

# County Immunization Rate Assessment 

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Appendix A: Indiana Immunization Rates by County for Series Completion 4:3:1:3:3:1:4 among Children Aged 19-35 Months, 2023. $\qquad$

Appendix B: Indiana Immunization Series Completion Rate
For 4:3:1:3:3:1:4 among Children 19-35 Months by County, 2022 \& 2023 $\qquad$

Appendix C: Indiana Immunization Antigen Rates by County for Series Completion 4:3:1:3:3:1:4 among Children Aged 19-35 Months, 2023

| CHIRP | Children and Hoosiers Immunization Registry Program, also referred to as the "Indiana Immunization Registry;" the software application used by the Indiana Department of Health Immunization Division for providers to report immunization data for patients |
| :---: | :---: |
| Registered in CHIRP | A record exists for the patient, regardless of data contained within that record. Many records are imported through Vital Records data, established in 2005, and contain only the patient's name and address, with no immunization data. |
| Active Immunization Record | A patient record that is marked as "active" in CHIRP and contains two or more vaccinations, excluding influenza |
| CDC | Centers for Disease Control and Prevention |
| VTrckS | Vaccine Tracking System, maintained by the CDC for use in managing vaccine ordering |
| 19-35 months of age | Patients born between 04/01/2019 and 08/31/2020 |
| 4:3:1:3:3:1:4 | Vaccine series assessed for 19-35 months of age: 4 DTaP, 3 Polio, 1 MMR, 3 Hib, 3 HepB, 1 Var, and 4 PCV |
| DTaP | Vaccine to prevent diphtheria, tetanus and acellular pertussis |
| Polio | Vaccine to prevent poliomyelitis |
| MMR | Vaccine to prevent measles mumps and rubella |
| Hib | Vaccine to prevent Haemophilus influenzae type B |
| HepB | Vaccine to prevent hepatitis B |
| Var | Vaccine to prevent varicella (chicken pox) |
| PCV | Vaccine to prevent pneumococcal disease |
| Fully Insured | A patient who has health insurance coverage that covers vaccine |
| VFC | Vaccines for Children program, funded through the CDC. that provides free vaccine for eligible children in the state of Indiana |
| VFC Provider | An immunization provider who is enrolled in the VFC program and therefore granted permission to order and administer vaccines covered under the VFC program to eligible persons |
| VFC Eligible | A child aged $0-18$ is eligible to receive free vaccine under the VFC program if they are Medicaid eligible, are uninsured or have health insurance that does not cover vaccines, or if they are a child who identifies as an American Indian or Alaskan Native, regardless of insurance status. (NOTE: Some children who are classified as "underinsured" can be funded with VFC vaccine at approved facilities.*) |

*Please refer to the IDOH Immunization Division Eligibility Policy for a detailed definition of underinsured.

## BACKGROUND

Each year, the Advisory Committee for Immunization Practices (ACIP) releases a recommended immunization schedule for childhood vaccination. These recommendations are supported by the Centers for Disease Control and Prevention (CDC). For each vaccine-preventable disease, there are specific rules and guidelines in the administration of the vaccine, designed to result in the optimal immune response in the patient when followed. If these guidelines are not adhered to, in some cases, a child may be left unprotected. This can include scenarios in which the child was administered a dose of vaccine incorrectly (invalid dose) or those who never receive the vaccine at all.

ACIP recommends children age 19-35 months complete the 4:3:1:3:3:1:4 immunization series, comprised of at least four doses of diphtheria-tetanus-acellular pertussis (DTaP), at least three doses of polio, at least one dose of measles-mumpsrubella (MMR), at least three doses of Haemophilus influenzae B (Hib) depending on the brand used, at least three doses of hepatitis $B$, at least one dose of varicella antigens, and at least four doses of pneumococcal conjugate vaccine (PCV).

County-level vaccination coverage estimates are important. Public health issues often originate in small geographic areas, and certain public health actions are most effective at the local level. With the use of the state immunization registry, Children and Hoosier Immunization Registry Program (CHIRP), a methodology has been developed for assessing children by county for completion of the entire ACIP-recommended childhood immunization series (4:3:1:3:3:1:4).

It is increasingly important to measure children for completion of the entire series of childhood vaccines, rather than focusing on one antigen. In assessing the complete series, we can assist in improving immunization rates for at least 10 different vaccinepreventable diseases in one measure. Improving the rate of completion for the entire series of childhood vaccines in those age 19-35 months can protect children from diseases such as diphtheria, pertussis, tetanus, polio, measles, mumps, rubella, varicella, pneumococcal disease and Haemophilus influenzae.

Providing a measure of how well protected children are in specific communities helps immunization programs throughout the state identify areas of greatest need and enable the targeting of resources. This may result in improving immunization rates in

Indiana, which ultimately will help reduce the incidence of morbidity and mortality due to vaccine-preventable diseases.

## METHODS

Immunization data by county was obtained by extracting raw data for the birth cohort from CHIRP through SAS software. This data was filtered to include only those children who had an active immunization record as defined by this assessment (see Data Dictionary), were born in the defined birth cohort, had a current address listed as an Indiana address and had received a valid vaccine on or before March 31, 2023. The query's output provides the number of patients assessed per county who meet the above criteria and number of each up-to-date (UTD) vaccine given per antigen by county. The rate per each antigen is calculated by dividing the number of UTD vaccines of that antigen by the total number of patients assessed in that county.

For completion rate, a query was used to calculate the total number of patients in that county who are UTD on all vaccines in the 4:3:1:3:3:1:4 immunization series. The 4:3:1:3:3:1:4 immunization completion rate for each county was calculated as the total number of children in that county who had a completed series divided by the total number of children in that county who were assessed. The number of UTD patients on all seven vaccines in the series was then divided by the total number of patients assessed in that county. For state totals, counts were summed from each of the 92 counties. The Indiana state rate was calculated by dividing the summed number of vaccines given for the entire state by the number of summed patients assessed. The number of patients assessed included only those who had an active immunization record and were born within the birth cohort for the corresponding age range.

Each county's cohort was assessed by VFC eligibility category, being "VFCEligible," "Not VFC-Eligible" or "Underinsured" (see Data Dictionary for a definition of each category). Any child who was missing a VFC eligibility category code from CHIRP was included in the overall rate for the county but was not included in a VFC eligibility category assessment.

The total number of VFC providers (803) by county enrolled as of April 15, 2023, was determined by exporting a VFC provider list from PEAR, an application provided by

CDC. Providers that were listed as birthing hospitals, pharmacies, mobile units, specialty clinics, and juvenile corrections centers were removed, leaving 733 providers that vaccinate children aged 19 - 35 months old within the state of Indiana.

The total population for children ages 19 to 35 months was calculated based on the CDC Wonder online Database. The population estimates for 1-and 2-year-olds were collected. One-half of the 1-year-old population estimate was added to the 2 -year-old estimate to get a population estimate for 19 - to 35 -month-olds in Indiana by county.

## LIMITATIONS

Providers' participation in the use of CHIRP for reporting immunizations was mandated in Indiana as of July 1, 2015, which means all Indiana medical providers who are authorized to administer immunizations must submit complete information to CHIRP within seven business days of administering an immunization to any patient age 18 years and younger. However, we recognize that some data gaps continue to exist, as not all providers have consistently entered data into CHIRP. The data analyzed from CHIRP is considered representative of the entire state, yet the true number of immunizations administered in Indiana remains unknown. Nonetheless, this assessment showed that from 2022 to 2023, approximately $1.6 \%$ fewer immunization records were assessed. See Table 3 for a detailed comparison between 2022 and 2023.

Upon breaking out the 19- to 35-month-old cohort into VFC eligibility categories, any child who was missing a VFC eligibility code from CHIRP was still included in the county rate but was not included in any analysis by VFC eligibility category. Therefore, the rate among each VFC eligibility category is only representative of those children who had appropriate documentation of their VFC eligibility status in CHIRP at the time of the most recent vaccination.

## RESULTS

The full results of this assessment can be found in the data table in Appendix A, or an antigen breakdown can be found in Appendix C. A comparison between 2022 and 2023 immunization completion rates by county, number assessed, and population represented can be found in Appendix B. Table 1 below
summarizes the state average and lists the 10 counties with the lowest rates. A summary of the number of VFC providers by county is also provided. Table 2 below displays the state average with the counties with the 10 highest rates. A summary of the number of VFC providers by county is also provided. Table 3 summarizes the 2021-2023 Indiana assessment.

Table 1: Ten Lowest Rates by County 2023

| COUNTY | TOTAL COMPLETION RATE FOR <br> 4:3:1:3:3:1:4 | NUMBER OF VFC PROVIDERS <br> ENROLLED |
| :--- | :---: | :---: |
|  |  |  |
| ~INDIANA | $56.4 \%$ | $\mathbf{7 3 3}$ |
| LA PORTE | $34 \%$ | 5 |
| NEWTON | $38 \%$ | 1 |
| LAGRANGE | $39 \%$ | 5 |
| JASPER | $43 \%$ | 2 |
| MARSHALL | $45 \%$ | 9 |
| DAVIESS | $46 \%$ | 6 |
| BENTON | $47 \%$ | 1 |
| SCOTT | $48 \%$ | 3 |
| FOUNTAIN | $49 \%$ | 2 |
| JACKSON | $50 \%$ | 3 |

The 2023 average completion rate for Indiana counties is $56.4 \%$. Of Indiana's 92 counties, 83 are greater than or equal to the state average of $50 \%$. It is important to consider the number of providers per county. Having more providers in a county allows for an increase in vaccination rates but can also raise a concern when children are not being vaccinated due to misinformation, lack of knowledge, etc. When a county has a lower number of providers and the rate is higher, it is crucial to understand what the one-to-one ratio is per county and providers. Therefore, the overall completion rate is assessed by looking at the number of patients receiving the vaccine divided by a total number of patients assessed rather than the census data.

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TABLE 2: TEN HIGHEST RATES BY COUNTY 2023

| COUNTY | TOTALCOMPLETION RATE FOR <br> 4:3:1:3:3:1:4 <br> NUMBER OF VFC PROVIDERS <br> ENROLLED |  |
| :--- | :---: | :---: |
| ~INDIANA | $\mathbf{5 6 . 4 \%}$ | $\mathbf{7 3 3}$ |
| POSEY | $79 \%$ | 3 |
| ST. JOSEPH | $76 \%$ | 37 |
| DUBOIS | $76 \%$ | 3 |
| WARRICK | $75 \%$ | 9 |
| RUSH | $75 \%$ | 4 |
| GIBSON | $73 \%$ | 5 |
| OWEN | $73 \%$ | 2 |
| PIKE | $73 \%$ | 2 |
| MONROE | $72 \%$ | 5 |
| HENRY | $72 \%$ | 4 |

TABLE 3: SUMMARY 2021-2023 INDIANA ASSESSMENT

|  | $\mathbf{2 0 2 1}$ | $\mathbf{2 0 2 2}$ | $\mathbf{2 0 2 3}$ |
| :--- | :---: | :---: | :---: |
| Indiana completion rate for 4:3:1:3:3:1:4 series | $61 \%$ | $58 \%$ | $56.4 \%$ |
| Number assessed 19-35 months of age | 124,974 | 122,568 | 118,780 |
| Percentage of population represented | $98 \%$ | $98 \%$ | $95 \%$ |
| Number of VFC providers enrolled | 743 | 799 | 733 |
| Number/completion rate by not VFC-eligible | $18,309 /$ | $14,612 /$ | $12,952 /$ |
| Number/completion rate by underinsured | $76 \%$ | $77 \%$ | $76 \%$ |
| Number/completion rate by VFC-eligible | $766 /$ | $667 /$ | $651 /$ |
|  | $71 \%$ | $66 \%$ | $65 \%$ |
|  | $64,038 /$ | $63,025 /$ | $60,466 /$ |
|  | $65 \%$ | $60 \%$ | $61 \%$ |

The data this year does show a none to slight decrease in individual vaccination rates. Hepatitis B has the highest decrease in rate by $2 \%$ as shown in Appendix C. Further investigation is being done to properly determine what can cause a $2 \%$ drop in the Hepatitis B vaccination rate.

## Map: 4:3:1:3:3:1:4 Completion Rate by County for 2023



## DISCUSSION

Indiana's 2023 immunization rate among children aged 19-35 months is 56.4\%, which decreased $1.6 \%$ relative to the 2022 rate of $58 \%$. According to 2020 U.S. Census data by age, Indiana's population of 19 - to 35 -month-old children should be approximately 124,595 . After excluding any immunization records that were not considered to be "active," 118,780 records were assessed in this analysis. This represents

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$95 \%$ of the estimated population. For 29 counties, the percentage of the population represented exceeded 100\%; they are highlighted in red in Appendix A. This is thought to be attributable to an increase in children aged 19-35 months who relocated to these counties after 2022, as well as the two-year difference between the census data and the data extracted from CHIRP for analysis of the rates.

## RECOMMENDATIONS

Achieving high vaccination rates is attainable, and many counties have made progress among the 19 - to 35 -months age group series completion. Additional efforts are needed to ensure that healthcare providers administer recommended vaccinations and use each visit as an opportunity to ensure each child is fully vaccinated on time with every recommended vaccine. Rather than targeting efforts toward children already past due, health departments need to implement targeted provider education to confirm kids are vaccinated before they fall within 19-35 months of age. Reducing the number of missed opportunities and vaccinating at the 15 -month appointment would greatly improve vaccination rates, as well as reduce the number of children who are behind.

## CONCLUSIONS

The results of this analysis demonstrate the need for further investigation into identifying contributing factors that might explain why children are not completing the childhood vaccination series by 35 months of age. Further details of each county's data should be assessed on a case-by-case basis to find pockets of need.

It can be observed that the counties with the highest immunization rates also have some of the lowest numbers of VFC providers. One reason for this may be that fewer number of providers have more control over maintaining patient records and performing activities to increase the number of children who complete the immunization series. It should be noted, however, that there may be many disadvantages to limiting immunization services to a few providers in an isolated area, as this could create potential barriers to accessing health care.

Evidence-based approaches to increasing immunization should be utilized, such as targeting populations in need and reminder-recall activities that prompt the guardians of children missing immunizations to contact their medical providers.

## REFERENCES

- Centers for Disease Control and Prevention (CDC). (2015) Epidemiology and Prevention of Vaccine-Preventable Diseases. 13 th ed. May 2015.
- Indiana Immunization Registry, CHIRP. Data obtained April 6, 2023.
- The output for this paper was generated using SAS software, Version 9.4 of the SAS System for Windows. Copyright © 2021 SAS Institute, Inc. SAS and all other SAS Institute, Inc., product or service names are registered trademarks or trademarks of SAS Institute, Inc., Cary, NC, USA.
- U.S. Department of Health and Human Services (US DHHS), Centers for Disease Control and Prevention (CDC), National Center for Health Statistics (NCHS), BridgedRace
- Population Estimates, United States, July 1st resident population by state, county, age, sex, bridged-race, and Hispanic origin, on CDC WONDER Online Database

| APPENDIX A: 2023 Data Summary. Completion rate of 4:3:1:3:3:1:4 immunization series among children 19-35 month with an active immunization record in CHIRP |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| COUNTY | NUMBER OF <br> VFC <br> PROVIDERS <br> ENROLLED | 2020 (Census) POPULATION 19-35 MONTHS OF AGE | $\begin{array}{\|c\|} \text { TOTAL } \\ \text { PATIENTS } \\ \text { ASSESSED } \end{array}$ | PERCENTAGE OF POPULATION REPRESENTED | $\left\|\begin{array}{c\|} \text { TOTAL } \\ \text { COMPLETION } \\ \text { FOR } 4: 3: 1: 3: 3: 1: 4 \end{array}\right\|$ |  | (SERIES <br> COMPLETE <br> _Number <br> Vaccinated <br> Vatient UTD <br> Not VFC- <br> Eligible | TOTAL PATIENTS ASSESSED NOT VFC-ELIGIBLE | COMPLETION RATE: NOT VFC-ELIGIBLE | (SERIES <br> COMPLETE) <br> Number <br> Vaccinated <br> Patients UTD <br> Underinsured | $\begin{gathered} \text { TOTAL } \\ \text { PATIENTS } \\ \text { ASSESSED } \\ \text { UNDERINSURED } \end{gathered}$ | $\begin{gathered} \text { COMPLETION } \\ \text { RATE: } \\ \text { UNDERINSURED } \end{gathered}$ | (SERIES <br> COMPLETE) <br> Number <br> Vaccinated <br> Patients UTD <br> VFC-Eligible | $\begin{gathered} \text { TOTAL } \\ \text { PATIENTS } \\ \text { ASSESSED } \\ \text { VFC-- } \\ \text { ELIGIBLE } \end{gathered}$ | COMPLETION <br> RATE: VFCELIGIbLE |
| -INDIANA | 733 | 124,595 | 118,780 | 95\% | 67018 | 56.4\% | 9782 | 12,952 | 76\% | 425 | 651 | 65\% | 36,728 | 60,466 | 61\% |
| ADAMS | 3 | 963 | 648 | 67\% | 335 | 51.7\% | 29 | 38 | 76\% | 3 | 4 | 75\% | 177 | 374 | 47\% |
| ALLEN | 32 | 7989 | 7368 | 92\% | 4436 | 60.2\% | 216 | 311 | 69\% | 16 | 25 | 64\% | 2432 | 4094 | 59\% |
| BARTHOLOMEW | 8 | 1592 | 1599 | 100\% | 1002 | 62.7\% | 74 | 96 | 77\% | 2 | 5 | 40\% | 400 | 580 | 69\% |
| BENTON | 1 | 165 | 131 | 79\% | 61 | 46.6\% | 9 | 13 | 69\% | 0 | 0 | 0\% | 39 | 67 | 58\% |
| BLACKFORD | 1 | 209 | 181 | 87\% | 106 | 58.6\% | 7 | 11 | 64\% | 0 | 0 | 0\% | 81 | 118 | 69\% |
| BOONE | 8 | 1313 | 1384 | 105\% | 868 | 62.7\% | 120 | 168 | 71\% | 13 | 22 | 59\% | 247 | 332 | 74\% |
| BROWN | 1 | 193 | 158 | 82\% | 102 | 64.6\% | 22 | 28 | 79\% | 0 |  | 0\% | 66 | 91 | 73\% |
| CARROLL | 3 | 376 | 301 | 80\% | 192 | 63.8\% | 48 | 52 | 92\% | 2 | 3 | 67\% | 100 | 141 | 71\% |
| CASS | 2 | 633 | 648 | 102\% | 375 | 57.9\% | 74 | 90 | 82\% | 2 | 3 | 67\% | 242 | 435 | 56\% |
| CLARK | 10 | 2191 | 2121 | 97\% | 1153 | 54.4\% | 279 | 364 | 77\% | 3 | 6 | 50\% | 550 | 787 | 70\% |
| CLAY | 5 | 476 | 549 | 115\% | 367 | 66.8\% | 62 | 73 | 85\% | 0 | 0 | 0\% | 226 | 341 | 66\% |
| CLINTON | 3 | 639 | 700 | 110\% | 454 | 64.9\% | 60 | 71 | 85\% | 22 | 25 | 88\% | 279 | 365 | 76\% |
| CRAWFORD | 3 | 186 | 113 | 61\% | 78 | 69.0\% | 14 | 16 | 88\% | 0 | 0 | 0\% | 48 | 70 | 69\% |
| DAVIESS | 6 | 878 | 500 | 57\% | 229 | 45.8\% | 74 | 105 | 70\% | 1 | 2 | 50\% | 121 | 300 | 40\% |
| DE KALB | 9 | 834 | 583 | 70\% | 350 | 60.0\% | 38 | 61 | 62\% | 1 | 1 | 100\% | 178 | 270 | 66\% |
| DEARBORN | 4 | 495 | 463 | 94\% | 333 | 71.9\% | 118 | 136 | 87\% | 9 | 11 | 82\% | 160 | 231 | 69\% |
| DECATUR | 6 | 849 | 823 | 97\% | 511 | 62.1\% | 50 | 65 | 77\% | 0 | 2 | 0\% | 255 | 429 | 59\% |
| DELAWARE | 13 | 1620 | 1840 | 114\% | 1100 | 59.8\% | 85 | 96 | 89\% | 4 | 5 | 80\% | 751 | 1091 | 69\% |
| DUBOIS | 3 | 803 | 718 | 89\% | 544 | 75.8\% | 121 | 147 | 82\% | 2 | 3 | 67\% | 204 | 282 | 72\% |
| ELKHART | 30 | 4647 | 3724 | 80\% | 2113 | 56.7\% | 182 | 274 | 66\% | 6 | 16 | 38\% | 1506 | 2572 | 59\% |
| FAYETTE | 3 | 424 | 358 | 84\% | 248 | 69.3\% | 17 | 18 | 94\% | 0 | 0 | 0\% | 191 | 258 | 74\% |
| FLOYD | 5 | 1390 | 1161 | 84\% | 657 | 56.6\% | 141 | 184 | 77\% | 5 | 7 | 71\% | 293 | 456 | 64\% |
| FOUNTAIN | 2 | 315 | 331 | 105\% | 161 | 48.6\% | 33 | 45 | 73\% | 0 | 0 | 0\% | 90 | 159 | 57\% |
| FRANKLIN | 3 | 458 | 233 | 51\% | 154 | 66.1\% | 58 | 73 | 79\% | 3 | 4 | 75\% | 62 | 98 | 63\% |
| FULTON | 2 | 376 | 308 | 82\% | 159 | 51.6\% | 33 | 39 | 85\% | 2 | 3 | 67\% | 77 | 177 | 44\% |
| GIBSON | 5 | 635 | 551 | 87\% | 404 | 73.3\% | 197 | 233 | 85\% | 3 | 4 | 75\% | 134 | 187 | 72\% |
| GRANT | 6 | 1182 | 1066 | 90\% | 640 | 60.0\% | 77 | 106 | 73\% | 8 | 12 | 67\% | 483 | 784 | 62\% |
| GREENE | 6 | 553 | 410 | 74\% | 290 | 70.7\% | 74 | 89 | 83\% | 3 | 4 | 75\% | 200 | 278 | 72\% |
| HAMILTON | 23 | 6229 | 5476 | 88\% | 3327 | 60.8\% | 735 | 1050 | 70\% | 20 | 25 | 80\% | 1017 | 1441 | 71\% |
| HANCOCK | 8 | 1343 | 1385 | 103\% | 910 | 65.7\% | 95 | 131 | 73\% | 3 | 5 | 60\% | 327 | 462 | 71\% |
| HARRISON | 4 | 664 | 617 | 93\% | 359 | 58.2\% | 82 | 116 | 71\% | 3 | 4 | 75\% | 143 | 224 | 64\% |
| HENDRICKS | 13 | 2795 | 3462 | 124\% | 1921 | 55.5\% | 102 | 131 | 78\% | 6 | 12 | 50\% | 753 | 1155 | 65\% |
| HENRY | 4 | 755 | 699 | 93\% | 504 | 72.1\% | 81 | 91 | 89\% | 0 | 0 | 0\% | 286 | 366 | 78\% |
| HOWARD | 9 | 1535 | 1448 | 94\% | 893 | 61.7\% | 78 | 102 | 76\% | 1 | 3 | 33\% | 587 | 903 | 65\% |
| HUNTINGTON | 5 | 601 | 618 | 103\% | 429 | 69.4\% | 64 | 74 | 86\% | 1 | 2 | 50\% | 251 | 346 | 73\% |
| JACKSON | 3 | 891 | 1104 | 124\% | 549 | 49.7\% | 81 | 116 | 70\% | 0 | 2 | 0\% | 355 | 544 | 65\% |
| JASPER | 2 | 522 | 563 | 108\% | 241 | 42.8\% | 16 | 32 | 50\% | 4 | 8 | 50\% | 126 | 252 | 50\% |
| JAY | 5 | 437 | 374 | 86\% | 242 | 64.7\% | 28 | 35 | 80\% | 1 | 1 | 100\% | 172 | 235 | 73\% |
| JEFFERSON | 2 | 546 | 574 | 105\% | 380 | 66.2\% | 119 | 145 | 82\% | 1 | 2 | 50\% | 210 | 304 | 69\% |
| JENNINGS | 2 | 518 | 542 | 105\% | 305 | 56.3\% | 37 | 53 | 70\% | 0 | 2 | 0\% | 214 | 296 | 72\% |
| JOHNSON | 20 | 2915 | 3030 | 104\% | 1602 | 52.9\% | 273 | 357 | 76\% | 12 | 25 | 48\% | 767 | 1273 | 60\% |
| KNOX | 3 | 630 | 552 | 88\% | 359 | 65.0\% | 121 | 173 | 70\% | 9 | 9 | 100\% | 203 | 309 | 66\% |
| KOSCIUSKO | 6 | 1511 | 1188 | 79\% | 653 | 55.0\% | 144 | 213 | 68\% | 3 | 6 | 50\% | 304 | 589 | 52\% |
| LA PORTE | 5 | 1094 | 549 | 50\% | 187 | 34.1\% | 19 | 30 | 63\% | 1 | 2 | 50\% | 117 | 325 | 36\% |
| LAGRANGE | 53 | 8753 | 8204 | 94\% | 3225 | 39.3\% | 350 | 611 | 57\% | 13 | 24 | 54\% | 1756 | 4445 | 40\% |
| LAKE | 13 | 1906 | 1653 | 87\% | 832 | 50.3\% | 216 | 314 | 69\% | 4 | 4 | 100\% | 461 | 990 | 47\% |
| LAWRENCE | 5 | 769 | 683 | 89\% | 461 | 67.5\% | 117 | 144 | 81\% | 7 | 12 | 58\% | 302 | 461 | 66\% |
| MADISON | 22 | 2123 | 2196 | 103\% | 1407 | 64.1\% | 98 | 113 | 87\% | 4 | 6 | 67\% | 1017 | 1431 | 71\% |
| MARION | 92 | 20739 | 20925 | 101\% | 10571 | 50.5\% | 807 | 1174 | 69\% | 72 | 115 | 63\% | 6533 | 10834 | 60\% |
| MARSHALL | 9 | 850 | 787 | 93\% | 352 | 44.7\% | 33 | 52 | 63\% | 0 | - 1 | 0\% | 191 | 431 | 44\% |
| MARTIN | 1 | 180 | 163 | 91\% | 100 | 61.3\% | 24 | 34 | 71\% | 0 | 2 | 0\% | 56 | 94 | 60\% |
| MIAMI | 3 | 534 | 496 | 93\% | 264 | 53.2\% | 22 | 32 | 69\% | 3 | 5 | 60\% | 169 | 305 | 55\% |
| MONROE | 5 | 1924 | 1614 | 84\% | 1167 | 72.3\% | 481 | 630 | 76\% | 8 | 12 | 67\% | 646 | 907 | 71\% |
| MONTGOMERY | 5 | 651 | 670 | 103\% | 379 | 56.6\% | 57 | 75 | 76\% | 4 | 5 | 80\% | 231 | 334 | 69\% |
| MORGAN | 8 | 1144 | 1393 | 122\% | 726 | 52.1\% | 75 | 91 | 82\% | 4 | 9 | 44\% | 420 | 753 | 56\% |
| NEWTON | 1 | 226 | 177 | 78\% | 67 | 37.9\% | 8 | 9 | 89\% | 0 | 0 | 0\% | 46 | 95 | 48\% |
| NOBLE | 4 | 954 | 834 | 87\% | 457 | 54.8\% | 36 | 48 | 75\% | 5 | 9 | 56\% | 261 | 512 | 51\% |
| OHIO | 2 | 95 | 125 | 132\% | 74 | 59.2\% | 8 | 10 | 80\% | 0 | 0 | 0\% | 36 | 62 | 58\% |


| APPENDIX A: 2023 Data Summary. Completion rate of 4:3:1:3:3:1:4 immunization series among children 19-35 month with an active immunization record in CHIRP |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| COUNTY | NUMBER OF VFC PROVIDERS ENROLLED | $\begin{array}{\|c\|} \hline 2020 \text { (Census) } \\ \text { POPULATION } \\ 19-35 \\ \text { MONTHS OF } \\ \text { AGE } \end{array}$ | $\begin{array}{\|c\|} \text { TOTAL } \\ \text { PATIENTS } \\ \text { ASSESSED } \end{array}$ | PERCENTAGE OF POPULATION REPRESENTED | $\begin{gathered} \text { TOTAL } \\ \text { COMPLETION } \\ \text { FOR } 4: 3: 1: 3: 3: 1: 4 \end{gathered}$ |  |  | total Patients ASSESSED NOT vFC-ELIGIBLE | COMPLETION RATE: NOT VFC-ELIGIBLE | (SERIES <br> COMPLETE) <br> Number <br> Vaccinated <br> Patients UTD <br> Underinsured | TOTAL PATIENTS ASESSED UNDERINSURED | $\begin{gathered} \text { COMPLETION } \\ \text { RATE: } \\ \text { UNDERINSURED } \end{gathered}$ | (SERIES <br> COMPLETE) <br> Number <br> Vaccinated <br> Patients UTD <br> VFC-Eligible | TOTAL <br> PATIENTS ASSESSED VFCELIGIBLE | $\begin{array}{\|c} \text { COMPLETION } \\ \text { RATE: VFC- } \\ \text { ELIGIBLE } \end{array}$ |
| ORANGE | 3 | 370 | 317 | 86\% | 193 | 60.9\% | 30 | 43 | 70\% | 2 | 2 | 100\% | 124 | 197 | 63\% |
| OWEN | 2 | 358 | 277 | 77\% | 203 | 73.3\% | 46 | 58 | 79\% | 1 | 1 | 100\% | 141 | 186 | 76\% |
| PARKE | 5 | 294 | 193 | 66\% | 113 | 58.5\% | 7 | 11 | 64\% | 0 | 0 | 0\% | 71 | 124 | 57\% |
| PERRY | 3 | 310 | 239 | 77\% | 161 | 67.4\% | 44 | 52 | 85\% | 5 | 7 | 71\% | 100 | 151 | 66\% |
| PIKE | 2 | 239 | 227 | 95\% | 166 | 73.1\% | 54 | 68 | 79\% | 0 | 0 | 0\% | 83 | 110 | 75\% |
| PORTER | 13 | 2659 | 2381 | 90\% | 1452 | 61.0\% | 189 | 275 | 69\% | 14 | 18 | 78\% | 543 | 999 | 54\% |
| POSEY | 3 | 422 | 327 | 77\% | 258 | 78.9\% | 120 | 132 | 91\% | , | - 1 | 100\% | 88 | 126 | 70\% |
| PULASKI | 1 | 195 | 193 | 99\% | 96 | 49.7\% | 12 | 17 | 71\% | 1 | - 1 | 100\% | 59 | 108 | 55\% |
| PUTNAM | 5 | 561 | 524 | 93\% | 309 | 59.0\% | 25 | 36 | 69\% | 1 | 2 | 50\% | 151 | 237 | 64\% |
| RANDOLPH | 3 | 384 | 447 | 116\% | 267 | 59.7\% | 15 | 21 | 71\% | 3 | 5 | 60\% | 180 | 283 | 64\% |
| RIPLEY | 4 | 553 | 452 | 82\% | 315 | 69.7\% | 156 | 189 | 83\% | 5 | 5 | 100\% | 99 | 154 | 64\% |
| RUSH | 4 | 273 | 269 | 99\% | 201 | 74.7\% | 30 | 34 | 88\% | 1 | 3 | 33\% | 138 | 176 | $78 \%$ |
| SCOTT | 3 | 5116 | 5519 | 108\% | 2657 | 48.1\% | 150 | 212 | 71\% | 29 | 43 | 67\% | 1606 | 2868 | 56\% |
| SHELBY | 2 | 403 | 495 | 123\% | 276 | 55.8\% | 46 | 61 | 75\% | 4 | 4 | 100\% | 180 | 251 | 72\% |
| SPENCER | 2 | 750 | 769 | 103\% | 501 | 65.1\% | 63 | 84 | 75\% | 0 | 1 | 0\% | 348 | 478 | 73\% |
| ST. JOSEPH | 37 | 295 | 266 | 90\% | 202 | 75.9\% | 72 | 86 | 84\% | 2 | 2 | 100\% | 94 | 121 | 78\% |
| STARKE | 7 | 414 | 316 | 76\% | 181 | 57.3\% | 26 | 36 | 72\% | 0 | 0 | 0\% | 101 | 173 | 58\% |
| STEUBEN | 3 | 558 | 503 | 90\% | 290 | 57.7\% | 71 | 91 | 78\% | 1 | 1 | 100\% | 162 | 305 | 53\% |
| SULLIVAN | 3 | 317 | 331 | 104\% | 214 | 64.7\% | 48 | 54 | 89\% | 4 | 5 | 80\% | 134 | 213 | 63\% |
| SWITZERLAND | 2 | 182 | 144 | 79\% | 72 | 50.0\% | 23 | 28 | 82\% | 0 | 0 | 0\% | 40 | 70 | 57\% |
| TIPPECANOE | 16 | 3311 | 3541 | 107\% | 1837 | 51.9\% | 318 | 387 | 82\% | 21 | 28 | 75\% | 1010 | 1588 | 64\% |
| TIPTON | 3 | 249 | 227 | 91\% | 158 | 69.6\% | 15 | 18 | 83\% | 3 | 3 | 100\% | 83 | 113 | 73\% |
| UNION | 1 | 112 | 64 | 57\% | 34 | 53.1\% | 1 | 4 | 25\% | 0 | 0 | 0\% | 16 | 30 | 53\% |
| VANDERBURGH | 22 | 3219 | 3031 | 94\% | 2182 | 72.0\% | 726 | 838 | 87\% | 3 | 5 | 60\% | 1155 | 1641 | 70\% |
| VERMILLION | , | 256 | 257 | 100\% | 140 | 54.5\% | 21 | 25 | 84\% | 2 | 2 | 100\% | 87 | 171 | 51\% |
| VIGO | 19 | 1746 | 1804 | 103\% | 1087 | 60.3\% | 104 | 123 | 85\% | 12 | 15 | 80\% | 756 | 1236 | 61\% |
| WABASH | 4 | 482 | 440 | 91\% | 297 | 67.5\% | 67 | 83 | 81\% | 0 | 0 | 0\% | 184 | 270 | $68 \%$ |
| WARREN | 2 | 124 | 154 | 124\% | 86 | 55.8\% | 19 | 21 | 90\% | 0 | 1 | 0\% | 45 | 70 | 64\% |
| WARRICK | 9 | 972 | 977 | 101\% | 736 | 75.3\% | 379 | 432 | 88\% | 2 | 2 | 100\% | 247 | 355 | 70\% |
| WASHINGTON | 4 | 471 | 426 | 90\% | 279 | 65.5\% | 30 | 38 | 79\% | 1 | 2 | 50\% | 193 | 262 | 74\% |
| WAYNE | 11 | 1237 | 1073 | 87\% | 706 | 65.8\% | 72 | 91 | 79\% | 1 | 1 | 100\% | 412 | 562 | 73\% |
| WELLS | 2 | 498 | 458 | 92\% | 301 | 65.7\% | 18 | 33 | 55\% | 2 | 3 | 67\% | 185 | 251 | 74\% |
| WHITE | 4 | 442 | 500 | 113\% | 278 | 55.6\% | 42 | 46 | 91\% | 4 | 6 | 67\% | 178 | 289 | 62\% |
| WHITLEY | 4 | 605 | 568 | 94\% | 405 | 71.3\% | 24 | 37 | 65\% | 1 | 1 | 100\% | 186 | 253 | $74 \%$ |

APPENDIX B. Immunization series completion rate for 4:3:1:3:3:1:4 among children aged 19-35 months, by county, number assessed, population represented, 2022 \& 2023


APPENDIX B. Immunization series completion rate for 4:3:1:3:3:1:4 among children aged 19-35 months, by county, number assessed, population represented, 2022 \& 2023

|  | (2020 Census) <br> POPULATION <br> 19-35 MONTHS <br> OF AGE | Number Assessed 19-35 Months of Age |  | Percentage of Population Represented |  | Completion Rate for4:3:1:3:3:1:4 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| FULTON | 376 | 299 | 308 | 80\% | 82\% | 56\% | 51.6\% |
| GIBSON | 635 | 544 | 551 | 86\% | 87\% | 73\% | 73.3\% |
| GRANT | 1182 | 1093 | 1066 | 92\% | 90\% | 60\% | 60.0\% |
| GREENE | 553 | 429 | 410 | 78\% | 74\% | 71\% | 70.7\% |
| HAMILTON | 6229 | 5682 | 5476 | 91\% | 88\% | 67\% | 60.8\% |
| HANCOCK | 1343 | 1303 | 1385 | 97\% | 103\% | 71\% | 65.7\% |
| HARRISON | 664 | 625 | 617 | 94\% | 93\% | 55\% | 58.2\% |
| HENDRICKS | 2795 | 3430 | 3462 | 123\% | 124\% | 56\% | 55.5\% |
| HENRY | 755 | 686 | 699 | 91\% | 93\% | 70\% | 72.1\% |
| HOWARD | 1535 | 1500 | 1448 | 98\% | 94\% | 65\% | 61.7\% |
| HUNTINGTON | 601 | 592 | 618 | 99\% | 103\% | 69\% | 69.4\% |
| JACKSON | 891 | 1360 | 1104 | 153\% | 124\% | 46\% | 49.7\% |
| JASPER | 522 | 624 | 563 | 120\% | 108\% | 55\% | 42.8\% |
| JAY | 437 | 369 | 374 | 84\% | 86\% | 60\% | 64.7\% |
| JEFFERSON | 546 | 591 | 574 | 108\% | 105\% | 67\% | 66.2\% |
| JENNINGS | 518 | 572 | 542 | 110\% | 105\% | 53\% | 56.3\% |
| JOHNSON | 2915 | 3187 | 3030 | 109\% | 104\% | 59\% | 52.9\% |
| KNOX | 630 | 555 | 552 | 88\% | 88\% | 68\% | 65.0\% |
| KOSCIUSKO | 1511 | 1274 | 1188 | 84\% | 79\% | 56\% | 55.0\% |
| LAGRANGE | 1094 | 557 | 549 | 51\% | 50\% | 35\% | 34.1\% |
| LAKE | 8753 | 8776 | 8204 | 100\% | 94\% | 43\% | 39.3\% |
| LAPORTE | 1906 | 1759 | 1653 | 92\% | 87\% | 50\% | 50.3\% |
| LAWRENCE | 769 | 720 | 683 | 94\% | 89\% | 69\% | 67.5\% |
| MADISON | 2123 | 2221 | 2196 | 105\% | 103\% | 69\% | 64.1\% |
| MARION | 20739 | 21398 | 20925 | 103\% | 101\% | 53\% | 50.5\% |
| MARSHALL | 850 | 810 | 787 | 95\% | 93\% | 51\% | 44.7\% |

APPENDIX B. Immunization series completion rate for 4:3:1:3:3:1:4 among children aged 19-35 months, by county, number assessed, population represented, 2022 \& 2023


APPENDIX B. Immunization series completion rate for 4:3:1:3:3:1:4 among children aged 19-35 months, by county, number assessed, population represented, 2022 \& 2023


| COUNTY | $\begin{array}{\|c\|} \hline \text { TOTAL } \\ \text { PATIENTS } \\ \text { ASSESSED } \\ \hline \end{array}$ | 4 Dtap | $\begin{aligned} & 4 \text { Dtap } \\ & \text { RATE } \end{aligned}$ | 3 Polio | 3 Polio <br> RATE | 1 MMR | 1 MMR RATE | 3 Hep B | 3 Hep B RATE | 3 Hib | $\begin{aligned} & \text { 3 Hib } \\ & \text { RATE } \end{aligned}$ | 1 VAR | $\begin{aligned} & 1 \text { VAR } \\ & \text { RATE } \end{aligned}$ | 4 PCV | $\begin{aligned} & 4 \text { PCV } \\ & \text { RATE } \end{aligned}$ | COMPLETION | $\begin{gathered} \hline \text { COMPLETIO } \\ \text { N RATE FOR } \\ \text { 4:3:1:3:3:1:4 } \\ \hline \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| -INDIANA | 118,780 | 79253 | 66.7\% | 93927 | 79.1\% | 93066 | 78.4\% | 88983 | 74.9\% | 91628 | 77.1\% | 92583 | 77.9\% | 77939 | 65.6\% | 67,018 | 56.4\% |
| ADAMS | 648 | 416 | 64.2\% | 500 | 77.2\% | 500 | 77.2\% | 490 | 75.6\% | 481 | 74.2\% | 486 | 75.0\% | 368 | 56.8\% | 335 | 51.7\% |
| ALLEN | 7368 | 4945 | 67.1\% | 5993 | 81.3\% | 5951 | 80.8\% | 6084 | 82.6\% | 5869 | 79.7\% | 5918 | 80.3\% | 4906 | 66.6\% | 4436 | 60.2\% |
| BARTHOLOMEW | 1599 | 1190 | 74.4\% | 1414 | 88.4\% | 1367 | 85.5\% | 1284 | 80.3\% | 1406 | 87.9\% | 1341 | 83.9\% | 1201 | 75.1\% | 1002 | 62.7\% |
| BENTON | 131 | 90 | 68.7\% | 99 | 75.6\% | 96 | 73.3\% | 76 | 58.0\% | 99 | 75.6\% | 96 | 73.3\% | 86 | 65.6\% | 61 | 46.6\% |
| BLACKFORD | 181 | 115 | 63.5\% | 138 | 76.2\% | 136 | 75.1\% | 142 | 78.5\% | 135 | 74.6\% | 136 | 75.1\% | 111 | 61.3\% | 106 | 58.6\% |
| BOONE | 1384 | 965 | 69.7\% | 1110 | 80.2\% | 1072 | 77.5\% | 1068 | 77.2\% | 1041 | 75.2\% | 1064 | 76.9\% | 953 | 68.9\% | 868 | 62.7\% |
| BROWN | 158 | 115 | 72.8\% | 135 | 85.4\% | 126 | 79.7\% | 130 | 82.3\% | 130 | 82.3\% | 125 | 79.1\% | 112 | 70.9\% | 102 | 64.6\% |
| CARROLL | 301 | 219 | 72.8\% | 247 | 82.1\% | 243 | 80.7\% | 236 | 78.4\% | 244 | 81.1\% | 240 | 79.7\% | 217 | 72.1\% | 192 | 63.8\% |
| CASS | 648 | 412 | 63.6\% | 517 | 79.8\% | 529 | 81.6\% | 539 | 83.2\% | 491 | 75.8\% | 530 | 81.8\% | 398 | 61.4\% | 375 | 57.9\% |
| CLARK | 2121 | 1460 | 68.8\% | 1655 | 78.0\% | 1645 | 77.6\% | 1401 | 66.1\% | 1665 | 78.5\% | 1631 | 76.9\% | 1455 | 68.6\% | 1153 | 54.4\% |
| CLAY | 549 | 406 | 74.0\% | 471 | 85.8\% | 455 | 82.9\% | 465 | 84.7\% | 463 | 84.3\% | 455 | 82.9\% | 411 | 74.9\% | 367 | 66.8\% |
| CLINTON | 700 | 513 | 73.3\% | 551 | 78.7\% | 546 | 78.0\% | 541 | 77.3\% | 535 | 76.4\% | 542 | 77.4\% | 501 | 71.6\% | 454 | 64.9\% |
| CRAWFORD | 113 | 85 | 75.2\% | 94 | 83.2\% | 96 | 85.0\% | 95 | 84.1\% | 94 | 83.2\% | 97 | 85.8\% | 84 | 74.3\% | 78 | 69.0\% |
| DAVIESS | 500 | 307 | 61.4\% | 397 | 79.4\% | 392 | 78.4\% | 411 | 82.2\% | 364 | 72.8\% | 344 | 68.8\% | 275 | 55.0\% | 229 | 45.8\% |
| DEARBORN | 583 | 417 | 71.5\% | 485 | 83.2\% | 487 | 83.5\% | 480 | 82.3\% | 497 | 85.2\% | 487 | 83.5\% | 407 | 69.8\% | 350 | 60.0\% |
| DECATUR | 463 | 367 | 79.3\% | 414 | 89.4\% | 402 | 86.8\% | 407 | 87.9\% | 412 | 89.0\% | 398 | 86.0\% | 366 | 79.0\% | 333 | 71.9\% |
| DEKALB | 823 | 572 | 69.5\% | 656 | 79.7\% | 660 | 80.2\% | 666 | 80.9\% | 642 | 78.0\% | 656 | 79.7\% | 561 | 68.2\% | 511 | 62.1\% |
| DELAWARE | 1840 | 1197 | 65.1\% | 1403 | 76.3\% | 1397 | 75.9\% | 1389 | 75.5\% | 1367 | 74.3\% | 1398 | 76.0\% | 1181 | 64.2\% | 1100 | 59.8\% |
| DUBOIS | 718 | 596 | 83.0\% | 676 | 94.2\% | 664 | 92.5\% | 671 | 93.5\% | 676 | 94.2\% | 662 | 92.2\% | 590 | 82.2\% | 544 | 75.8\% |
| ELKHART | 3724 | 2521 | 67.7\% | 3074 | 82.5\% | 3006 | 80.7\% | 2976 | 79.9\% | 3026 | 81.3\% | 2996 | 80.5\% | 2399 | 64.4\% | 2113 | 56.7\% |
| FAYETTE | 358 | 263 | 73.5\% | 314 | 87.7\% | 304 | 84.9\% | 317 | 88.5\% | 288 | 80.4\% | 302 | 84.4\% | 255 | 71.2\% | 248 | 69.3\% |
| FLOYD | 1161 | 809 | 69.7\% | 950 | 81.8\% | 932 | 80.3\% | 844 | 72.7\% | 957 | 82.4\% | 938 | 80.8\% | 813 | 70.0\% | 657 | 56.6\% |
| FOUNTAIN | 331 | 186 | 56.2\% | 222 | 67.1\% | 212 | 64.0\% | 211 | 63.7\% | 214 | 64.7\% | 213 | 64.4\% | 193 | 58.3\% | 161 | 48.6\% |
| FRANKLIN | 233 | 169 | 72.5\% | 203 | 87.1\% | 193 | 82.8\% | 207 | 88.8\% | 202 | 86.7\% | 193 | 82.8\% | 165 | 70.8\% | 154 | 66.1\% |
| FULTON | 308 | 195 | 63.3\% | 257 | 83.4\% | 257 | 83.4\% | 254 | 82.5\% | 250 | 81.2\% | 255 | 82.8\% | 189 | 61.4\% | 159 | 51.6\% |
| GIBSON | 551 | 439 | 79.7\% | 494 | 89.7\% | 477 | 86.6\% | 493 | 89.5\% | 482 | 87.5\% | 476 | 86.4\% | 435 | 78.9\% | 404 | 73.3\% |
| GRANT | 1066 | 711 | 66.7\% | 871 | 81.7\% | 885 | 83.0\% | 900 | 84.4\% | 863 | 81.0\% | 881 | 82.6\% | 692 | 64.9\% | 640 | 60.0\% |
| GREENE | 410 | 307 | 74.9\% | 364 | 88.8\% | 347 | 84.6\% | 366 | 89.3\% | 349 | 85.1\% | 346 | 84.4\% | 314 | 76.6\% | 290 | 70.7\% |
| HAMILTON | 5476 | 3960 | 72.3\% | 4527 | 82.7\% | 4512 | 82.4\% | 4317 | 78.8\% | 4483 | 81.9\% | 4503 | 82.2\% | 3831 | 70.0\% | 3327 | 60.8\% |
| HANCOCK | 1385 | 1052 | 76.0\% | 1178 | 85.1\% | 1168 | 84.3\% | 1119 | 80.8\% | 1169 | 84.4\% | 1167 | 84.3\% | 1048 | 75.7\% | 910 | 65.7\% |
| HARRISON | 617 | 431 | 69.9\% | 518 | 84.0\% | 501 | 81.2\% | 461 | 74.7\% | 525 | 85.1\% | 503 | 81.5\% | 429 | 69.5\% | 359 | 58.2\% |
| HENDRICKS | 3462 | 2206 | 63.7\% | 2592 | 74.9\% | 2533 | 73.2\% | 2532 | 73.1\% | 2490 | 71.9\% | 2529 | 73.1\% | 2161 | 62.4\% | 1921 | 55.5\% |
| HENRY | 699 | 531 | 76.0\% | 596 | 85.3\% | 582 | 83.3\% | 592 | 84.7\% | 590 | 84.4\% | 582 | 83.3\% | 527 | 75.4\% | 504 | 72.1\% |
| HOWARD | 1448 | 1015 | 70.1\% | 1208 | 83.4\% | 1188 | 82.0\% | 1205 | 83.2\% | 1162 | 80.2\% | 1187 | 82.0\% | 1010 | 69.8\% | 893 | 61.7\% |
| HUNTINGTON | 618 | 467 | 75.6\% | 524 | 84.8\% | 538 | 87.1\% | 517 | 83.7\% | 521 | 84.3\% | 536 | 86.7\% | 465 | 75.2\% | 429 | 69.4\% |
| JACKSON | 1104 | 654 | 59.2\% | 767 | 69.5\% | 764 | 69.2\% | 743 | 67.3\% | 773 | 70.0\% | 758 | 68.7\% | 613 | 55.5\% | 549 | 49.7\% |
| JASPER | 563 | 375 | 66.6\% | 440 | 78.2\% | 429 | 76.2\% | 319 | 56.7\% | 438 | 77.8\% | 422 | 75.0\% | 348 | 61.8\% | 241 | 42.8\% |
| JAY | 374 | 267 | 71.4\% | 305 | 81.6\% | 300 | 80.2\% | 310 | 82.9\% | 299 | 79.9\% | 298 | 79.7\% | 266 | 71.1\% | 242 | 64.7\% |
| JEFFERSON | 574 | 413 | 72.0\% | 483 | 84.1\% | 469 | 81.7\% | 487 | 84.8\% | 482 | 84.0\% | 469 | 81.7\% | 400 | 69.7\% | 380 | 66.2\% |
| JENNINGS | 542 | 345 | 63.7\% | 404 | 74.5\% | 401 | 74.0\% | 393 | 72.5\% | 395 | 72.9\% | 398 | 73.4\% | 337 | 62.2\% | 305 | 56.3\% |
| JOHNSON | 3030 | 2132 | 70.4\% | 2443 | 80.6\% | 2427 | 80.1\% | 1946 | 64.2\% | 2410 | 79.5\% | 2394 | 79.0\% | 2115 | 69.8\% | 1602 | 52.9\% |
| KNOX | 552 | 387 | 70.1\% | 494 | 89.5\% | 474 | 85.9\% | 497 | 90.0\% | 488 | 88.4\% | 473 | 85.7\% | 396 | 71.7\% | 359 | 65.0\% |
| KOSCIUSKO | 1188 | 769 | 64.7\% | 956 | 80.5\% | 946 | 79.6\% | 963 | 81.1\% | 950 | 80.0\% | 933 | 78.5\% | 714 | 60.1\% | 653 | 55.0\% |
| LAGRANGE | 549 | 240 | 43.7\% | 322 | 58.7\% | 334 | 60.8\% | 323 | 58.8\% | 301 | 54.8\% | 323 | 58.8\% | 216 | 39.3\% | 187 | 34.1\% |
| LAKE | 8204 | 4821 | 58.8\% | 6035 | 73.6\% | 5978 | 72.9\% | 4724 | 57.6\% | 5982 | 72.9\% | 5920 | 72.2\% | 4694 | 57.2\% | 3225 | 39.3\% |
| LAPORTE | 1653 | 1025 | 62.0\% | 1326 | 80.2\% | 1312 | 79.4\% | 1214 | 73.4\% | 1298 | 78.5\% | 1299 | 78.6\% | 1045 | 63.2\% | 832 | 50.3\% |


| COUNTY | TOTAL <br> PATIENTS <br> ASSESSED | 4 Dtap | 4 Dtap <br> RATE | 3 Polio | 3 Polio RATE | 1 MMR | $\begin{aligned} & 1 \text { MMR } \\ & \text { RATE } \end{aligned}$ | 3 Hep B | 3 Hep B RATE | 3 Hib | $\begin{aligned} & 3 \mathrm{Hib} \\ & \text { RATE } \end{aligned}$ | 1 VAR | $\begin{aligned} & 1 \text { VAR } \\ & \text { RATE } \end{aligned}$ | 4 PCV | $\begin{aligned} & 4 \text { PCV } \\ & \text { RATE } \end{aligned}$ | $\begin{array}{\|c\|c\|c\|} \text { COMPLETION } \\ \text { 4:3:1:3:3:1:4 } \end{array}$ | $\begin{array}{\|c} \hline \text { COMPLETIO } \\ \text { N RATE FOR } \\ \text { 4:3:1:3:3:1:4 } \\ \hline \end{array}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| LAWRENCE | 683 | 489 | 71.6\% | 603 | 88.3\% | 587 | 85.9\% | 612 | 89.6\% | 552 | 80.8\% | 583 | 85.4\% | 504 | 73.8\% | 461 | 67.5\% |
| MADISON | 2196 | 1589 | 72.4\% | 1822 | 83.0\% | 1787 | 81.4\% | 1796 | 81.8\% | 1768 | 80.5\% | 1791 | 81.6\% | 1531 | 69.7\% | 1407 | 64.1\% |
| MARION | 20925 | 12886 | 61.6\% | 15345 | 73.3\% | 15560 | 74.4\% | 14407 | 68.9\% | 14723 | 70.4\% | 15506 | 74.1\% | 12465 | 59.6\% | 10571 | 50.5\% |
| MARSHALL | 787 | 464 | 59.0\% | 612 | 77.8\% | 584 | 74.2\% | 559 | 71.0\% | 601 | 76.4\% | 593 | 75.3\% | 450 | 57.2\% | 352 | 44.7\% |
| MARTIN | 163 | 117 | 71.8\% | 140 | 85.9\% | 135 | 82.8\% | 137 | 84.0\% | 130 | 79.8\% | 126 | 77.3\% | 113 | 69.3\% | 100 | 61.3\% |
| MIAMI | 496 | 322 | 64.9\% | 393 | 79.2\% | 401 | 80.8\% | 395 | 79.6\% | 381 | 76.8\% | 396 | 79.8\% | 303 | 61.1\% | 264 | 53.2\% |
| MONROE | 1614 | 1227 | 76.0\% | 1425 | 88.3\% | 1376 | 85.3\% | 1456 | 90.2\% | 1308 | 81.0\% | 1375 | 85.2\% | 1251 | 77.5\% | 1167 | 72.3\% |
| MONTGOMERY | 670 | 426 | 63.6\% | 491 | 73.3\% | 486 | 72.5\% | 468 | 69.9\% | 481 | 71.8\% | 488 | 72.8\% | 434 | 64.8\% | 379 | 56.6\% |
| MORGAN | 1393 | 979 | 70.3\% | 1156 | 83.0\% | 1113 | 79.9\% | 932 | 66.9\% | 1106 | 79.4\% | 1100 | 79.0\% | 972 | 69.8\% | 726 | 52.1\% |
| NEWTON | 177 | 100 | 56.5\% | 122 | 68.9\% | 115 | 65.0\% | 85 | 48.0\% | 121 | 68.4\% | 116 | 65.5\% | 99 | 55.9\% | 67 | 37.9\% |
| NOBLE | 834 | 553 | 66.3\% | 674 | 80.8\% | 672 | 80.6\% | 689 | 82.6\% | 666 | 79.9\% | 672 | 80.6\% | 510 | 61.2\% | 457 | 54.8\% |
| OHIO | 125 | 89 | 71.2\% | 105 | 84.0\% | 101 | 80.8\% | 101 | 80.8\% | 105 | 84.0\% | 100 | 80.0\% | 88 | 70.4\% | 74 | 59.2\% |
| ORANGE | 317 | 220 | 69.4\% | 266 | 83.9\% | 254 | 80.1\% | 268 | 84.5\% | 258 | 81.4\% | 256 | 80.8\% | 214 | 67.5\% | 193 | 60.9\% |
| OWEN | 277 | 220 | 79.4\% | 247 | 89.2\% | 238 | 85.9\% | 242 | 87.4\% | 227 | 81.9\% | 239 | 86.3\% | 218 | 78.7\% | 203 | 73.3\% |
| PARKE | 193 | 127 | 65.8\% | 152 | 78.8\% | 149 | 77.2\% | 151 | 78.2\% | 152 | 78.8\% | 149 | 77.2\% | 128 | 66.3\% | 113 | 58.5\% |
| PERRY | 239 | 179 | 74.9\% | 211 | 88.3\% | 207 | 86.6\% | 210 | 87.9\% | 204 | 85.4\% | 210 | 87.9\% | 170 | 71.1\% | 161 | 67.4\% |
| PIKE | 227 | 183 | 80.6\% | 206 | 90.7\% | 200 | 88.1\% | 208 | 91.6\% | 204 | 89.9\% | 202 | 89.0\% | 177 | 78.0\% | 166 | 73.1\% |
| PORTER | 2381 | 1725 | 72.4\% | 2061 | 86.6\% | 2015 | 84.6\% | 1892 | 79.5\% | 2027 | 85.1\% | 1991 | 83.6\% | 1755 | 73.7\% | 1452 | 61.0\% |
| POSEY | 327 | 273 | 83.5\% | 304 | 93.0\% | 299 | 91.4\% | 305 | 93.3\% | 302 | 92.4\% | 301 | 92.0\% | 271 | 82.9\% | 258 | 78.9\% |
| PULASKI | 193 | 118 | 61.1\% | 150 | 77.7\% | 145 | 75.1\% | 149 | 77.2\% | 136 | 70.5\% | 147 | 76.2\% | 115 | 59.6\% | 96 | 49.7\% |
| PUTNAM | 524 | 354 | 67.6\% | 416 | 79.4\% | 405 | 77.3\% | 418 | 79.8\% | 408 | 77.9\% | 399 | 76.1\% | 352 | 67.2\% | 309 | 59.0\% |
| RANDOLPH | 447 | 295 | 66.0\% | 356 | 79.6\% | 350 | 78.3\% | 370 | 82.8\% | 332 | 74.3\% | 349 | 78.1\% | 297 | 66.4\% | 267 | 59.7\% |
| RIPLEY | 452 | 346 | 76.5\% | 398 | 88.1\% | 385 | 85.2\% | 405 | 89.6\% | 390 | 86.3\% | 382 | 84.5\% | 355 | 78.5\% | 315 | 69.7\% |
| RUSH | 269 | 218 | 81.0\% | 241 | 89.6\% | 238 | 88.5\% | 239 | 88.8\% | 240 | 89.2\% | 238 | 88.5\% | 214 | 79.6\% | 201 | 74.7\% |
| STJOSEPH | 5519 | 3144 | 57.0\% | 3904 | 70.7\% | 3936 | 71.3\% | 3768 | 68.3\% | 3736 | 67.7\% | 3926 | 71.1\% | 3160 | 57.3\% | 2657 | 48.1\% |
| SCOTT | 495 | 307 | 62.0\% | 359 | 72.5\% | 350 | 70.7\% | 343 | 69.3\% | 360 | 72.7\% | 346 | 69.9\% | 300 | 60.6\% | 276 | 55.8\% |
| SHELBY | 769 | 572 | 74.4\% | 643 | 83.6\% | 644 | 83.7\% | 606 | 78.8\% | 646 | 84.0\% | 632 | 82.2\% | 576 | 74.9\% | 501 | 65.1\% |
| SPENCER | 266 | 223 | 83.8\% | 244 | 91.7\% | 240 | 90.2\% | 244 | 91.7\% | 239 | 89.8\% | 238 | 89.5\% | 217 | 81.6\% | 202 | 75.9\% |
| STARKE | 316 | 213 | 67.4\% | 257 | 81.3\% | 247 | 78.2\% | 250 | 79.1\% | 252 | 79.7\% | 244 | 77.2\% | 208 | 65.8\% | 181 | 57.3\% |
| STEUBEN | 503 | 315 | 62.6\% | 410 | 81.5\% | 396 | 78.7\% | 408 | 81.1\% | 403 | 80.1\% | 395 | 78.5\% | 337 | 67.0\% | 290 | 57.7\% |
| SULLIVAN | 331 | 235 | 71.0\% | 277 | 83.7\% | 268 | 81.0\% | 274 | 82.8\% | 277 | 83.7\% | 268 | 81.0\% | 237 | 71.6\% | 214 | 64.7\% |
| SWITZERLAND | 144 | 81 | 56.3\% | 108 | 75.0\% | 102 | 70.8\% | 108 | 75.0\% | 110 | 76.4\% | 102 | 70.8\% | 88 | 61.1\% | 72 | 50.0\% |
| TIPPECANOE | 3541 | 2219 | 62.7\% | 2535 | 71.6\% | 2509 | 70.9\% | 2237 | 63.2\% | 2518 | 71.1\% | 2510 | 70.9\% | 2239 | 63.2\% | 1837 | 51.9\% |
| TIPTON | 227 | 171 | 75.3\% | 196 | 86.3\% | 196 | 86.3\% | 197 | 86.8\% | 189 | 83.3\% | 196 | 86.3\% | 168 | 74.0\% | 158 | 69.6\% |
| UNION | 64 | 42 | 65.6\% | 52 | 81.3\% | 53 | 82.8\% | 54 | 84.4\% | 49 | 76.6\% | 51 | 79.7\% | 43 | 67.2\% | 34 | 53.1\% |
| VANDERBURGH | 3031 | 2336 | 77.1\% | 2668 | 88.0\% | 2628 | 86.7\% | 2681 | 88.5\% | 2574 | 84.9\% | 2625 | 86.6\% | 2326 | 76.7\% | 2182 | 72.0\% |
| VERMILLION | 257 | 161 | 62.6\% | 192 | 74.7\% | 194 | 75.5\% | 194 | 75.5\% | 192 | 74.7\% | 194 | 75.5\% | 158 | 61.5\% | 140 | 54.5\% |
| VIGO | 1804 | 1234 | 68.4\% | 1473 | 81.7\% | 1433 | 79.4\% | 1445 | 80.1\% | 1453 | 80.5\% | 1428 | 79.2\% | 1257 | 69.7\% | 1087 | 60.3\% |
| WABASH | 440 | 330 | 75.0\% | 374 | 85.0\% | 374 | 85.0\% | 375 | 85.2\% | 378 | 85.9\% | 369 | 83.9\% | 324 | 73.6\% | 297 | 67.5\% |
| WARREN | 154 | 106 | 68.8\% | 117 | 76.0\% | 120 | 77.9\% | 102 | 66.2\% | 116 | 75.3\% | 119 | 77.3\% | 109 | 70.8\% | 86 | 55.8\% |
| WARRICK | 977 | 806 | 82.5\% | 890 | 91.1\% | 868 | 88.8\% | 880 | 90.1\% | 868 | 88.8\% | 863 | 88.3\% | 787 | 80.6\% | 736 | 75.3\% |
| WASHINGTON | 426 | 306 | 71.8\% | 344 | 80.8\% | 350 | 82.2\% | 342 | 80.3\% | 351 | 82.4\% | 347 | 81.5\% | 310 | 72.8\% | 279 | 65.5\% |
| WAYNE | 1073 | 771 | 71.9\% | 889 | 82.9\% | 886 | 82.6\% | 922 | 85.9\% | 824 | 76.8\% | 884 | 82.4\% | 756 | 70.5\% | 706 | 65.8\% |
| WELLS | 458 | 343 | 74.9\% | 406 | 88.6\% | 380 | 83.0\% | 403 | 88.0\% | 398 | 86.9\% | 380 | 83.0\% | 334 | 72.9\% | 301 | 65.7\% |
| WHITE | 500 | 329 | 65.8\% | 391 | 78.2\% | 378 | 75.6\% | 361 | 72.2\% | 391 | 78.2\% | 376 | 75.2\% | 330 | 66.0\% | 278 | 55.6\% |
| WHITLEY | 568 | 433 | 76.2\% | 480 | 84.5\% | 479 | 84.3\% | 490 | 86.3\% | 484 | 85.2\% | 481 | 84.7\% | 436 | 76.8\% | 405 | 71.3\% |

