



INDIANA
RURAL HEALTH TRANSFORMATION

Rural Health Regional Data Summaries



Indiana
Department
of
Health

Data Trends: Health topics of potential impact





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REGION 5

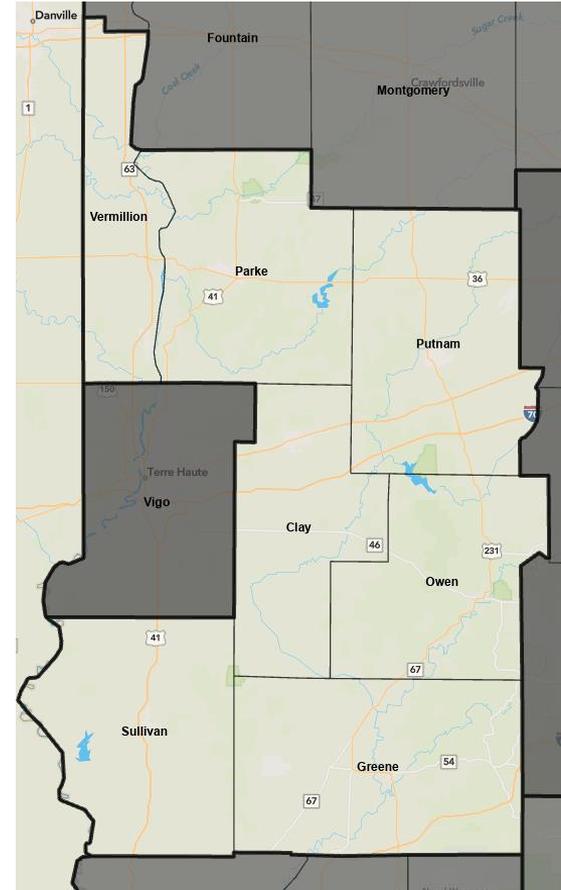


Indiana
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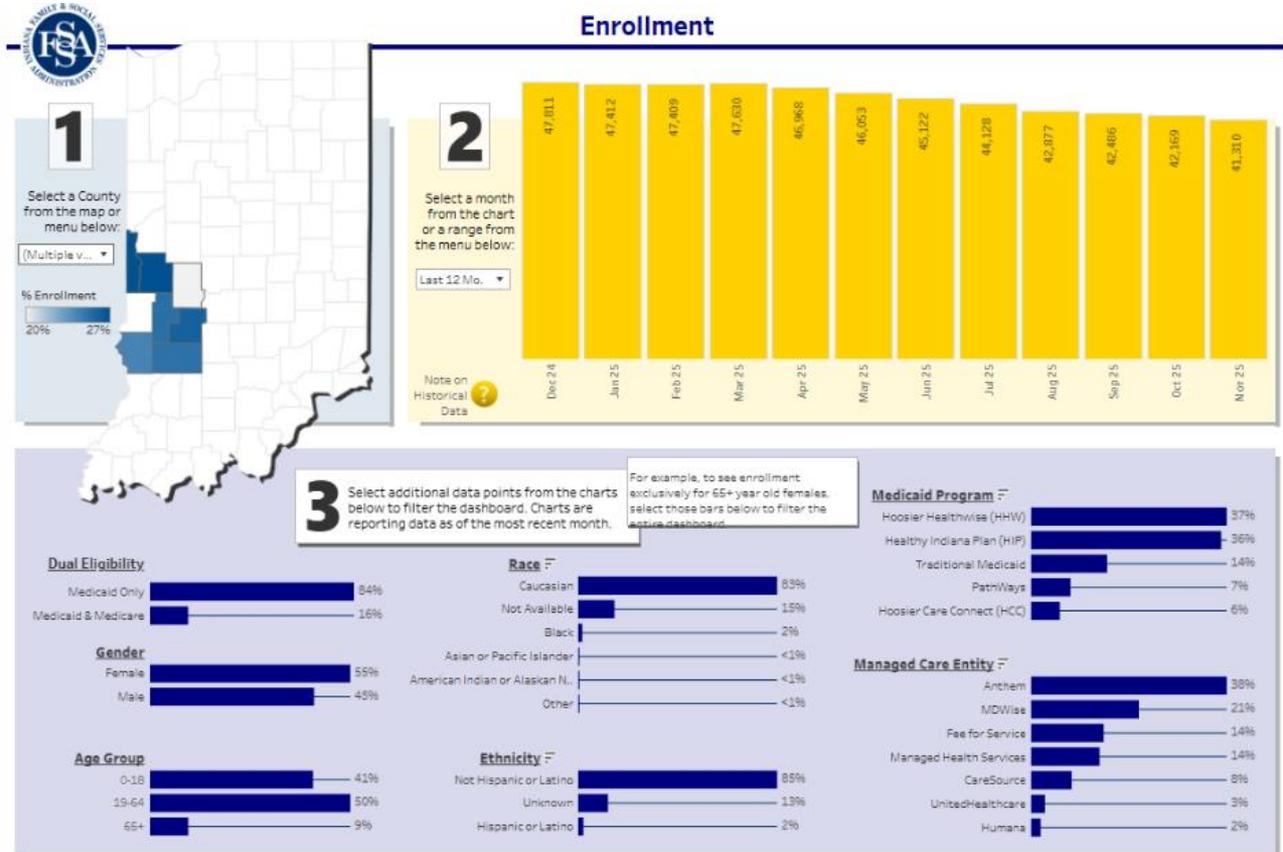
Region 5

This region includes the following **fully rural** designated counties:

- Vermillion
- Parke
- Putnam
- Clay
- Owen
- Sullivan
- Greene



Medicaid Patient Enrollment Profile



Chronic Disease & Primary Care

Health topic: **Obesity**

Metric: **Prevalence (adults)**

Source: **Centers for Disease Control and Prevention (CDC) Places and Behavioral Risk Factor Surveillance System (BRFSS)**



Chronic Disease & Primary Care

Obesity Prevalence Among Adults

Table 1. Obesity Prevalence by County, 2020-2022			
County	2020	2021	2022
CLAY	39.1%	41.1%	42.3%
GREENE	38.4%	37.2%	40.5%
OWEN	39.1%	36.9%	39.9%
PARKE	40.5%	42.2%	38.3%
PUTNAM	38.6%	36.2%	39.4%
SULLIVAN	42.0%	37.8%	38.1%
VERMILLION	41.5%	40.9%	40.8%
Regional Average	39.6%	38.4%	40.0%
Statewide Rate	37.0%	36.0%	38.0%

Data Source: CDC Places. Statewide rates to compare against regional and county rates was sourced from BRFSS data. Rates are age-adjusted.

Key takeaways: Sullivan saw a drop in 2020-2021.

Chronic Disease & Primary Care

Health topic: **Diabetes (Type-1 and Type-2)**

Metric: **Prevalence (five-year pooled), death rate (age-adjusted), and non-fatal emergency department (ED) visit rate (age-adjusted)**

Source: **Regenstrief Institute, Indiana Department of Health (IDOH) Vital Records, and Indiana Hospital Association (IHA) Hospital Discharge Datasets**



Chronic Disease & Primary Care

Diabetes Type-1 Prevalence Estimates

Table 2. Type-1 Diabetes Prevalence by County, 2020-2024	
County	2020-2024
CLAY	0.4%
GREENE	0.7%
OWEN	0.8%
PARKE	0.3%
PUTNAM	0.6%
SULLIVAN	0.5%
VERMILLION	0.6%
Regional Rate	0.6%
Statewide Rate	0.5%
<small>Data Source: July 1, 2019 - June 30, 2024, INPC Data pulled from Diabetes Prevalence Estimates for Indiana Counties document prepared by Regenstrief Institute. Source is same for state and county.</small>	

Key takeaways: Rates are low for Clay and Parke compared to the region. Rates are high for Owen compared to the region.

Chronic Disease & Primary Care

Diabetes Type-2 Prevalence Estimates

Table 3. Type-2 Diabetes Prevalence by County, 2020-2024

County	2020-2024
CLAY	10.8%
GREENE	16.4%
OWEN	18.0%
PARKE	8.7%
PUTNAM	14.6%
SULLIVAN	14.9%
VERMILLION	9.3%
Regional Rate	13.9%
Statewide Rate	11.2%

Data Source: July 1, 2019 - June 30, 2024, INPC Data pulled from Diabetes Prevalence Estimates for Indiana Counties document prepared by Regenstrief Institute. Source is same for state and county.

Key takeaways: Rates are low for Parke and Vermillion compared to the region.



Chronic Disease & Primary Care

Diabetes-Related Deaths, All Types

Table 4. Age-Adjusted Diabetes-Related Death Rates per 100,000 by County, 2020-2024					
County	2020	2021	2022	2023	2024
CLAY	33.7*	56.2*	22.6*	13.3*	22.5*
GREENE	33.6*	55.0*	48.2*	39.3*	48.8*
OWEN	69.2*	42.1*	26.8*	54.3*	27.8*
PARKE	16.0*	11.5*	33.1*	35.4*	25.1*
PUTNAM	14.5*	40.4*	25.3*	34.9*	22.3*
SULLIVAN	51.2*	26.9*	37.7*	51.6*	17.7*
VERMILLION	40.4*	38.7*	26.2*	17.4*	35.8*
Regional Rate	35.2	41.3	31.4	35.1	28.7
Statewide Rate	40.9	42.0	40.0	36.5	34.4

*Data Source: Indiana Department of Health Vital Records Division. Source is same for state and county. * = Unstable (count is less than 20). Rates are age-adjusted.*

Key takeaways: No definitive trends or regional differences.



Chronic Disease & Primary Care

Diabetes-Related ED Visits, All Types

Table 5. Age-Adjusted Diabetes-Related ED Visit Rates per 100,000 by County, 2020-2024					
County	2020	2021	2022	2023	2024
CLAY	387.9	335.2	320.7	436.9	420.3
GREENE	403.1	472.6	501.4	500.6	493.2
OWEN	233.6	438.0	317.3	381.8	389.6
PARKE	260.1	145.8	209.0	227.9	256.3
PUTNAM	288.5	268.5	286.4	415.1	290.2
SULLIVAN	228.7	373.2	374.7	460.4	481.2
VERMILLION	451.4	467.7	272.6	364.8	401.5
Regional Rate	322.3	356.6	338.9	412.2	166.1
Statewide Rate	344.1	364.1	365.3	401.7	406.9

Data Source: Indiana Hospital Association (IHA) Hospital Discharge dataset. Source is same for state and county. Rates are age-adjusted.

Key takeaways: Rates are low for Parke compared to the region. Rates are high for Greene compared to the region. Owen and Sullivan saw increases in 2020-2021. Vermillion saw a drop in 2021-2022.

Chronic Disease & Primary Care

Health topic: **Hypertension**

Metric: **Prevalence estimates, death rate (age-adjusted), and non-fatal ED visit rate (age-adjusted)**

Source: **Regenstrief Institute, IDOH Vital Records, and IHA Hospital Discharge Datasets**



Chronic Disease & Primary Care

Hypertension Prevalence Estimates

Table 6. Hypertension Prevalence by County, 2020-2024	
County	2020-2024
CLAY	50.4%
GREENE	63.0%
OWEN	76.8%
PARKE	48.6%
PUTNAM	44.2%
SULLIVAN	56.3%
VERMILLION	54.4%
Regional Rate	55.9%
Statewide Rate	47.5%
<i>Data Source: 2020-2024 INPC Data pulled from IDOH Health First Hypertension Report prepared by Regenstrief Institute. Source is same for state and county.</i>	

Key takeaways: Rates are high for Owen compared to the region.



Chronic Disease & Primary Care

Hypertension-Related Deaths

Table 7. Age-Adjusted Hypertension-Related Death Rates per 100,000 by County, 2020-2024

County	2020	2021	2022	2023	2024
CLAY	73.2*	52.4*	68.9*	118.3	106.3
GREENE	48.2*	43.3*	61.9	31.9*	61.8
OWEN	54.7*	53.6*	72.5*	124.7	55.6*
PARKE	54.5*	50.0*	55.5*	38.9*	46.1*
PUTNAM	27.2*	35.0*	39.9*	60.5	65.0
SULLIVAN	40.2*	82.8*	85.5*	84.0*	47.0*
VERMILLION	45.1*	9.4*	43.8*	56.9*	40.9*
Regional Rate	47.8	46.4	60.1	73.0	63.5
Statewide Rate	39.1	42.5	43.2	44.8	42.9

*Data Source: Indiana Department of Health Vital Records Division. Source is same for state and county. * = Unstable (count is less than 20). Rates are age-adjusted.*

Key takeaways: Rates for this region are high for Indiana.



Chronic Disease & Primary Care

Hypertension-Related ED Visits

Table 8. Age-Adjusted Hypertension-Related ED Visit Rates per 100,000 by County, 2020-2024					
County	2020	2021	2022	2023	2024
CLAY	565.3	488.7	571.9	716.8	890.6
GREENE	571.3	933.4	808.9	930.6	926.9
OWEN	746.0	832.6	1,013.5	1,141.9	756.1
PARKE	312.8	378.3	465.7	419.6	443.1
PUTNAM	379.8	449.0	479.1	632.6	611.3
SULLIVAN	547.0	560.2	588.5	723.0	721.3
VERMILLION	471.6	619.6	514.6	533.6	678.8
Regional Rate	511.9	616.4	637.5	748.2	735.1
Statewide Rate	528.5	590.1	634.8	704.1	654.9

Data Source: Indiana Hospital Association (IHA) Hospital Discharge dataset. Source is same for state and county. Rates are age-adjusted.

Key takeaways: Rates are low for Parke compared to the region. Rates are high for Owen compared to the region. Rates are increasing for this region but not for the state. Greene saw an increase in 2020-2021. Owen saw a drop in 2023-2024.

Chronic Disease & Primary Care

Health topic: **Heart Disease**

Metric: **Death rate (age-adjusted)** and **non-fatal ED visit rate (age-adjusted)**

Source: **IDOH Vital Records** and **IHA Hospital Discharge dataset**



Chronic Disease & Primary Care

Heart Disease-Related Deaths

Table 9. Age-Adjusted Heart Disease-Related Death Rates per 100,000 by County, 2020-2024					
County	2020	2021	2022	2023	2024
CLAY	380.9	325.7	385.4	386.1	369.6
GREENE	305.1	275.9	284.5	284.0	278.0
OWEN	332.3	239.3	301.6	319.5	225.8
PARKE	278.8	265.2	251.3	289.0	248.6
PUTNAM	235.0	273.7	287.0	313.8	335.1
SULLIVAN	291.0	348.3	330.1	375.9	337.8
VERMILLION	348.1	375.0	375.5	309.7	311.6
Regional Rate	304.7	295.9	313.5	325.3	304.6
Statewide Rate	257.9	257.2	248.7	244.8	239.9

Data Source: Indiana Department of Health Vital Records Division. Source is same for state and county. Rates are age-adjusted.

Key takeaways: Owen saw a drop in 2020-2021. Vermillion saw a drop in 2022-2023. Owen saw a drop in 2023-2024.



Chronic Disease & Primary Care

Heart Disease-Related ED Visits

Table 10. Age-Adjusted Heart Disease-Related ED Visits per 100,000 by County, 2020-2024					
County	2020	2021	2022	2023	2024
CLAY	921.2	843.0	808.5	785.3	883.6
GREENE	765.7	1,014.9	984.1	1,160.3	1,333.1
OWEN	771.8	904.5	968.6	1,263.5	981.1
PARKE	790.0	726.8	682.6	760.5	816.3
PUTNAM	1,006.1	1,057.9	1,066.2	1,090.1	948.2
SULLIVAN	933.9	1,024.8	1,085.9	1,014.9	1,070.0
VERMILLION	1,097.3	932.8	1,074.4	917.1	1,399.0
Regional Rate	891.4	945.1	960.6	1,019.0	1,055.2
Statewide Rate	639.1	730.6	734.8	769.9	753.9

Data Source: Indiana Hospital Association (IHA) Hospital Discharge dataset. Source is same for state and county. Rates are age-adjusted.

Key takeaways: Rates for this region are high for Indiana. Rates are increasing both for this region and for the state. Greene saw an increase in 2020-2021. Owen saw an increase in 2022-2023. Vermillion saw an increase in 2023-2024. Owen saw a drop in 2023-2024.

Chronic Disease & Primary Care

Health topic: **Stroke**

Metric: **Death rate (age-adjusted)** and **non-fatal ED visit rate (age-adjusted)**

Source: **IDOH Vital Records** and **IHA Hospital Discharge dataset**



Chronic Disease & Primary Care

Stroke-Related Deaths

Table 11. Age-Adjusted Stroke-Related Death Rates per 100,000 by County, 2020-2024					
County	2020	2021	2022	2023	2024
CLAY	41.5*	46.3*	58.8*	59.1*	36.3*
GREENE	49.3*	33.8*	51.5*	49.8*	65.7
OWEN	43.4*	81.9*	39.2*	38.9*	65.0*
PARKE	35.2*	64.3*	52.8*	50.4*	72.1*
PUTNAM	57.3*	45.8*	92.1	48.4*	42.0*
SULLIVAN	33.1*	43.0*	24.5*	34.4*	25.8*
VERMILLION	119.1*	106.8*	86.4*	88.4*	133.4
Regional Rate	52.4	55.8	59.4	50.8	58.1
Statewide Rate	57.0	59.0	56.1	56.0	55.7

*Data Source: Indiana Department of Health Vital Records Division. Source is same for state and county. * = Unstable (count is less than 20). Rates are age-adjusted.*

Key takeaways: No definitive trends or regional differences.



Chronic Disease & Primary Care

Stroke-Related ED Visits

Table 12. Age-Adjusted Stroke-Related ED Visit Rates per 100,000 by County, 2020-2024					
County	2020	2021	2022	2023	2024
CLAY	120.8	143.9	156.8	124.1	133.3
GREENE	136.7	171.8	233.7	189.8	191.4
OWEN	99.2	119.9	91.2	122.0	125.8
PARKE	140.4	117.2	125.5	160.0	165.1
PUTNAM	100.7	128.3	115.0	164.1	160.2
SULLIVAN	112.2	96.7	156.8	106.8	202.4
VERMILLION	222.4	179.9	144.8	141.4	204.1
Regional Rate	127.1	136.8	149.8	147.0	166.1
Statewide Rate	88.3	94.0	100.0	103.9	106.6

Data Source: Indiana Hospital Association (IHA) Hospital Discharge dataset. Source is same for state and county. Rates are age-adjusted.

Key takeaways: Rates for this region are high for Indiana. Rates are increasing both for this region and for the state. Greene and Sullivan saw increases in 2021-2022. Sullivan and Vermillion saw increases in 2023-2024.

Chronic Disease & Primary Care

Health topic: **Smoking**

Metric: **Prevalence (adults)** and **Prevalence among pregnant women**

Source: **BRFSS, IDOH Vital Records**



Chronic Disease & Primary Care

Smoking Prevalence Among Adults

Table 13. Smoking Prevalence Among Adults by County, 2018-2022	
County	2018-2022
CLAY	21.2%
GREENE	22.6%
OWEN	21.2%
PARKE	21.2%
PUTNAM	21.2%
SULLIVAN	22.6%
VERMILLION	21.2%
Regional Rate	21.6%
Statewide Rate	17.9%
<i>Data Source: BRFSS. Source is same for state and county. Counties with insufficient data are grouped with nearby ones.</i>	

Key takeaways: No definitive trends or regional differences.



Chronic Disease & Primary Care

Smoking Prevalence Among Pregnant Women

Table 14. Smoking Prevalence Among Pregnant Women by County, 2021-2024				
County	2021	2022	2023	2024
CLAY	18.9%	14.6%	7.0%	6.1%*
GREENE	15.5%	11.5%	11.1%	9.0%
OWEN	21.5%	12.4%	13.2%	11.3%
PARKE	10.6%	8.2%*	5.4%*	5.4%*
PUTNAM	12.5%	11.1%	7.2%	4.6%*
SULLIVAN	16.2%	9.2%	9.2%	9.8%*
VERMILLION	19.8%	13.8%	9.2%*	8.1%*
Regional Rate	16.1%	11.5%	8.7%	7.5%
Statewide Rate	9.0%	6.6%	5.3%	3.8%
<i>Data Source: Indiana Department of Health Vital Records Division. Source is same for state and county. * = Unstable (count is less than 20).</i>				

Key takeaways: Rates are high for Owen compared to the region. Rates for this region are high for Indiana. Rates are decreasing both for this region and for the state. Owen saw a drop in 2021-2022. Clay saw a drop in 2022-2023.

Maternal & Child Health

Health topic: **Infant mortality**

Metric: **Infant mortality rate (per thousand)**

Definition: **The number of infant deaths per 1,000 live births in each time period**

Source: **IDOH Vital Records**

Maternal & Child Health

Infant Mortality Rate

Table 15. Infant Mortality Rate per 1,000 by County, 2016-2024					
County	2016-2020	2017-2021	2018-2022	2019-2023	2020-2024
CLAY	9.6*	10.4*	10.0*	10.3*	12.8*
GREENE	5.4*	5.4*	7.9*	8.9*	9.6*
OWEN	9.3*	7.4*	6.4*	7.6*	8.4*
PARKE	7.0*	8.9*	6.9*	6.8*	9.4*
PUTNAM	6.0*	6.1*	3.9*	4.5*	4.5*
SULLIVAN	12.4*	7.6*	6.6*	8.5*	4.8*
VERMILLION	11.2*	8.6*	7.6*	7.7*	(S)
Regional Rate	8.2	7.6	7.0	7.7	7.9
Statewide Rate	7.0	6.8	6.8	6.7	6.7

*Data Source: Indiana Department of Health Vital Records Division. Source is same for state and county. * = Unstable (count is between 5 and 19). (S) = Suppressed (count is less than 5).*

Key takeaways: No definitive trends or regional differences.

Maternal & Child Health

Health topic: **Low birthweight**

Metric: **Low birthweight rate**

Definition: **The percentage of babies that were born with a weight of less than 2,500 grams**

Source: **IDOH Maternal and Child Health**



Maternal & Child Health

Low Birthweight Rate

Table 16. Low Birthweight Rate by County, 2020-2024

County	2020	2021	2022	2023	2024
CLAY	7.0%	8.0%	8.9%	9.4%	4.6%*
GREENE	9.5%	7.3%	10.2%	6.4%*	9.6%
OWEN	7.5%*	15.1%	9.7%	6.4%*	6.7%*
PARKE	6.6%*	(S)	8.7%*	4.1%*	4.0%*
PUTNAM	5.8%	8.7%	6.1%	4.9%*	4.1%*
SULLIVAN	7.4%*	6.2%*	5.1%*	12.3%	5.2%*
VERMILLION	9.4%*	9.6%*	(S)	8.6%*	7.6%*
Regional Rate	7.5%	8.1%	7.5%	7.3%	5.9%
Statewide Rate	8.1%	8.4%	8.7%	8.6%	8.5%

*Data Source: Indiana Department of Health Maternal and Child Health. Source is same for state and county. * = Unstable (count is between 5 and 19). (S) = Suppressed (count is less than 5).*

Key takeaways: Owen saw a drop in 2021-2022.

Maternal & Child Health

Health topic: **Pre-term births**

Metric: **Pre-term birth rate**

Definition: **The percentage of babies that were born at less than 37 weeks**

Source: **IDOH Maternal and Child Health**



Maternal & Child Health

Pre-Term Birth Rate

Table 17. Pre-Term Birth Rate by County, 2020-2024					
County	2020	2021	2022	2023	2024
CLAY	10.8%	9.8%	12.1%	10.5%	7.3%*
GREENE	11.1%	14.3%	10.2%	8.7%	14.2%
OWEN	9.5%*	16.4%	12.0%	9.8%	9.7%
PARKE	10.7%	6.0%*	7.7%*	6.3%*	6.2%*
PUTNAM	8.1%	11.9%	9.1%	10.3%	6.7%
SULLIVAN	10.4%	8.6%*	7.4%*	11.5%	11.9%
VERMILLION	10.6%*	13.2%	4.1%*	8.6%*	12.8%
Regional Rate	10.1%	11.6%	9.4%	9.5%	9.6%
Statewide Rate	10.4%	10.9%	10.9%	11.0%	10.9%

*Data Source: Indiana Department of Health Maternal and Child Health. Source is same for state and county. * = Unstable (count is less than 20).*

Key takeaways: Greene saw an increase in 2023-2024.

Maternal & Child Health

Health topic: **Early prenatal care**

Metric: **No Early Prenatal Care rate**

Definition: **The percentage of births to mothers that did not access prenatal care in the first trimester**

Source: **IDOH Maternal and Child Health**



Maternal & Child Health

No Early Pre-Natal Care Rate

Table 18. No Early Pre-Natal Care Rate by County, 2020-2024					
County	2020	2021	2022	2023	2024
CLAY	26.1%	19.6%	23.5%	16.0%	15.7%
GREENE	24.6%	22.8%	21.7%	17.8%	20.7%
OWEN	22.6%	23.3%	19.4%	22.5%	23.9%
PARKE	46.2%	43.1%	51.0%	49.8%	45.5%
PUTNAM	24.0%	18.6%	16.9%	14.3%	13.4%
SULLIVAN	29.7%	16.2%	21.2%	18.5%	17.5%
VERMILLION	31.2%	29.3%	28.3%	16.0%	14.0%
Regional Rate	28.2%	23.8%	24.7%	21.3%	20.9%
Statewide Rate	30.7%	28.3%	29.1%	26.6%	27.3%

Data Source: Indiana Department of Health Maternal and Child Health. Source is same for state and county.

Key takeaways: Rates are low for Putnam compared to the region. Rates are high for Parke compared to the region. Rates are decreasing for this region but not for the state. Sullivan saw a drop in 2020-2021. Parke saw an increase in 2021-2022. Clay and Vermillion saw drops in 2022-2023.



Trauma & Injury Prevention

Health topic: **Older adult (age 65+) falls**

Metric: **Death rate from falls (65+), non-fatal hospitalization rate from falls (65+) and non-fatal ED visit rate from falls (65+)**

Source: **IDOH Vital Records and IHA Hospital Discharge dataset**



Trauma & Injury Prevention

Deaths From Falls (Age 65+)

Table 19. Falls (Age 65+), Death Rates per 100,000 by County, 2022-2024			
County	2022	2023	2024
CLAY	19.8*	57.8*	56.0*
GREENE	127.1*	62.2*	30.6*
OWEN	22.2*	107.7*	167.5*
PARKE	58.3*	85.9*	55.9*
PUTNAM	61.2*	44.7*	14.8*
SULLIVAN	25.3*	25.1*	24.2*
VERMILLION	0.0*	95.4*	0.0*
Regional Rate	51.6*	65.5	49.5*
Statewide Rate	53.1	58.1	58.4

*Data Source: Indiana Department of Health Vital Records Division. Source is same for state and county. * = Unstable (count is less than 20).*

Key takeaways: No definitive trends or regional differences.



Trauma & Injury Prevention

ED Visits From Falls (Age 65+)

Table 20. Falls (Age 65+), ED Visit Rates per 100,000 by County, 2022-2024			
County	2022	2023	2024
CLAY	6,208.0	6,535.6	6,701.5
GREENE	7,740.0	9,461.6	9,025.5
OWEN	6,340.1	5,967.3	6,028.9
PARKE	5,484.2	5,727.4	5,308.7
PUTNAM	8,463.4	7,671.7	7,901.0
SULLIVAN	7,038.0	7,506.9	7,420.8
VERMILLION	6,805.3	7,249.6	7,656.2
Regional Rate	7,047.7	7,341.9	7,316.6
Statewide Rate	6,032.1	6,410.5	6,666.6

Data Source: Indiana Hospital Association (IHA) Hospital Discharge dataset. Source is same for state and county.

Key takeaways: Greene saw an increase in 2022-2023.

Trauma & Injury Prevention

Hospitalizations From Falls (Age 65+)

Table 21. Falls (Age 65+), Hospitalization Rates per 100,000 by County, 2022-2024

County	2022	2023	2024
CLAY	1,107.2	1,330.2	1,866.7
GREENE	985.4	1,213.8	1,300.3
OWEN	1,064.1	1,141.7	1,235.1
PARKE	846.0	1,145.5	1,313.2
PUTNAM	1,071.3	1,161.9	889.4
SULLIVAN	1,215.2	1,380.9	1,377.8
VERMILLION	1,575.3	1,271.9	1,906.2
Regional Rate	1,101.8	1,229.6	1,366.0
Statewide Rate	1,103.9	1,132.9	1,187.9

Data Source: Indiana Hospital Association (IHA) Hospital Discharge dataset. Source is same for state and county.

Key takeaways: Rates are increasing both for this region and for the state. Clay and Vermillion saw increases in 2023-2024.

Trauma & Injury Prevention

Health topic: **Motor vehicle traffic injuries**

Metric: **Death rate from motor vehicle injuries, non-fatal hospitalization rate from motor vehicle injuries** and **non-fatal ED visit rate from motor vehicle injuries**

Source: **IDOH Vital Records** and **IHA Hospital Discharge dataset**

Trauma & Injury Prevention

Deaths From Motor Vehicle Traffic Injuries

Table 22. Motor Vehicle Traffic Injuries, Death Rates per 100,000 by County, 2022-2024

County	2022	2023	2024
CLAY	0.0*	7.6*	11.4*
GREENE	25.8*	32.1*	12.8*
OWEN	14.0*	32.5*	4.6*
PARKE	18.3*	12.1*	18.2*
PUTNAM	18.8*	13.3*	10.6*
SULLIVAN	33.9*	14.5*	38.5*
VERMILLION	25.9*	6.5*	19.3*
Regional Rate	19.0	17.7	15.3
Statewide Rate	14.2	13.7	12.6

*Data Source: Indiana Department of Health Vital Records Division. Source is same for state and county. * = Unstable (count is less than 20).*

Key takeaways: Rates are decreasing both for this region and for the state.



Trauma & Injury Prevention

ED Visits From Motor Vehicle Traffic Injuries

Table 23. Motor Vehicle Traffic Injuries, ED Visit Rates per 100,000 by County, 2022-2024			
County	2022	2023	2024
CLAY	803.7	861.7	987.7
GREENE	896.6	839.9	912.9
OWEN	828.6	1,133.2	1,066.3
PARKE	494.8	606.6	575.5
PUTNAM	699.7	708.1	756.5
SULLIVAN	706.3	669.7	703.0
VERMILLION	692.5	745.9	825.0
Regional Rate	748.9	799.2	843.1
Statewide Rate	762.0	836.2	862.3

Data Source: Indiana Hospital Association (IHA) Hospital Discharge dataset. Source is same for state and county.

Key takeaways: Rates are low for Parke compared to the region. Rates are increasing both for this region and for the state. Owen saw an increase in 2022-2023.



Trauma & Injury Prevention

Hospitalizations From Motor Vehicle Traffic Injuries

Table 24. Motor Vehicle Traffic Injuries, Hospitalization Rates per 100,000 by County, 2022-2024

County	2022	2023	2024
CLAY	45.5*	52.9*	71.9*
GREENE	51.6*	73.7	35.2*
OWEN	51.2*	79.0*	82.4*
PARKE	42.8*	36.4*	36.3*
PUTNAM	59.0	42.6*	58.2
SULLIVAN	82.2*	57.8*	43.3*
VERMILLION	64.7*	(S)	58.0*
Regional Rate	56.3	54.3	55.3
Statewide Rate	44.4	47.0	45.1

*Data Source: Indiana Hospital Association (IHA) Hospital Discharge dataset. Source is same for state and county. * = Unstable (count is between 5 and 19). (S) = Suppressed (count is less than 5).*

Key takeaways: No definitive trends or regional differences.

Trauma & Injury Prevention

Health topic: **Traumatic brain injury (TBI)**

Metric: **Death rate from TBI, non-fatal hospitalization rate from TBI and non-fatal ED visit rate from TBI**

Source: **IDOH Vital Records** and **IHA Hospital Discharge dataset**



Trauma & Injury Prevention

Deaths From Traumatic Brain Injuries

Table 25. Traumatic Brain Injuries, Death Rates per 100,000 by County, 2022-2024			
County	2022	2023	2024
CLAY	19.0*	30.2*	22.7*
GREENE	38.7*	38.5*	19.2*
OWEN	27.9*	37.2*	27.5*
PARKE	24.4*	18.2*	54.5*
PUTNAM	16.1*	34.6*	26.5*
SULLIVAN	33.9*	24.1*	9.6*
VERMILLION	12.9*	32.4*	19.3*
Regional Rate	24.9	31.9	24.7
Statewide Rate	21.1	21.3	22.4

*Data Source: Indiana Department of Health Vital Records Division. Source is same for state and county. * = Unstable (count is less than 20).*

Key takeaways: No definitive trends or regional differences.



Trauma & Injury Prevention

ED Visits From Traumatic Brain Injuries

Table 26. Traumatic Brain Injuries, ED Visit Rates per 100,000 by County, 2022-2024			
County	2022	2023	2024
CLAY	299.5	343.9	325.5
GREENE	532.2	612.3	560.6
OWEN	423.6	427.3	549.2
PARKE	195.5	230.5	230.2
PUTNAM	370.0	375.3	354.5
SULLIVAN	309.6	346.9	385.2
VERMILLION	233.0	278.9	328.7
Regional Rate	358.7	394.3	402.1
Statewide Rate	246.1	260.1	261.2

Data Source: Indiana Hospital Association (IHA) Hospital Discharge dataset. Source is same for state and county.

Key takeaways: Rates are low for Parke and Vermillion compared to the region. Rates are high for Greene compared to the region. Rates for this region are high for Indiana. Rates are increasing both for this region and for the state. Greene saw an increase in 2022-2023. Owen saw an increase in 2023-2024.



Trauma & Injury Prevention

Hospitalizations From Traumatic Brain Injuries

Table 27. Traumatic Brain Injuries, Hospitalization Rates per 100,000 by County, 2022-2024

County	2022	2023	2024
CLAY	56.9*	79.4	79.5
GREENE	80.6	67.3	76.9
OWEN	74.5*	120.8	119.0
PARKE	91.6*	78.9*	103.0*
PUTNAM	59.0	63.9	52.9
SULLIVAN	62.9*	53.0*	86.7*
VERMILLION	71.2*	84.3*	90.2*
Regional Rate	69.4	76.1	82.3
Statewide Rate	62.2	64.7	66.4

*Data Source: Indiana Hospital Association (IHA) Hospital Discharge dataset. Source is same for state and county. * = Unstable (count is less than 20).*

Key takeaways: Rates are increasing both for this region and for the state.

Trauma & Injury Prevention

Health topic: **Overdoses (all drugs)**

Metric: **Death rate from overdoses, non-fatal hospitalization rate from overdoses, and non-fatal ED visit rate from overdoses**

Source: **IDOH Vital Records** and **IHA Hospital Discharge dataset**



Trauma & Injury Prevention

Deaths From Overdoses

Table 28. Overdoses, Death Rates per 100,000 by County, 2022-2024			
County	2022	2023	2024
CLAY	11.4*	34.0*	22.7*
GREENE	19.4*	22.4*	9.6*
OWEN	32.6*	32.5*	22.9*
PARKE	18.3*	6.1*	18.2*
PUTNAM	13.4*	18.6*	21.2*
SULLIVAN	14.5*	19.3*	14.4*
VERMILLION	12.9*	38.9*	19.3*
Regional Rate	17.2	24.2	18.2
Statewide Rate	39.1	32.4	24.7

*Data Source: Indiana Department of Health Vital Records Division. Source is same for state and county. * = Unstable (count is less than 20).*

Key takeaways: Rates for this region are low for Indiana.



Trauma & Injury Prevention

ED Visits From Overdoses

Table 29. Overdoses, ED Visit Rates per 100,000 by County, 2022-2024			
County	2022	2023	2024
CLAY	178.2	162.5	181.7
GREENE	283.8	246.8	281.9
OWEN	228.1	116.1	205.9
PARKE	128.3	151.7	139.3
PUTNAM	214.5	205.0	187.8
SULLIVAN	193.5	154.2	154.1
VERMILLION	265.4	220.5	199.8
Regional Rate	217.0	184.8	198.7
Statewide Rate	244.9	223.0	188.4

Data Source: Indiana Hospital Association (IHA) Hospital Discharge dataset. Source is same for state and county.

Key takeaways: Rates are low for Parke compared to the region. Rates are high for Greene compared to the region. Owen saw a drop in 2022-2023. Owen saw an increase in 2023-2024.



Trauma & Injury Prevention

Hospitalizations From Overdoses

Table 30. Overdoses, Hospitalization Rates per 100,000 by County, 2022-2024

County	2022	2023	2024
CLAY	68.2*	90.7	87.0
GREENE	48.4*	48.1*	76.9
OWEN	93.1	74.3*	77.8*
PARKE	48.9*	48.5*	48.5*
PUTNAM	50.9*	53.2	26.5*
SULLIVAN	53.2*	77.1*	48.2*
VERMILLION	38.8*	58.4*	141.8
Regional Rate	57.5	63.7	67.0
Statewide Rate	82.3	78.6	73.1

*Data Source: Indiana Hospital Association (IHA) Hospital Discharge dataset. Source is same for state and county. * = Unstable (count is less than 20).*

Key takeaways: Rates are increasing for this region but decreasing for the state.

Trauma & Injury Prevention

Health topic: **Opioid overdoses**

Metric: **Death rate from opioid overdoses, non-fatal hospitalization rate from opioid overdoses** and **non-fatal ED visit rate from opioid overdoses**

Source: **IDOH Vital Records**

Trauma & Injury Prevention

Deaths From Opioid Overdoses

Table 31. Opioid Overdoses, Death Rates per 100,000 by County, 2022-2024

County	2022	2023	2024
CLAY	3.8*	11.3*	7.6*
GREENE	12.9*	16.0*	6.4*
OWEN	23.3*	18.6*	13.7*
PARKE	18.3*	0.0*	6.1*
PUTNAM	13.4*	8.0*	15.9*
SULLIVAN	9.7*	4.8*	0.0*
VERMILLION	6.5*	25.9*	6.4*
Regional Rate	12.5	11.8	8.8*
Statewide Rate	30.2	23.4	16.6

*Data Source: Indiana Department of Health Vital Records Division. Source is same for state and county. * = Unstable (count is less than 20).*

Key takeaways: No definitive trends or regional differences.



Trauma & Injury Prevention

ED Visits From Opioid Overdoses

Table 32. Opioid Overdoses, ED Visit Rates per 100,000 by County, 2022-2024

County	2022	2023	2024
CLAY	34.1*	22.7*	22.7*
GREENE	87.1	38.5*	64.1
OWEN	107.1	41.8*	73.2*
PARKE	(S)	(S)	(S)
PUTNAM	64.3	55.9	29.1*
SULLIVAN	24.2*	33.7*	(S)
VERMILLION	(S)	45.4*	51.6*
Regional Rate	55.7	39.0	38.2
Statewide Rate	98.5	77.3	54.7

Data Source: Indiana Hospital Association (IHA) Hospital Discharge dataset. Source is same for state and county. * = Unstable (count is between 5 and 19). (S) = Suppressed (count is less than 5).

Key takeaways: Rates for this region are low for Indiana. Rates are decreasing both for this region and for the state.



Trauma & Injury Prevention

Hospitalizations From Opioid Overdoses

Table 33. Opioid Overdoses, Hospitalization Rates per 100,000 by County, 2022-2024

County	2022	2023	2024
CLAY	(S)	(S)	(S)
GREENE	(S)	(S)	19.2*
OWEN	(S)	23.2*	(S)
PARKE	(S)	(S)	(S)
PUTNAM	16.1*	(S)	(S)
SULLIVAN	(S)	(S)	(S)
VERMILLION	(S)	(S)	(S)
Regional Rate	9.5*	11.8	11.2*
Statewide Rate	20.3	20.7	17.6

*Data Source: Indiana Hospital Association (IHA) Hospital Discharge dataset. Source is same for state and county. * = Unstable (count is between 5 and 19). (S) = Suppressed (count is less than 5).*

Key takeaways: No definitive trends or regional differences.

Trauma & Injury Prevention

Health topic: **Overdose deaths by drug**

Metric: **Number of overdose deaths from heroin, benzodiazepine, cocaine, psychostimulants, and synthetic opioids**

Source: **IDOH Vital Records**

Trauma & Injury Prevention

Death Counts From Overdoses, Any Opioid

Table 34. Any Opioid Overdoses, Death Counts by County, 2022-2024

County	2022	2023	2024
CLAY	1	3	2
GREENE	4	5	2
OWEN	5	4	3
PARKE	3	0	1
PUTNAM	5	3	6
SULLIVAN	2	1	0
VERMILLION	1	4	1
Regional Total	21	20	15
Statewide Total	<i>2,064</i>	<i>1,608</i>	<i>1,149</i>

Data Source: Indiana Department of Health Vital Records Division. Source is same for state and county.

Key takeaways: Counts are decreasing both for this region and for the state.



Trauma & Injury Prevention

Death Counts From Overdoses, Heroin

Table 35. Heroin Overdoses, Death Counts by County, 2022-2024

County	2022	2023	2024
CLAY	0	0	0
GREENE	0	0	0
OWEN	0	0	0
PARKE	0	0	0
PUTNAM	1	0	0
SULLIVAN	0	0	0
VERMILLION	0	0	0
Regional Total	1	0	0
Statewide Total	66	24	25

Data Source: Indiana Department of Health Vital Records Division. Source is same for state and county.

Key takeaways: Putnam saw a drop in 2022-2023.

Trauma & Injury Prevention

Death Counts From Overdoses, Benzodiazepine

Table 36. Benzodiazepine Overdoses, Death Counts by County, 2022-2024

County	2022	2023	2024
CLAY	0	1	0
GREENE	1	0	0
OWEN	1	1	1
PARKE	0	0	1
PUTNAM	0	0	0
SULLIVAN	0	1	0
VERMILLION	0	1	0
Regional Total	2	4	2
Statewide Total	212	187	142

Data Source: Indiana Department of Health Vital Records Division. Source is same for state and county.

Key takeaways: No definitive trends or regional differences.



Trauma & Injury Prevention

Death Counts From Overdoses, Cocaine

Table 37. Cocaine Overdoses, Death Counts by County, 2022-2024			
County	2022	2023	2024
CLAY	1	1	0
GREENE	0	1	0
OWEN	0	0	0
PARKE	0	0	0
PUTNAM	1	0	0
SULLIVAN	0	0	0
VERMILLION	0	0	0
Regional Total	2	2	0
Statewide Total	478	442	348

Data Source: Indiana Department of Health Vital Records Division. Source is same for state and county.

Key takeaways: Greene saw an increase in 2022-2023. Putnam saw a drop in 2022-2023. Clay and Greene saw drops in 2023-2024.



Trauma & Injury Prevention

Death Counts From Overdoses, Psychostimulants Other Than Cocaine

Table 38. Psychostimulant Overdoses Other Than Cocaine, Death Counts by County, 2022-2024			
County	2022	2023	2024
CLAY	1	3	5
GREENE	2	4	2
OWEN	3	4	3
PARKE	1	1	1
PUTNAM	1	5	5
SULLIVAN	0	3	2
VERMILLION	2	3	1
Regional Total	10	23	19
Statewide Total	948	763	678

Data Source: Indiana Department of Health Vital Records Division. Source is same for state and county.

Key takeaways: Putnam saw an increase in 2022-2023.



Trauma & Injury Prevention

Death Counts From Overdoses, Synthetic Opioid

Table 39. Synthetic Opioid Overdoses, Death Counts by County, 2022-2024			
County	2022	2023	2024
CLAY	1	2	1
GREENE	4	4	1
OWEN	4	4	3
PARKE	3	0	0
PUTNAM	5	3	6
SULLIVAN	1	1	0
VERMILLION	1	1	0
Regional Total	19	15	11
Statewide Total	<i>1,911</i>	<i>1,504</i>	<i>1,045</i>

Data Source: Indiana Department of Health Vital Records Division. Source is same for state and county.

Key takeaways: Counts are decreasing both for this region and for the state. Parke saw a drop in 2022-2023. Putnam saw an increase in 2023-2024. Greene saw a drop in 2023-2024.

Trauma & Injury Prevention

Health topic: **Opioid prescribing**

Metric: **Opioid prescribing rate (per thousand)**

Source: Indiana Scheduled Prescription Electronic Collection and Tracking Program (INSPECT)

Trauma & Injury Prevention

Opioid Prescribing Rate

Table 40. Opioid Prescribing Rate per 1,000 by County, 2022-2024

County	2022	2023	2024
CLAY	679.8	691.2	678.4
GREENE	969.9	984.0	927.4
OWEN	1,094.5	1,101.3	1,008.3
PARKE	673.0	628.7	592.9
PUTNAM	815.5	825.8	767.0
SULLIVAN	716.6	795.6	808.3
VERMILLION	773.2	787.1	724.3
Regional Rate	828.4	842.5	797.9
Statewide Rate	701.2	686.2	628.7

Data Source: Indiana Scheduled Prescription Electronic Collection and Tracking Program (INSPECT). Source is same for state and county.

Key takeaways: Sullivan saw an increase in 2022-2023. Owen saw a drop in 2023-2024.

Trauma & Injury Prevention

Health topic: **Suicide and non-fatal self-harm**

Metric: **Death rate from self-harm, non-fatal hospitalization rate from self-harm** and **non-fatal ED visit rate from self-harm**

Source: **IDOH Vital Records** and **IHA Hospital Discharge dataset**



Trauma & Injury Prevention

Deaths From Self-Harm

Table 41. Self-Harm, Death Rates per 100,000 by County, 2022-2024

County	2022	2023	2024
CLAY	26.5*	22.7*	18.9*
GREENE	19.4*	28.8*	19.2*
OWEN	32.6*	37.2*	22.9*
PARKE	6.1*	6.1*	30.3*
PUTNAM	21.4*	39.9*	15.9*
SULLIVAN	29.0*	14.5*	28.9*
VERMILLION	32.4*	38.9*	32.2*
Regional Rate	23.7	28.3	22.3
Statewide Rate	16.8	17.3	16.9

*Data Source: Indiana Department of Health Vital Records Division. Source is same for state and county. * = Unstable (count is less than 20).*

Key takeaways: Rates for this region are high for Indiana.



Trauma & Injury Prevention

ED Visits From Self-Harm

Table 42. Self-Harm, ED Visit Rates per 100,000 by County, 2022-2024

County	2022	2023	2024
CLAY	155.4	158.7	147.6
GREENE	135.5	125.0	163.4
OWEN	116.4	65.0*	123.6
PARKE	116.1*	103.1*	96.9*
PUTNAM	126.0	133.1	121.7
SULLIVAN	150.0	81.9*	125.2
VERMILLION	181.2	97.3*	148.2
Regional Rate	138.1	114.5	134.0
Statewide Rate	111.9	108.7	105.3

*Data Source: Indiana Hospital Association (IHA) Hospital Discharge dataset. Source is same for state and county. * = Unstable (count is less than 20).*

Key takeaways: Greene saw an increase in 2023-2024.



Trauma & Injury Prevention

Hospitalizations From Self-Harm

Table 43. Self-Harm, Hospitalization Rates per 100,000 by County, 2022-2024

County	2022	2023	2024
CLAY	30.3*	45.4*	41.6*
GREENE	19.4*	25.6*	32.0*
OWEN	37.2*	27.9*	45.8*
PARKE	36.7*	30.3*	(S)
PUTNAM	21.4*	21.3*	18.5*
SULLIVAN	24.2*	33.7*	33.7*
VERMILLION	(S)	(S)	(S)
Regional Rate	26.1	28.9	30.6
Statewide Rate	30.7	29.4	27.5

*Data Source: Indiana Hospital Association (IHA) Hospital Discharge dataset. Source is same for state and county. * = Unstable (count is between 5 and 19). (S) = Suppressed (count is less than 5).*

Key takeaways: Rates are increasing for this region but decreasing for the state.

Syndromic Surveillance

Health topic: **Emergency department utilization**

Metric: **Emergency department visit counts**

Source: **IHA Hospital Discharge dataset**

**ED visit counts by facility represent where care is accessed, not necessarily where the patient lives. A count of 0 indicates that individuals rely on neighboring counties for emergency care.*



Syndromic Surveillance

Emergency Department Utilization

Table 44. ED Visit Counts by Facility County, 2020-2024					
County	2020	2021	2022	2023	2024
CLAY	6,363	6,374	6,879	7,441	7,279
GREENE	7,236	8,819	9,554	10,127	10,636
OWEN	0*	0*	0*	0*	0*
PARKE	0*	0*	0*	0*	0*
PUTNAM	9,096	10,503	11,687	12,179	11,065
SULLIVAN	6,246	7,032	7,809	7,867	7,984
VERMILLION	7,866	9,051	9,876	9,813	10,306
Regional Total	36,807	41,779	45,805	47,427	47,270
Statewide Total	835,498	934,002	995,892	1,017,665	1,017,155

*Data Source: Indiana Hospital Association (IHA) Hospital Discharge dataset. Source is same for state and county. * = No emergency departments within the county.*

Key takeaways: Counts are increasing both for this region and for the state. Greene and Putnam saw increases in 2020-2021.

Vitality

Health topic: **Life expectancy**

Metric: **Average life expectancy**

Source: **University of Wisconsin Population Institute**



Vitality

Life Expectancy

Table 45. Life Expectancy by County, 2019-2021	
County	2019-2021
CLAY	75.6
GREENE	74.7
OWEN	73.5
PARKE	78.2
PUTNAM	76.4
SULLIVAN	75.6
VERMILLION	74.2
Regional Average	75.5
Statewide Average	75.6
<i>Data Source: University of Wisconsin Population Health Institute. Source is same for state and county.</i>	

Key takeaways: No definitive trends or regional differences.

Medical Workforce

Health topic: **Professional capacity**

Metric: **Healthcare provider ratio**

Definition: **Ratio of full-time equivalent physician count to population**

Source: **IU School of Medicine Bowen Center**



Medical Workforce

Provider Ratio

Table 46. Provider Ratios by County, 2015-2023					
County	2015	2017	2019	2021	2023
CLAY	1,181	1,412	1,007	829	826
GREENE	1,350	1,541	1,147	887	880
OWEN	2,523	2,523	2,903	3,311	1,737
PARKE	1,213	1,820	896	1,267	1,569
PUTNAM	925	675	561	633	692
SULLIVAN	1,398	1,417	598	591	488
VERMILLION	862	624	446	476	478
Regional Ratio	1,206	1,127	784	791	777
Statewide Ratio	361	316	209	205	215

Data Source: Bowen Center for Health Workforce Research and Policy. Source is same for state and county.

Key takeaways: Values are low for Putnam and Vermillion compared to the region. Values are high for Owen and Parke compared to the region. Values for this region are high for Indiana. Values are decreasing for this region but not for the state. Parke saw an increase in 2015-2017. Parke and Sullivan saw drops in 2017-2019. Owen saw a drop in 2021-2023.

Geospatial Analysis

Health topic: **Drive-time to medical resources**

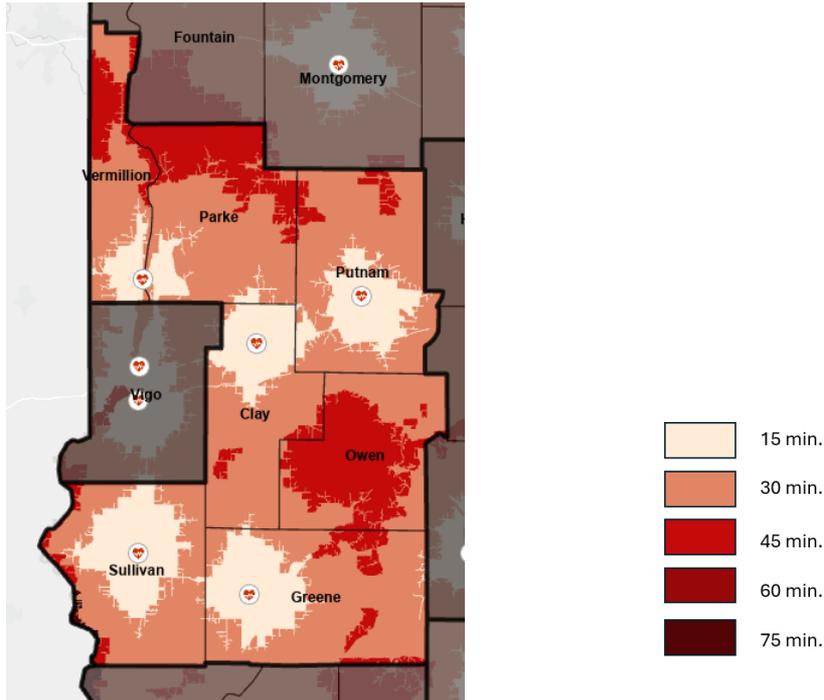
Metric: **Drive-time analysis of local emergency departments*** and
Drive-time analysis of local birthing hospitals*

Source: **IDOH Maternal and Child Health** and **Indiana Hospital Association**

**Out-of-state emergency departments and birthing hospitals were not included in this analysis.*

Geospatial Analysis

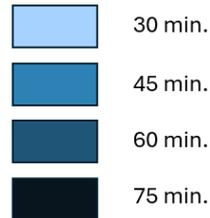
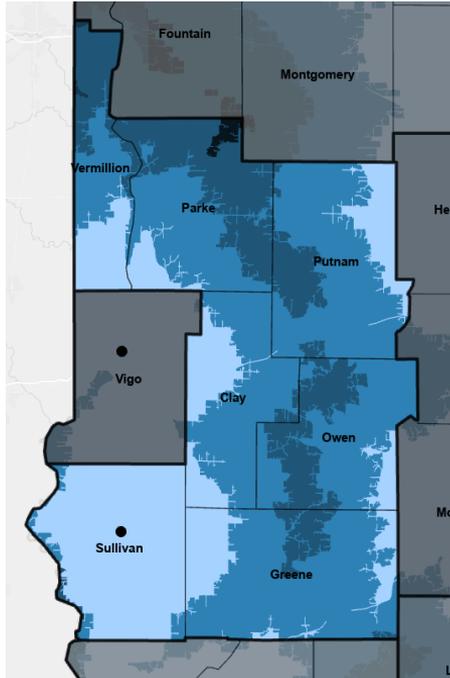
Drive-time to emergency departments



Key takeaways: Parts of all counties in these region exhibit drive-times of 30-45 minutes to the nearest Indiana emergency care facility.

Geospatial Analysis

Drive-time to birthing hospitals



Key takeaways: Vermillion, Parke, Putnam, Clay, Owen and Greene counties exhibit drive-times of 60 minutes to the nearest Indiana birthing hospital. Northeast Parke county contains **the highest drive-time in this region, at 75 minutes.**