other	3
Communication Failure	3	Active Shooter	2
Seasonal Influenza	3	Bomb Threat	2
Temperature Extremes	3	Building Move	2
Workplace Violence	3	Mass casualty Incident	2
Cyber Attack	2	Seasonal Flu	2
Hostage Incident	2	Water Disruption	2
Power Outage	2	Suspicious Odor	2

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STATE THREAT HAZARD IDENTIFICATION AND RISK ASSESSMENT

The Indiana Department of Homeland Security in collaboration with the Indiana Intelligence Fusion Center and collaboration from over 40 state and federal agencies have conducted a detailed all-hazards risk assessment for the State of Indiana. The top hazards and threats can be found in the following table for 2016-2022.

Top Statewide Hazards & Threats	
Public Utility Failure	High Hazard Dam
Cyber-Attack	Communication Failure
Flash Flood	Hazmat Incident
Tornado	Invasive Species
Human Disease Outbreak	Severe Thunderstorm
Earthquake	Major Levee Failure
Winter Storm	Major Flood

HHS EMPOWER ASSESSMENT <https://empowermap.hhs.gov/>

The Office of the Assistant Secretary for Preparedness and Response (ASPR), in partnership with the Centers for Medicare and Medicaid Services (CMS), launched emPOWER to help community partners better anticipate, plan for, and respond to the needs of electricity dependent populations in each community. The following table summarizes Indiana as of 2017 for services and equipment.

IN emPOWER Summary			
Beneficiaries and Services			
Medicare Beneficiaries	ESRD Dialysis	O2 Services	Home Health Services
IN Total	<i>within 3 mo.</i>	<i>within 13 mo.</i>	<i>within 3 mo.</i>
1,126,283	6,596	24,977	22,066
Power Dependent Devices and Durable Medical Equipment			
Cardiac Devices	Ventilators	BiPAPs	O2 Concentrator
<i>within 5 yrs.</i>	<i>within 13 mo.</i>	<i>within 13 mo.</i>	<i>within 3 yrs.</i>
435	1,898	517	51,392
Enteral Feeding	IV Infusion Pump	Suction Pumps	At-Home ESRD Dialysis
<i>within 13 mo.</i>	<i>within 13 mo.</i>	<i>within 13 mo.</i>	<i>within 3 mo.</i>
2,108	2,780	436	887
Motorized Wheelchairs	Electric Beds	Devices and Equipment	
<i>within 13 mo.</i>	<i>within 13 mo.</i>	IN Total	
2,877	4,817	64,694	

HEALTHCARE INFRASTRUCTURE SUMMARY

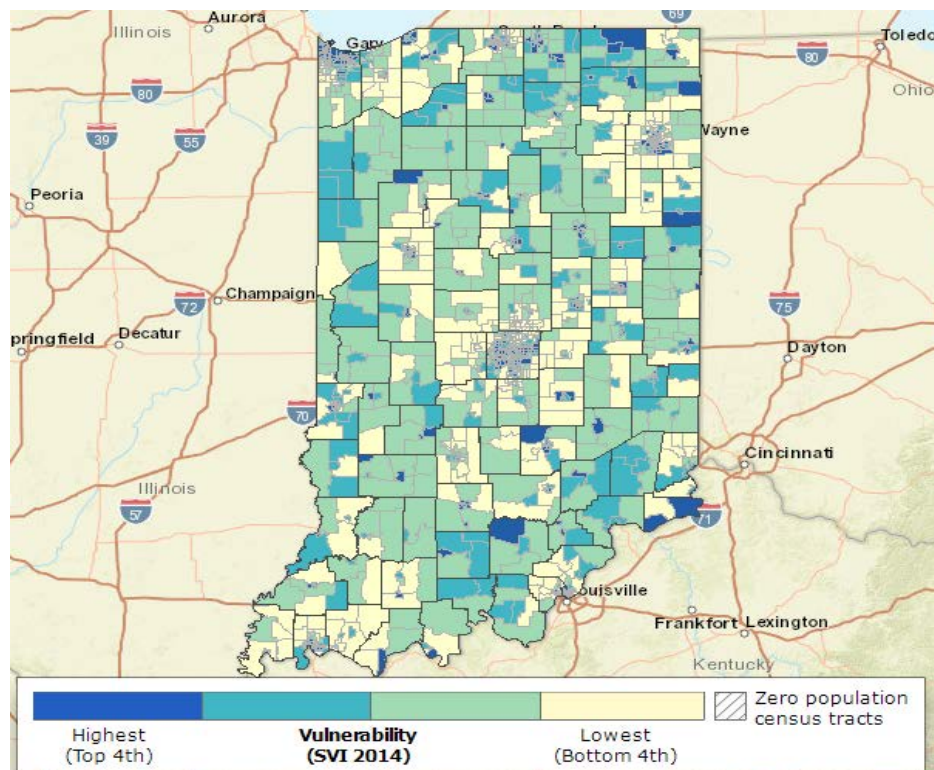
The following is a summary of the number of health organizations or facilities within the state of Indiana. These facilities are based on licensure data from 2017 of ISDH, IDHS, and FSSA.

2017 Indiana Statewide Public Health and Medical Risk Assessment

Healthcare Type	Count
Ambulatory Surgical Center	132
Community Health Center (State and Federal)	149
Community Mental Health Center	25
EMS Providers (Private, Government, Hospital, Fire, Volunteer, Air, Non-Trans)	919
End State Renal Disease	165
Home Health Agency	352
Hospice	88
Hospital (Acute, Critical Access, Long term, Psych, Rehab, Transplant, VA)	190
Intermediate Care Facility	484
Local Public Health Department	93
Long Term Care (Comprehensive, Residential, S/NF Distinct, SNF/NF Dual, NF, SNF)	719
Organ Procurement	1
Psychiatric Residential Treatment Facility	15
Rural Health Clinic	68

ATSDR SOCIAL VULNERABILITY INDEX <https://svi.cdc.gov/>

The Agency for Toxic Substances and Disease Registry (ATSDR)'s Social Vulnerability Index uses U.S. census variables at tract level to help local officials identify communities that may need support in preparing for hazards, or recovering from disaster. Social vulnerability refers to the resilience of communities when confronted by external stresses on human health, stresses such as natural or human-caused disasters, or disease outbreaks. Reducing social vulnerability can decrease both human suffering and economic loss. The following represents data from 2014:

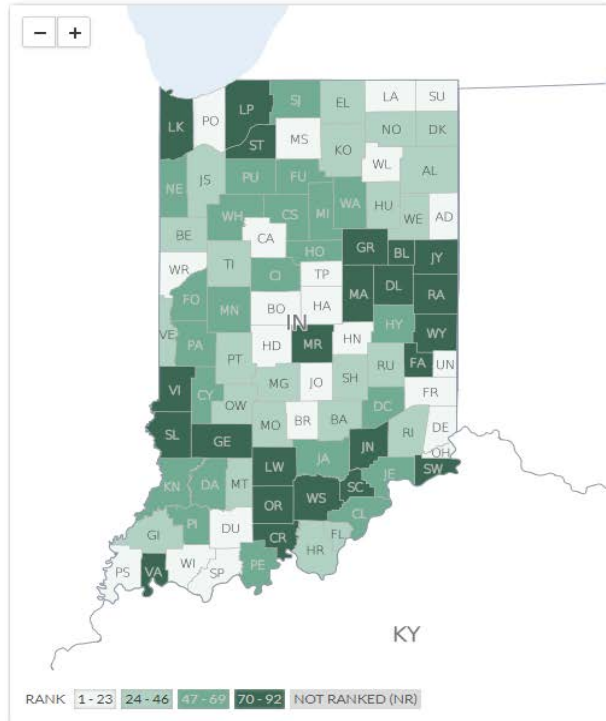


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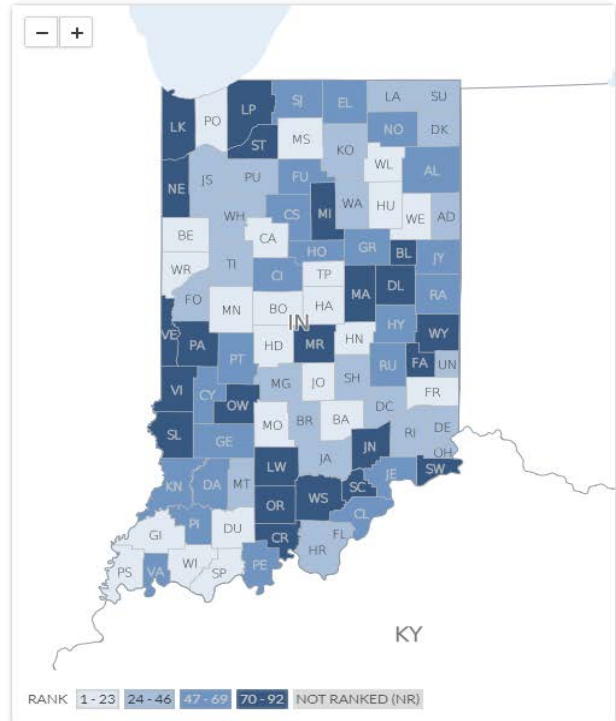
COUNTY HEALTH RANKINGS www.countyhealthrankings.org

The annual County Health Rankings measure vital health factors, including high school graduation rates, obesity, smoking, unemployment, access to healthy foods, the quality of air and water, income inequality, and teen births in nearly every county in America. The annual Rankings provide a revealing snapshot of how health is influenced by where we live, learn, work and play. The following summarizes data for 2017:

Overall Rankings in Health Outcomes 



Overall Rankings in Health Factors 



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County Health Rankings 2017: Indiana

2017 COUNTY HEALTH RANKINGS: MEASURES AND NATIONAL/STATE RESULTS

Measure	Description	US Median	State Overall	State Minimum	State Maximum
HEALTH OUTCOMES					
Premature death	Years of potential life lost before age 75 per 100,000 population	7,700	7,700	3,800	13,800
Poor or fair health	% of adults reporting fair or poor health	16%	18%	10%	21%
Poor physical health days	Average # of physically unhealthy days reported in past 30 days	3.8	4.0	2.9	4.5
Poor mental health days	Average # of mentally unhealthy days reported in past 30 days	3.8	4.1	3.1	4.4
Low birthweight	% of live births with low birthweight (< 2500 grams)	8%	8%	5%	10%
HEALTH FACTORS					
HEALTH BEHAVIORS					
Adult smoking	% of adults who are current smokers	17%	21%	13%	22%
Adult obesity	% of adults that report a BMI ≥ 30	31%	32%	22%	38%
Food environment index	Index of factors that contribute to a healthy food environment, (0-10)	7.3	7.2	6.1	8.7
Physical inactivity	% of adults aged 20 and over reporting no leisure-time physical activity	26%	26%	16%	34%
Access to exercise opportunities	% of population with adequate access to locations for physical activity	62%	75%	13%	92%
Excessive drinking	% of adults reporting binge or heavy drinking	17%	17%	15%	20%
Alcohol-impaired driving deaths	% of driving deaths with alcohol involvement	30%	24%	0%	60%
Sexually transmitted infections	# of newly diagnosed chlamydia cases per 100,000 population	294.8	434.0	60.5	1,024.7
Teen births	# of births per 1,000 female population ages 15-19	38	35	11	60
CLINICAL CARE					
Uninsured	% of population under age 65 without health insurance	14%	14%	8%	25%
Primary care physicians	Ratio of population to primary care physicians	2,030:1	1,490:1	14,250:1	510:1
Dentists	Ratio of population to dentists	2,570:1	1,900:1	12,590:1	1,230:1
Mental health providers	Ratio of population to mental health providers	1,105:1	730:1	14,010:1	210:1
Preventable hospital stays	# of hospital stays for ambulatory-care sensitive conditions per 1,000 Medicare enrollees	56	57	31	97
Diabetes monitoring	% of diabetic Medicare enrollees ages 65-75 that receive HbA1c monitoring	86%	85%	33%	92%
Mammography screening	% of female Medicare enrollees ages 67-69 that receive mammography screening	61%	62%	46%	72%
SOCIAL AND ECONOMIC FACTORS					
High school graduation	% of ninth-grade cohort that graduates in four years	88%	87%	72%	98%
Some college	% of adults ages 25-44 with some post-secondary education	57%	61%	27%	86%
Unemployment	% of population aged 16 and older unemployed but seeking work	5.3%	4.8%	3.4%	7.1%
Children in poverty	% of children under age 18 in poverty	22%	20%	5%	31%
Income inequality	Ratio of household income at the 80th percentile to income at the 20th percentile	4.4	4.4	3.2	6.3
Children in single-parent households	% of children that live in a household headed by a single parent	32%	34%	11%	48%
Social associations	# of membership associations per 10,000 population	12.6	12.4	7.5	22.4
Violent crime	# of reported violent crime offenses per 100,000 population	198	356	28	1,197
Injury deaths	# of deaths due to injury per 100,000 population	77	67	34	112
PHYSICAL ENVIRONMENT					
Air pollution – particulate matter	Average daily density of fine particulate matter in micrograms per cubic meter (PM2.5)	9.2	11.1	10.3	13.1
Drinking water violations	Indicator of the presence of health-related drinking water violations. Yes - indicates the presence of a violation, No - indicates no violation.	NA	NA	No	Yes
Severe housing problems	% of households with overcrowding, high housing costs, or lack of kitchen or plumbing facilities	14%	14%	7%	23%
Driving alone to work	% of workforce that drives alone to work	81%	83%	52%	89%
Long commute – driving alone	Among workers who commute in their car alone, % commuting > 30 minutes	30%	30%	13%	54%

5 www.countyhealthrankings.org/indiana

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County Health Rankings 2017: Indiana

2017 COUNTY HEALTH RANKINGS: DATA SOURCES AND YEARS OF DATA

	Measure	Data Source	Years of Data
HEALTH OUTCOMES			
Length of Life	Premature death	National Center for Health Statistics – Mortality files	2012-2014
Quality of Life	Poor or fair health	Behavioral Risk Factor Surveillance System	2015
	Poor physical health days	Behavioral Risk Factor Surveillance System	2015
	Poor mental health days	Behavioral Risk Factor Surveillance System	2015
	Low birthweight	National Center for Health Statistics – Natality files	2008-2014
HEALTH FACTORS			
HEALTH BEHAVIORS			
Tobacco Use	Adult smoking	Behavioral Risk Factor Surveillance System	2015
Diet and Exercise	Adult obesity	CDC Diabetes Interactive Atlas	2013
	Food environment index	USDA Food Environment Atlas, Map the Meal Gap	2010 & 2014
	Physical inactivity	CDC Diabetes Interactive Atlas	2013
	Access to exercise opportunities	Business Analyst, Delorme map data, ESRI, & US Census Tigerline Files	2010 & 2014
Alcohol and Drug Use	Excessive drinking	Behavioral Risk Factor Surveillance System	2015
	Alcohol-impaired driving deaths	Fatality Analysis Reporting System	2011-2015
Sexual Activity	Sexually transmitted infections	National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention	2014
	Teen births	National Center for Health Statistics - Natality files	2008-2014
CLINICAL CARE			
Access to Care	Uninsured	Small Area Health Insurance Estimates	2014
	Primary care physicians	Area Health Resource File/American Medical Association	2014
	Dentists	Area Health Resource File/National Provider Identification file	2015
	Mental health providers	CMS, National Provider Identification file	2016
Quality of Care	Preventable hospital stays	Dartmouth Atlas of Health Care	2014
	Diabetes monitoring	Dartmouth Atlas of Health Care	2014
	Mammography screening	Dartmouth Atlas of Health Care	2014
SOCIAL AND ECONOMIC FACTORS			
Education	High school graduation	EDFacts ¹	2014-2015
	Some college	American Community Survey	2011-2015
Employment	Unemployment	Bureau of Labor Statistics	2015
Income	Children in poverty	Small Area Income and Poverty Estimates	2015
	Income inequality	American Community Survey	2011-2015
Family and Social Support	Children in single-parent households	American Community Survey	2011-2015
	Social associations	County Business Patterns	2014
Community Safety	Violent crime	Uniform Crime Reporting – FBI	2012-2014
	Injury deaths	CDC WONDER mortality data	2011-2015
PHYSICAL ENVIRONMENT			
Air and Water Quality	Air pollution - particulate matter ²	CDC National Environmental Public Health Tracking Network	2012
	Drinking water violations	Safe Drinking Water Information System	FY2013-14
Housing and Transit	Severe housing problems	Comprehensive Housing Affordability Strategy (CHAS) data	2009-2013
	Driving alone to work	American Community Survey	2011-2015
	Long commute – driving alone	American Community Survey	2011-2015

¹ State sources used for California and Texas.

² Not available for AK and HI.