

Regional Highlights: Changes in Hospital-Based Obstetric Care in the US, 2010-2024

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Key Findings

- Both urban and rural hospitals saw losses of obstetric services in all US Census regions from 2010 to 2024. Among urban hospitals, the percent without obstetric services increased fairly consistently across US regions from 2010 to 2024, while rural hospitals saw much greater regional variation.
- Rural hospitals in the South consistently had the greatest percentage of hospitals without obstetric services, increasing from half (50.1%, 367/733) of all rural hospitals in 2010 to over 6 out of every 10 hospitals (64.2%, 484/754) without services in 2024.
- Within each region, obstetric services availability varied across states between 2010 and 2024; while many states saw increased challenges in obstetric services availability, a few states had minimal losses or gained services during this time.

Purpose

The purpose of this report is to provide a summary of hospital-level changes in obstetric care availability between 2010 and 2024 across the four United States (US) Census regions and to highlight changes within select states in each region.

Summary

The report describes changes in the availability of obstetric services at hospitals in states within each region, including hospitals that lost obstetric services (due to obstetric unit and/or hospital closures) and the percentage of all hospitals that were without obstetric services (due to obstetric unit and/or hospital closures, or because they never had obstetric services). We then ranked variation across all US states and the District of Columbia (DC), focusing on the four US Census regions (Northeast, South, Midwest, West). Hospitals within states are stratified by those located in rural (non–Metropolitan Statistical Areas) and urban (Metropolitan Statistical Areas) counties based on 2023 Office of Management and Budget delineations.¹ Unless otherwise stated, percents are among all hospitals open and operating as short-term acute care hospitals in any study year (2010-2024). Detailed information on obstetric unit status identification is provided in the October 2025 Methodology Brief on the University of Minnesota Rural Health Research Center website.² A national hospital-level report and county-level reports for each state can be found on the Maternity Care Team page on the University of Minnesota Rural Health Research Center website.³

Regional Overview

The percent of hospitals that lost obstetric services between 2010 and 2024 varied across US regions, ranging from 12.4% (244/1961) of hospitals in the South to 17.1% (248/1447) of hospitals in the Midwest (**Table 1**). Similar patterns emerged for losses that occurred in 2024, during which 1.0% (N=20)

of all hospitals in the South and 1.6% (N=23) of all hospitals in the Midwest lost obstetric services.

A somewhat different regional pattern was apparent when examining the percent of hospitals without obstetric services, as many hospitals (notably in the South) lacked obstetric services in 2010, when the data in this report began. In 2010, the Northeast had the smallest percentage of hospitals without obstetric services, at 27.5% (164/597) of all hospitals

in the region, while 4 out of every 10 hospitals (40.9%, 747/1828) in the South were already without services in 2010. By 2024, the percentage of hospitals without obstetric services increased by 14.3 percentage points (from 34.8% [1663/4783] to 49.1% [2463/5019]) across the US as a result of obstetric unit and hospital closures. Hospitals in the West experienced the fewest disruptions in obstetric care availability, with the percentage of

Table 1. Percent of hospitals that lost obstetric services and were without obstetric services among rural and urban hospitals, by region (2010-2024)

Measures	United States (N=5019)	Census Region			
		South (N=1961)	Midwest (N=1447)	Northeast (N=613)	West (N=998)
Percent of all hospitals from 2010-2024 that lost obstetric services:					
Overall, 2010-2024	14.3	12.4	17.1	15.8	12.9
Previously, between 2010-2023	13.0	11.4	15.5	14.4	11.4
Recently, between 2023-2024	1.3	1.0	1.6	1.5	1.5
Percent of all hospitals from 2010-2024 without obstetric services in:					
2010	34.8	40.9	33.9	27.5	29.0
2024	49.1	54.2	50.4	42.9	40.8
Percentage-point difference	14.3	13.3	16.5	15.4	11.8
Percent of RURAL hospitals from 2010-2024 without obstetric services in:					
2010	41.6	50.1	39.2	27.3	34.0
2024	57.5	64.2	57.6	49.7	45.3
Percentage-point difference	15.9	14.1	18.4	22.4	11.3
Percent of URBAN hospitals from 2010-2024 without obstetric services in:					
2010	30.2	34.7	28.1	27.5	26.4
2024	43.6	48.0	42.9	40.8	38.6
Percentage-point difference	13.4	13.3	14.8	13.3	12.2

The total number of hospitals shown in the United States and in each region includes all hospitals open at any point during 2010-2024. A hospital was counted as losing obstetric services if it was without services in 2024 but had provided obstetric services in any previous year (2010–2023). Recent losses include those that had obstetric services in 2023 and did not have services in 2024. Percents for previous and recent losses are out of all hospitals that were open and operating as short-term acute care hospitals in any study year (2010-2024). Percents of hospitals without obstetric services in 2010 are the number of hospitals without services in 2010 among hospitals open and operating as short-term acute care hospitals in 2010. Percents of hospitals without obstetric services in 2024 are the number of hospitals without services in 2024 (either because they were open but did not provide services or the hospital was closed) among all hospitals that were open and operating as short-term acute care hospitals in any study year (2010-2024) in the indicated state. Rural hospitals were those located in non–Metropolitan Statistical Areas and urban in Metropolitan Statistical Areas per 2023 Office of Management and Budget definitions.

hospitals without services in that region increasing by 11.8 percentage points from 2010 to 2024 (from 29.0% [274/946] to 40.8% [407/998]), while the most disruptions in availability occurred in the Midwest, increasing by 16.5 percentage points from 2010 to 2024 (from 33.9% [478/1412] to 50.4% [730/1447]). However, the South remained the region with the most hospitals without obstetric services, at 54.2% (1063/1961) by 2024.

Both urban and rural hospitals saw losses of obstetric services in all US Census regions from 2010 to 2024. Among urban hospitals, the percent without obstetric services increased fairly consistently across US regions from 2010 to 2024, ranging between 26.4% (164/622) and 34.7% (380/1095) in 2010 and between 38.6% (258/669) and 48.0% (579/1207) by 2024 (lowest in the West, highest in the South). Much greater regional variation in changes to obstetric services availability was evident among rural hospitals. Rural hospitals in the West had the smallest increase in the percentage of hospitals without obstetric services from 2010 to 2024 (34.0% [110/324] to 45.3% [149/329], an 11.3-percentage-point increase), while rural hospitals in the Northeast experienced a 22.4-percentage-point increase during that period (from 27.3% [39/143] to 49.7% [72/145] of rural hospitals without obstetric services). Rural hospitals in the South consistently had the greatest percentage of hospitals without obstetric services, increasing from half (50.1%, 367/733) of all rural hospitals in 2010 to over 6 out of every 10 hospitals (64.2%, 484/754) without services in 2024.

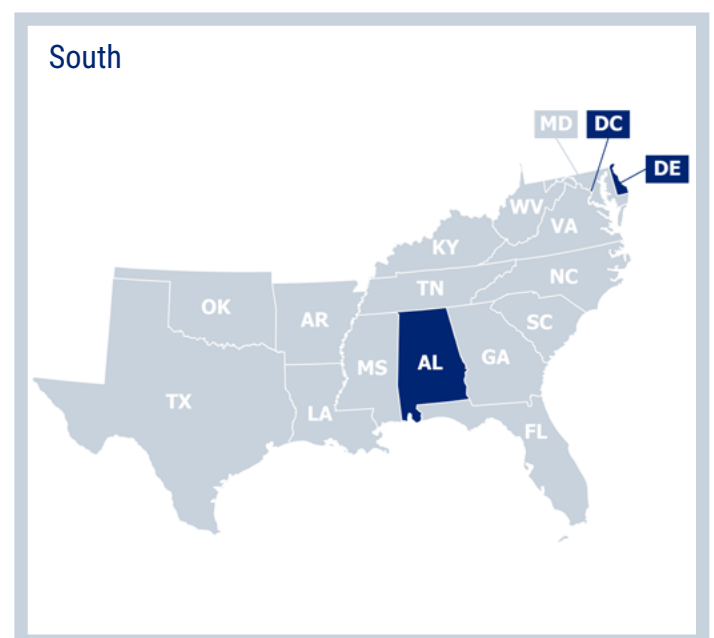
State Highlights by Region

Within each region, obstetric services availability varied across states between 2010 and 2024. For each region, we highlighted hospital-level changes in obstetric services availability for 3 states, over time (2010-2024) and in the most recent year of data available (2024). We selected 2 states with different types of challenges in obstetric services availability (e.g., large losses, many without services, etc.) and 1 state that maintained, had minimal losses, or gained services within each region. We also compared these

states to national trends and ranked variation in availability (losses and percentages without services) across all US states and DC.

The South Region

- Alabama** was similar to the national average (13.9% [14/101] vs. 14.3% [718/5019], respectively) in the percent of hospitals that lost obstetric services from 2010-2024. However, Alabama was 3rd highest nationally in the proportion of all hospitals (2010-2024) for which losses occurred in the most recent year of data availability (4.0% [4/101] in 2024). The loss of obstetric services during 2010-2024 was concentrated among rural hospitals in Alabama, moving the state from the 8th highest nationally without services in 2010 (53.5%, 23/43) to the 4th highest by 2024 (73.3%, 33/45). Considering urban hospitals, Alabama had just slightly higher than the national average (46.4% [26/56] vs. 43.6% [1330/3048], respectively) of urban hospitals without services by 2024. Many rural communities in Alabama lacked obstetric services in 2024 because of both a historic lack of availability before 2010 and recent losses of obstetric services at remaining rural hospitals in Alabama.



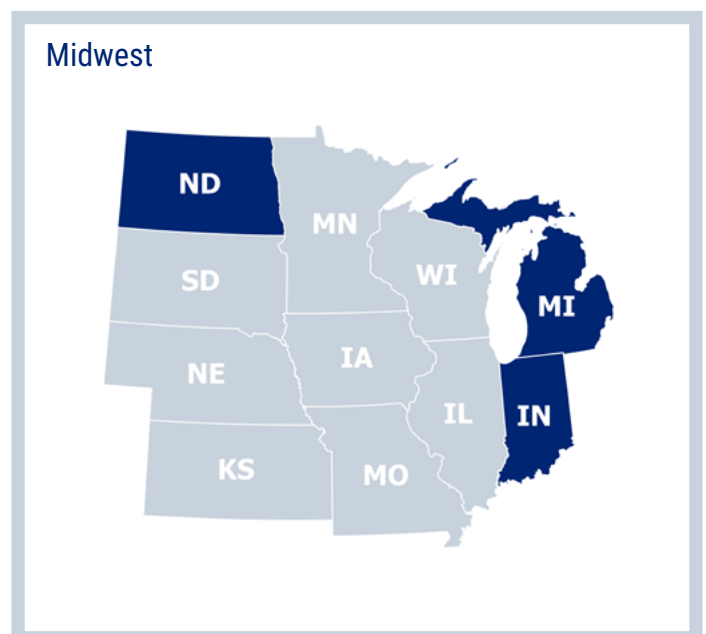
- Between 2010 and 2024, **DC** saw 25.0% (2/8) of its 8 hospitals lose obstetric services, which was more than any state across the US; all losses occurred prior to 2024. These losses resulted in DC having the greatest percentage-point increase (compared with all other US states) in hospitals without obstetric services, moving from 12.5% (1/8) without services in 2010 to 37.5% (3/8) without by 2024. While there are few hospitals in DC, obstetric unit and hospital closures have greatly limited availability of these services throughout the District by 2024.
- Delaware** only had a small number of hospitals operating in the state during 2010-2024 (N=8), but it was the only state in the US in which no hospitals lost obstetric services between 2010-2024. Delaware was also just one of two states (along with Utah) in which the percentage of hospitals without obstetric services decreased from 2010 (28.6%, 2/7) to 2024 (12.5%, 1/8) because of gains in services at an urban hospital and the opening of a rural hospital with obstetric services in Delaware.

The Midwest Region

- Compared to all other US states, **North Dakota** had the 5th lowest percent of hospitals that lost obstetric services between 2010 and 2024 (6.7%, 3/45), and had 1 hospital that gained services, all of which occurred prior to 2024. However, North Dakota had the highest percent of hospitals without services in 2010 (66.7%, 30/45) and by 2024 (71.1%, 32/45). Hospitals without obstetric services were concentrated in rural areas, making North Dakota the 2nd highest state nationally without services in its rural hospitals across the period (75.0% [27/36] without in 2010, 80.6% [29/36] without by 2024). North Dakota had few hospitals providing obstetric care in 2010, so even relatively small losses result in consistently high percentages of hospitals without obstetric care.
- While **Indiana** had the 16th highest percent of hospitals that lost obstetric services from 2010-

2024 (16.9%, 21/124) among all US states, Indiana had the greatest proportion of hospitals that lost services in the most recent year of data (4.8% [6/124] of 2010-2024 hospitals lost services in 2024, 28.6% [6/21] of all 2010-2024 losses in Indiana occurred in 2024). These losses in the state largely occurred at rural hospitals, moving Indiana from the US state with the 6th lowest percent of hospitals without obstetric services in 2010 (17.1%, 7/41) to the 20th lowest (51.2%, 21/41) by 2024, a 34.1-percentage-point increase. Recent losses of obstetric services have had a large impact on the percentage of rural hospitals without obstetric care in Indiana.

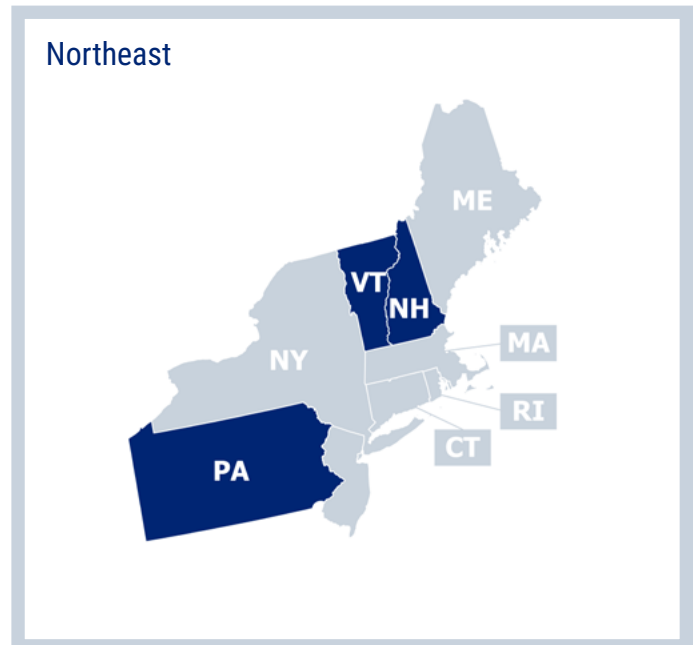
- Michigan** had one of the lower percentages of hospitals that lost obstetric services during 2010-2024 (15th lowest nationally, at 10.4% [14/135]). Michigan remained at or just below the national average for the percent of all (33.6%, 45/134), of rural (38.9%, 21/54), and of urban (30.0%, 24/80) hospitals without obstetric services in 2010. With a 13.8- and 7.5-percentage-point increase, respectively, in rural and urban hospitals without obstetric services, Michigan maintained that status (near the national average) through 2024.



The Northeast Region

- **New Hampshire** had the 2nd highest percent of hospitals that lost obstetric services between 2010 and 2024 (23.1%, 6/26) compared with all other US states, all of which occurred prior to 2024. All urban hospitals in New Hampshire had obstetric services in 2010 – one of only three states (alongside Alaska and Vermont) – but unlike those other states, by 2024, the percent of urban hospitals without obstetric services increased to 20.0% (2/10), following obstetric unit closures at urban hospitals during this period. A similar degree of change occurred among rural hospitals in New Hampshire, for which 31.3% (5/16) were without services in 2010, increasing to 56.3% (9/16) without services by 2024.
- Approximately one-third of hospitals in **Pennsylvania** did not have obstetric services in 2010, and the percentage without services was slightly lower among rural (31.1%, 14/45) than urban hospitals (36.8%, 43/117) in that year. However, Pennsylvania was the 7th highest nationally for the percentage of hospitals that lost obstetric services between 2010 and 2024 (21.4%, 37/173) and the 8th highest nationally for the percentage of losses in the most recent year of data (2.3% [4/173] of 2010-2024 hospitals lost services in 2024, 10.8% [4/37] of all 2010-2024 losses in Pennsylvania occurred in 2024). Losses occurred among both rural and urban hospitals in the state but were more common among those in rural areas. By 2024, the percent of rural hospitals without obstetric services increased by 30.6 percentage points (the 3rd largest increase nationally) to 61.7% (29/47), and among urban hospitals by 16.4 percentage points, to 53.2% (67/126). Pennsylvania experienced a notable decline in the availability of obstetric services at rural hospitals from 2010-2024.
- **Vermont** had the 6th lowest percent of hospitals that lost obstetric services during 2010-2024 (6.7%, 1/15) compared with all other US states and did not experience any losses in the most

recent year of data (2024). Vermont maintained obstetric services among all urban hospitals in 2010 and 2024 (Alaska was the only other state for which this was true), and Vermont had the 9th lowest change in the percentage of rural hospitals without services in the US, increasing from 23.1% (3/13) in 2010 to 30.8% (4/13) by 2024.

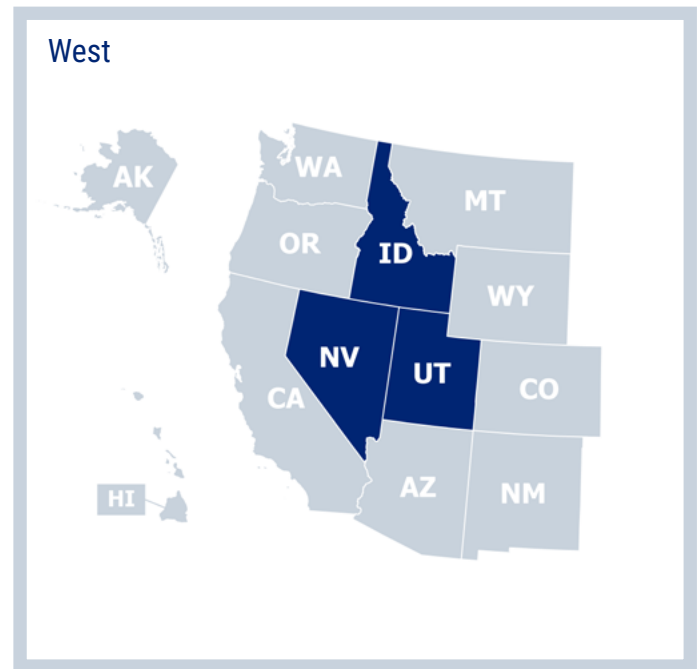


The West Region

- Among hospitals open at any point during 2010-2024, **Idaho** experienced the 2nd highest percentage of hospitals that lost obstetric services in 2024 alone (4.4%, 2/45) compared with all other US states, and a total of 17.8% (8/45) hospitals lost services during the entire period (14th highest compared with other states). Those losses were split between rural and urban hospitals, increasing the percent of hospitals without obstetric services in 2010 and by 2024 from 36.0% (9/25) to 50.0% (13/26) among rural hospitals (14.0 percentage points) and from 23.5% (4/17) to 42.1% (8/19) among urban hospitals (18.6 percentage points). These changes in Idaho were slightly lower than the national averages for changes in rural (15.9-percentage-

point-increase) and urban (13.4-percentage-point-increase) hospitals without obstetric services in 2010 and by 2024. Still, Idaho experienced notable recent losses in obstetric services availability.

- **Nevada** had the 13th lowest percent of hospitals that lost obstetric services during 2010-2024 (10.3%, 4/39) compared with other US states, all of which occurred in Nevada prior to 2024. All obstetric services losses during 2010-2024 occurred in urban hospitals, increasing the percent of urban hospitals without services from 32.0% (8/25) in 2010 to 50.0% (14/28) by 2024. The percent of rural hospitals in Nevada without services remained consistently high in 2010 and 2024, at 63.6% (7/11) in both years. Even with few obstetric unit closures in Nevada, many rural and urban areas in the state have limited availability of these services.
- Only 2.1% (1/47) of hospitals in **Utah** lost obstetric services during 2010-2024, and no losses occurred in the most recent year of data (2024). Utah consistently had some of the lowest proportions nationally of hospitals without obstetric services overall as well as separately among rural and urban hospitals. The proportion of hospitals without obstetric services decreased by 0.3 percentage points among rural hospitals (from 5.3% [1/19] to 5.0% [1/20]) and by 0.9 percentage points among urban hospitals (from 8.3% [2/24] to 7.4% [2/27]).



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References

1. About Metropolitan and Micropolitan Statistical Areas. United States Census Bureau. February 27, 2026. Accessed October 2, 2026. <https://www.census.gov/programs-surveys/metro-micro/about.html>
2. Interrante JD, Carroll C, Sheffield EC, Handley SC, O'Hanlon K, Kozhimannil KB. An Enhanced Method for Identifying Hospital-Based Obstetric Unit Status, Version 2 with Addendum. University of Minnesota Rural Health Research Center; 2025. <https://rhrc.umn.edu/publication/an-enhanced-method-for-identifying-hospital-based-obstetric-unit-status-version-2-with-addendum/>
3. Interrante JD, O'Hanlon K, Sheffield EC, Kozhimannil KB. Annual Overview of Hospital-Level Changes in Obstetric Services Availability, 2010-2024. University of Minnesota Rural Health Research Center; 2026. <https://rhrc.umn.edu/publication/annual-overview-of-hospital-level-changes-in-obstetric-services-availability-2010-2024/>

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