Master of Public Health

Applied Practice Experience

by

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MPH Candidate

submitted in partial fulfillment of the requirements for the degree

MASTER OF PUBLIC HEALTH

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Chapter 1 - Portfolio Products

During my APE/ILE experience, I was employed at the Kansas Department of Health and Environment—Bureau of Family Health (KDHE—BFH). I began working with the Maternal and Child Health (MCH) team in March 2024. The KDHE's MCH team leads efforts to improve the health of women and children in Kansas by fostering partnerships with families and communities. Within KDHE, a variety of maternal health initiatives exist, including the Kansas Maternal Mortality Review Committee (KMMRC) which gives rise to the MAVIS Project; the Kansas Maternal and Child Health (KMCH) Title V Block Grant, which includes the Kansas Connecting Communities (KCC) and the Kansas Perinatal Community Collaborative (KPCC); and the Kansas Perinatal Quality Collaborative (KPQC), which includes the Fourth Trimester Initiative (FTI).

My interest in maternal and child health led me to pursue projects related to current health initiatives in Kansas and assess their impact on Kansas communities. In April 2024, I began reviewing the Kansas Maternal Mortality Review Committee's (KMMRC) recommendations and the health initiatives that the KDHE and the KPQC have to address the recommendations. I also attended the Kansas Maternal and Child Health Council meeting, where I better understood the current and prospective achievements and challenges facing Kansas maternal and child health. Eventually, this led me to meet and work with the KPQC and KMMRC coordinator and Kansas MCH epidemiologist to create two infographics surrounding the topics of pregnancy-related deaths and the CDC PRAMS data for Kansas (2017-2022) to be used for information sharing at the Kansas Maternal Health Innovation Task Force meeting(s) and published in the future 2016-2022 KMMRC report (Appendix B). I also worked with the Maternal Health Innovation Coordinator to create a survey to assess the perceived barriers, challenges, gaps, and achievements of Kansas maternal health initiatives by the Maternal Health Innovation Task Force members (Appendix A).

The Kansas Maternal Mortality Review Committee (KMMRC) is a state-level initiative established to meticulously review and analyze cases of maternal mortality in Kansas. Its primary objective is to identify the underlying causes of pregnancy-related deaths and formulate recommendations aimed at preventing similar incidents in the future. The KMMRC rigorously evaluates data related to pregnancy-associated deaths, discerning which ones could have been prevented, and then carefully analyzes contributing factors such as healthcare accessibility, social determinants of health, and systemic issues within the healthcare system. Through collaboration with various stakeholders, including public health agencies and healthcare

providers, the KMMRC aims to enhance maternal health outcomes by implementing targeted interventions and proposing policy recommendations. This committee plays a pivotal role in addressing the maternal health crisis in Kansas, providing valuable insights that inform state health initiatives and improve care for pregnant individuals.

The Kansas Perinatal Quality Collaborative (KPQC) is a statewide effort to enhance maternal and infant health outcomes in Kansas. It brings together healthcare providers, public health experts, and other stakeholders to implement evidence-based practices and quality improvement projects in birthing facilities across the state. The KPQC addresses critical issues in perinatal care, including reducing maternal mortality and morbidity, improving neonatal outcomes, and enhancing overall care quality for mothers and newborns. One of its key initiatives is the Fourth Trimester Initiative, which aims to decrease maternal morbidity and mortality during the postpartum period through comprehensive assessments and interventions. The KPQC offers resources, training, and ongoing support to participating healthcare facilities, promoting collaboration and knowledge sharing among maternal health leaders throughout Kansas. By coordinating efforts and standardizing best practices, the KPQC is crucial in advancing maternal and infant healthcare quality across the state.

The Kansas Maternal Health Innovation Task Force is a collaborative involving individuals from various state and community organizations. The task force aims to improve maternal health by providing quality services, a skilled workforce, enhanced data quality and capacity, and innovative programming in Kansas' maternal and child healthcare system.

Table 1.1 Summary of Portfolio Products

Portfolio Product	**Description**
Infographic(s)	The infographics contained the most recent KMMRC report and CDC PRAM data. The finished products were used for information sharing in future MHTIF meetings and the future published (2016-2022) KMMRC report.
Collaboration on Maternal Health Innovation Task Force (MHTIF) Survey	The survey aims to assess MHTIF members' perceived awareness and effectiveness of various maternal health initiatives in Kansas, seeking to gather comprehensive insights on enhancing maternal health outcomes in Kansas

	by identifying gaps, barriers, and opportunities for collaboration and improvement of state health departments and local communities. I created the survey questions, and my mentors reviewed the final draft and assisted in piloting the survey.

The products identified above, need to address at least one or more of the competencies chosen for Chapter 2 – Competencies. ***One product does not have to satisfy all five of your chosen competencies, but all of the products together must satisfy all five competencies.***

Table 1.2 Portfolio Products and Competency Addressed

Portfolio Product	**Number and Competency Addressed**	
Infographic(s)	14	Advocate for political, social, or economic policies and programs that will improve health in diverse populations.
	16	Apply principles of leadership, governance, and management, which include creating a vision, empowering others, fostering collaboration, and guiding decision-making.
Collaboration on Maternal Health Innovation Task Force (MHTIF) Survey	2	Select quantitative and qualitative data collection methods appropriate for a given public health context.
	4	Interpret results of data analysis for public health research, policy, or practice.
	11	Select methods to evaluate public programs.
	14	Advocate for political, social, or economic policies and programs that will improve health in diverse populations.

Chapter 2 - Competencies

This chapter must contain this following table, in addition to a written detailed explanation of each competency and how it was addressed and/or attained during the APE.

Table 2.1 Summary of MPH Foundational Competencies

Number and Competency		Description
2	Select quantitative and qualitative data collection methods appropriate for a given public health context.	This competency was fulfilled by designing a survey that included qualitative and quantitative components. The survey would be provided to members of the MHTIF through Qualtrics. My mentor, Kayla Stangis, suggested using this data collection method to account for timeliness and accuracy.
4	Interpret results of data analysis for public health research, policy, or practice.	The data collected via the survey was analyzed to evaluate members' knowledge and perceptions of Kansas maternal health initiatives.
11	Select methods to evaluate public programs.	My mentors, Kayla Stangis and Jill Nelson, chose the survey as the best way to evaluate the MHITF members' perceptions of the effectiveness of the MCH initiatives in Kansas. Evaluating public health initiatives is crucial for creating and implementing efficient and beneficial programs for the target populations.
14	Advocate for political, social, or economic policies and programs that will improve health in diverse populations.	The survey design advocated for improved maternal health policies by gathering diverse perspectives on current initiatives, identifying gaps in services, and soliciting suggestions for policy changes to address health disparities among different populations in Kansas. The infographics function as a potent tool for advocacy. They visually present data on maternal health disparities and outcomes, highlight areas requiring policy attention, and inform stakeholders about the impact of social determinants on maternal health in various Kansas communities.
16	Apply principles of leadership, governance, and management, which include creating a vision, empowering others, fostering collaboration, and guiding decision-making.	Creating infographics for the KMHITF showcased leadership by envisioning data presentation and guiding decision-making through strategic data visualization.

Competency 2 – This competency was primarily achieved through my design of the comprehensive survey for the members of the Maternal Health Innovation Task Force (MHITF).

The survey incorporated qualitative and quantitative components, demonstrating my ability to use mixed methods in data collection. Considering timeliness and accuracy in data collection, and in consultation with my mentor, Kayla Stangis we decided to utilize Qualtrics as the survey creation and distribution platform. By crafting this survey, I demonstrated my ability to select and implement appropriate data collection methods aligned with the specific needs of the MHITF, ensuring the gathering of robust and diverse data to inform future maternal health strategies and interventions.

Competency 4 – During my experience, I addressed and attained the competency of interpreting results of data analysis for public health research, policy, and practice through my work with the survey data collected from members of the Maternal Health Innovation Task Force (MHITF). After designing and administering the survey, I analyzed the responses to evaluate members' knowledge and perceptions of Kansas maternal health initiatives. This process involved examining quantitative data from Likert scale questions and qualitative data from open-ended responses. I carefully interpreted these results, identifying key trends, patterns, and insights that emerged from the data. This analysis allowed me to draw meaningful conclusions about the current state of maternal health initiatives in Kansas, including awareness levels among healthcare providers, perceived effectiveness of existing programs, and identified gaps or areas for improvement. By interpreting these results, I was able to provide valuable insights that could inform future policy decisions, guide the development of new initiatives, and contribute to the overall improvement of maternal health practices in Kansas. This experience enhanced my ability to translate raw data into actionable information, a critical public health research and practice skill.

Competency 11 - During my integrated learning experience, I addressed and attained the competency of selecting methods to evaluate public health programs through my work on developing a survey for the Maternal Health Innovation Task Force (MHITF) members. In collaboration with my mentors, Kayla Stangis and Jill Nelson, we determined that a survey would be the most effective method to evaluate the MHITF members' perceptions of the effectiveness of maternal and child health (MCH) initiatives in Kansas. This decision was based on the understanding that evaluating public health initiatives is crucial for creating and implementing efficient and beneficial programs for maternal populations.

Competency 14 - By visually presenting data from the KMMRC report and CDC PRAMS data for Kansas (2017-2022), the infographics effectively highlight disparities in maternal health outcomes across different populations. They showcase key statistics on pregnancy-related deaths, emphasizing how social determinants of health and factors such as race, ethnicity, and

socioeconomic status impact maternal health. By presenting this information in an accessible format, the infographics advocate for targeted interventions and policy changes to address these disparities. The infographics highlight the role of mental health conditions and substance use disorders in maternal mortality, advocating for increased resources and policy attention in these areas. Ultimately, these visual tools empower stakeholders with the knowledge needed to advocate for political, social, and economic policies that can improve maternal health outcomes across all communities in Kansas.

I also addressed this competency through the design and implementation of my survey. By crafting questions that sought diverse perspectives on current maternal health initiatives in Kansas, I created a platform for stakeholders to voice their opinions and experiences. The survey was intentionally structured to identify gaps in services, particularly those affecting underserved populations, and to solicit suggestions for policy changes that could address health disparities among different communities in Kansas. Through this process, I was able to indirectly advocate for improved maternal health policies by providing a mechanism for key stakeholders to share their insights and recommendations. The survey questions were designed to uncover the unique challenges faced by various populations, including rural communities and racial/ethnic minorities, in accessing maternal healthcare. By gathering this information, I aimed to create a comprehensive picture of the maternal health landscape in Kansas, highlighting areas where policy interventions could make the most significant impact. This approach advocated for better policies and ensured that the voices of diverse populations were included in the conversation about improving maternal health outcomes across the state.

Competency 16 - The development of infographics for the MCH team demonstrated leadership principles by creating a clear vision for data presentation, empowering MCH team members and other local maternal health community leaders to make positive change, fostering collaboration between departments for comprehensive data interpretation, and guiding decision-making by highlighting key trends and areas for improvement in maternal health outcomes.

Table 2.2 MPH Foundational Competencies Course Mapping

22 Public Health Foundational Competencies Course Mapping	MPH 701	MPH 720	MPH 754	MPH 802	MPH 818
Evidence-based Approaches to Public Health					
1. Apply epidemiological methods to the breadth of settings and situations in public health practice	x		x		
2. Select quantitative and qualitative data collection methods appropriate for a given public health context	x	x	x		
3. Analyze quantitative and qualitative data using biostatistics, informatics, computer-based programming and software, as appropriate	x	x	x		
4. Interpret results of data analysis for public health research, policy or practice	x		x		
Public Health and Health Care Systems					
5. Compare the organization, structure and function of health care, public health and regulatory systems across national and international settings		x			
6. Discuss the means by which structural bias, social inequities and racism undermine health and create challenges to achieving health equity at organizational, community and societal levels					x
Planning and Management to Promote Health					
7. Assess population needs, assets and capacities that affect communities' health		x		x	
8. Apply awareness of cultural values and practices to the design or implementation of public health policies or programs					x
9. Design a population-based policy, program, project or intervention			x		
10. Explain basic principles and tools of budget and resource management		x	x		
11. Select methods to evaluate public health programs	x	x	x		
Policy in Public Health					
12. Discuss multiple dimensions of the policy-making process, including the roles of ethics and evidence		x	x	x	
13. Propose strategies to identify stakeholders and build coalitions and partnerships for influencing public health outcomes		x		x	x
14. Advocate for political, social or economic policies and programs that will improve health in diverse populations		x			x
15. Evaluate policies for their impact on public health and health equity		x		x	
Leadership					
16. Apply principles of leadership, governance and management, which include creating a vision, empowering others, fostering collaboration and guiding decision making		x			x
17. Apply negotiation and mediation skills to address organizational or community challenges		x			
Communication					
18. Select communication strategies for different audiences and sectors	DMP 815, FNDH 880 or KIN 796				

19. Communicate audience-appropriate public health content, both in writing and through oral presentation	DMP 815, FNDH 880 or KIN 796				
20. Describe the importance of cultural competence in communicating public health content		x			x
Intreprofessional Practice					
21. Perform effectively on interprofessional teams		x			x
Systems Thinking					
22. Apply systems thinking tools to a public health issue			x	x	

Appendix

Appendix A:

Final Qualtrics Draft:

	Far below average	Somewhat below average	Average	Somewhat above average	Far above average
Current data collection methods	○	○	○	○	○
Evaluation methods	○	○	○	○	○
Accessibility of maternal health data	○	○	○	○	○

On a scale from 1 (not a barrier) to 5 (extreme barrier), to what extent do you believe the following are barriers to implementing alternative or non-traditional maternal care options in your area:

	Not a barrier	Slight barrier	Moderate barrier	Considerable barrier	Extreme barrier
Lack of funding	○	○	○	○	○
Regulatory barriers	○	○	○	○	○
Lack of trained professionals	○	○	○	○	○
Cultural resistance	○	○	○	○	○
Lack of awareness	○	○	○	○	○

Do you have any final thoughts about any strengths or gaps in maternal healthcare in Kansas?

Powered by Qualtrics

strategies are for involving local communities in maternal health initiatives:

	Not effective at all	Moderately effective	Extremely effective
Community outreach programs	○	○	○
Local health fairs	○	○	○
Partnerships with community organizations	○	○	○
Social media campaigns	○	○	○
Town hall meetings	○	○	○

(Optional) What policies, if any, sufficiently support maternal health improvements in Kansas?

On a scale from 1 (strongly disagree) to 5 (strongly agree), to what extent do you agree with the following statements:

	Strongly disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Strongly agree
Maternal health initiatives in Kansas have positively evolved over the past few years.	○	○	○	○	○
Kansas maternal health initiatives have integrated well with federal programs.	○	○	○	○	○
There are significant gaps in maternal health initiatives.	○	○	○	○	○
There are significant overlaps in maternal health initiatives in Kansas.	○	○	○	○	○

(Optional) Could you elaborate on your answers?

On a scale from 1 (far below average) to 5 (far above average), how would you rate KDHE's:

On a scale from 1 (extremely negative) to 5 (extremely positive impact), how would you rate the impact of education access and quality for maternal health in Kansas?

	Extremely negative	Somewhat negative	Neither positive nor negative	Somewhat positive	Extremely positive
In urban counties?	○	○	○	○	○
In rural counties?	○	○	○	○	○

On a scale from 1 (extremely negative) to 5 (extremely positive impact), how would you rate the impact of the neighborhood and built environment (e.g., housing, transportation, safety) for maternal health in Kansas?

	Extremely negative	Somewhat negative	Neither positive nor negative	Somewhat positive	Extremely positive
In urban counties?	○	○	○	○	○
In rural counties?	○	○	○	○	○

On a scale from 1 (extremely negative) to 5 (extremely positive impact), how would you rate the impact of the social and community context (e.g., social cohesion,

discrimination, incarceration) on maternal health in Kansas?

	Extremely negative	Somewhat negative	Neither positive nor negative	Somewhat positive	Extremely positive
In urban counties?	○	○	○	○	○
In rural counties?	○	○	○	○	○

(Optional) Are there any specific gaps that you want to highlight for urban or rural counties?

(Optional) Are there any specific assets or strengths that you want to highlight for urban or rural counties?

On a scale from 1 (not effective at all) to 3 (extremely effective), how effective do you believe the following

Default Question Block

How knowledgeable are you about the resources provided by these Kansas maternal health programs and initiatives?

	Not knowledgeable at all	Moderately knowledgeable	Very knowledgeable
Alliance for Innovation on Maternal Health (AIM) program	○	○	○
Fourth Trimester Initiative (FTI)	○	○	○
Maternal Warning Signs Initiative	○	○	○
Kansas Connecting Communities	○	○	○
Kansas Perinatal Community Collaborative	○	○	○
M.A.V.I.S Project	○	○	○

On a scale 1 (not effective) to 5 (very effective), how effective do you believe the current maternal health

initiatives are in improving maternal health outcomes in Kansas?

	Not effective at all	Moderately effective	Extremely effective
In urban counties?	○	○	○
In rural counties?	○	○	○

(Optional) Could you explain your answer?

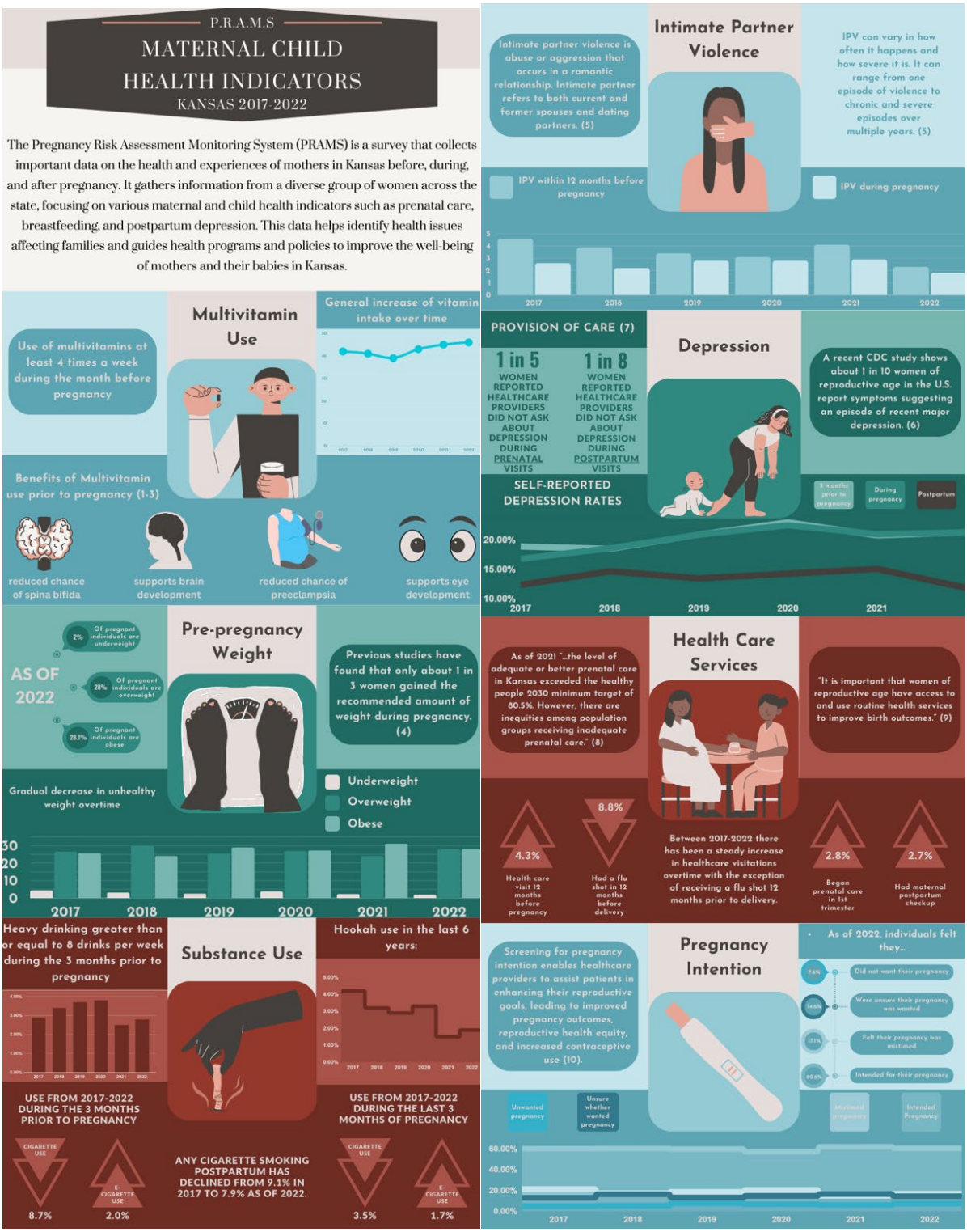
On a scale from 1 (extremely negative) to 5 (extremely positive impact), how would you rate the impact on economic stability (e.g., poverty, employment, food security) for maternal health in Kansas?

	Extremely negative	Somewhat negative	Neither positive nor negative	Somewhat positive	Extremely positive
In urban counties?	○	○	○	○	○
In rural counties?	○	○	○	○	○

Appendix B: Infographics

MHITF Infographic:

PRAMS Infographic:



Contraceptive Use

Use of all forms of postpartum contraception have decreased except for the least effective postpartum contraceptive method between 2017 and 2022.

Use of any forms of postpartum contraception between 2017 and 2022:

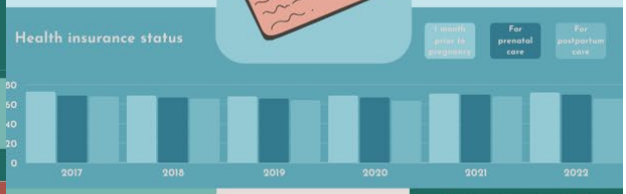
Declined by: 3.9%

Private Insurance

As of 2021, 51.7% of women had private insurance in the U.S (15).

Coverage by private insurance rose with age, from 14.7% for mothers under age 20 to 65.5% for mothers aged 35 and over (15).

Health insurance status

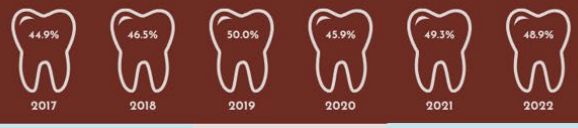


Oral Health

Pregnancy can make women more prone to periodontal (gum) disease and cavities.

Periodontal disease has been associated with poor pregnancy outcomes, including preterm birth and low birth weight. (11)

TEETH CLEANED DURING PREGNANCY BY A DENTIST OR DENTAL HYGIENIST



Medicaid or CHIP/SCHIP

As of 2021, 41% of U.S. births were paid for by Medicaid (15).

Among women covered by Medicaid or CHIP delivering a live birth in 2021 (16):

82% HAD A TIMELY PRENATAL CARE VISIT

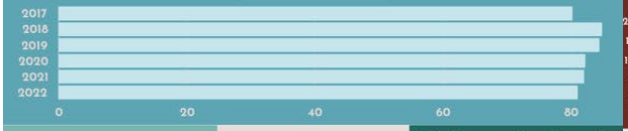
75% HAD A TIMELY POSTPARTUM CARE VISIT

Health insurance status

Infant Sleep Practices

The back sleep position is the safest sleep position for all babies, including those born preterm and those with reflux, until they are 1 year old (12).

Individuals in Kansas who laid their baby most often on their back to sleep remained relatively steady with an average of 82.5% across 2017-2022.

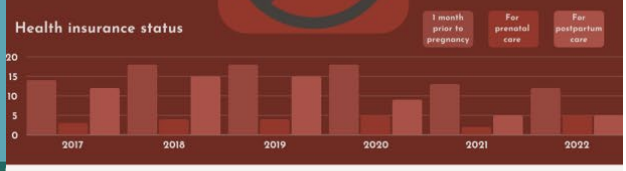


No Insurance

As of 2021, 3.9% of U.S. births were "self-pay" and likely to be uninsured (15).

Uninsured women receive fewer prenatal care services than insured counterparts (17).

Health insurance status



Breastfeeding Practices

The U.S. Dietary Guidelines for Americans 2020-2025 recommend that infants be exclusively breastfed for about 6 months with continued breastfeeding while introducing appropriate complementary foods for 1 year or longer (13).

60% of mothers do not breastfeed for as long as they intended to (14). This is influenced by many factors:

- Issues with lactation and latching.
- Concerns about infant nutrition and weight.
- Mother's concern about taking medications while breastfeeding.

% of those who've ever breastfed

Individuals who have ever breastfed and those who continued to breastfeed to 8 weeks fluctuated between between 2017 and 2022, with large drops in 2021.

% of those who breastfed at 8 weeks

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