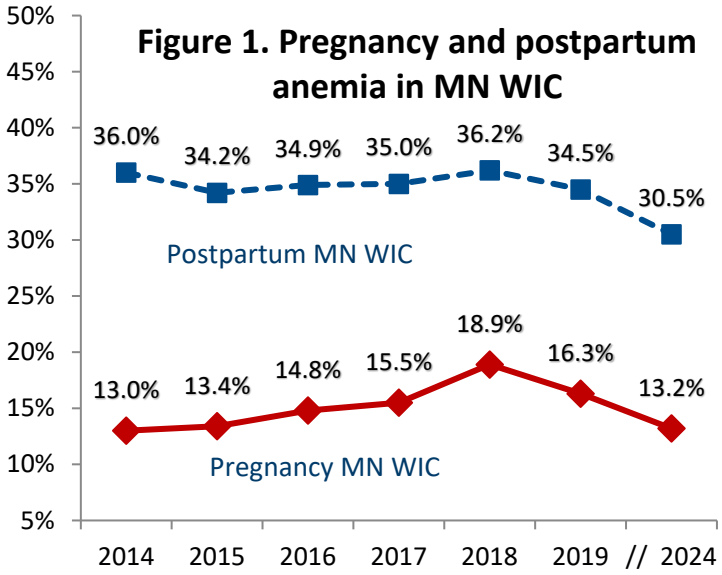
Anemia in pregnant and postpartum women
Minnesota WIC fact sheet, 2025

Anemia[¥] during and after pregnancy can cause long-term health problems for mother and infant. Pregnancy anemia increases the risk of prematurity and low birth weight. Prematurity is associated with autism spectrum disorder, intellectual disabilities, schizophrenia, and attention-deficit- hyperactivity disorder in children. Iron deficiency anemia during the third trimester can result in low iron stores in the newborn. These low iron stores may continue through the first year of life with potential lifelong consequences (Georgieff, 2020).
Anemia occurring after pregnancy is associated with postpartum depression, decreased milk supply, impaired parent-infant bonding and anemia in subsequent pregnancies (Neef, 2024).

Pregnancy and postpartum anemia

- In 2024, 2,167 pregnant women and 6,780 postpartum women in MN WIC were anemic.
- Anemia during pregnancy in MN WIC decreased to 13.2% in 2024 after peaking in 2018 at 18.9% (figure 1) (MN WIC Information System). Data are unavailable from 2020 to 2023 due to deferred blood work during the COVID-19 pandemic.
- The National Health and Nutrition Examination Survey for the United States reported increases in anemia during pregnancy with an estimate of 11.1% in 2018 (Jefferds, 2022).
- In 2018, Minnesota WIC increased its focus on anemia in response to rising rates. Nutrition education, promoting the use of non-gummy prenatal vitamins containing iron, and enhanced follow-up protocols were implemented statewide.



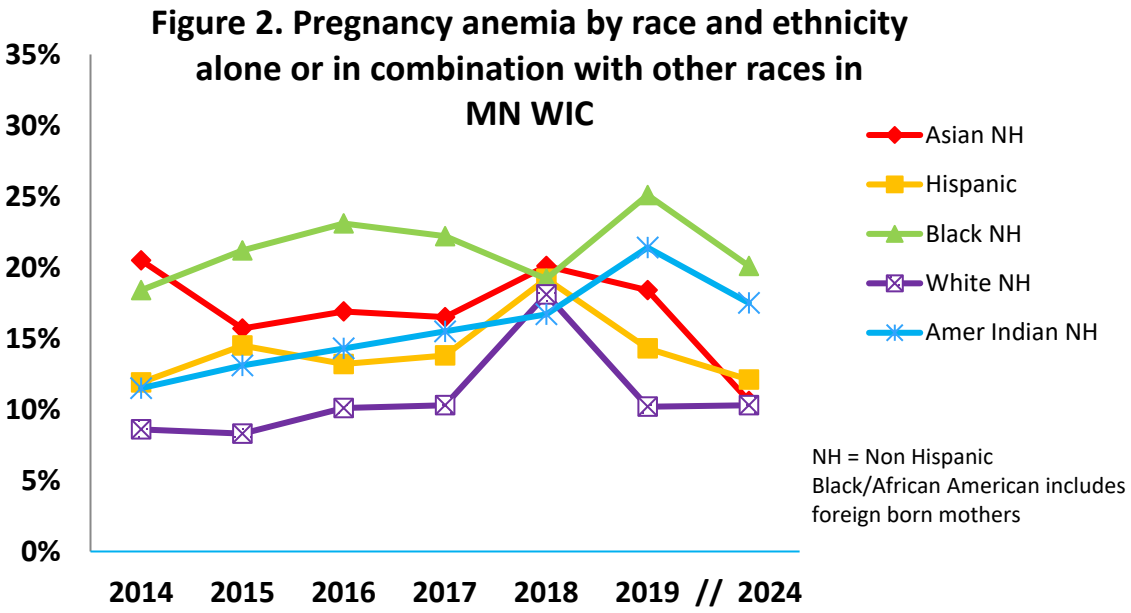
- Anemia in postpartum women in MN WIC decreased to 30.5 % in 2024 after peaking at 36.2% in 2018 (figure 1). (MN WIC Information System). National estimates for the prevalence of postpartum anemia are as high as 50% (Neef, 2024).

MN WIC addresses anemia by

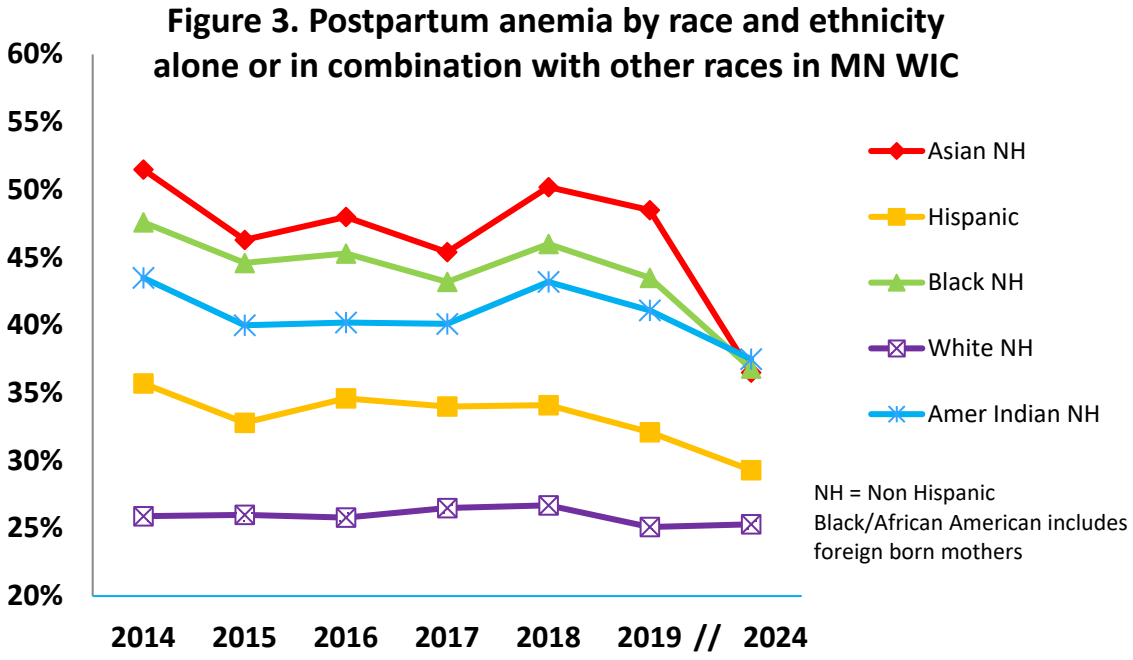
- Screening for anemia at WIC certification.
- Counseling and education to prevent or resolve anemia.
- Providing a nutritious food package that increases intake of iron and vitamin C.
- Encouraging the use of prenatal supplements with adequate amounts of iron.
- Referring food-insecure families to food resources.
- Referring those with low hemoglobin results to a health care provider.

[¥] Anemia refers to low hemoglobin of <11.0 mg/dl first and third trimesters, <10.5 mg/dl second trimester, and <12.0 mg/dl postpartum. Low hemoglobin is most often due to iron deficiency.

Health inequities in pregnancy and postpartum anemia



- Anemia during pregnancy decreased for Asian, Hispanic and White participants since 2018 (figure 2).
- Black and American Indian people were more likely to have anemia during pregnancy. Anemia decreased for both groups from 2019 to 2024 (figure 2).



- Postpartum anemia decreased for all race and ethnicities in 2024 (figure 3).
- In 2018, 50.2% of Asian postpartum women had anemia; twice that of white women. By 2024, these rates decreased to 36.8% (figure 3).
- Asian, Black (African American) and American Indian people had the highest rates of postpartum anemia (figure 3).

Anemia by cultural identity

Figure 4. Postpartum anemia by Black cultural identity in MN WIC

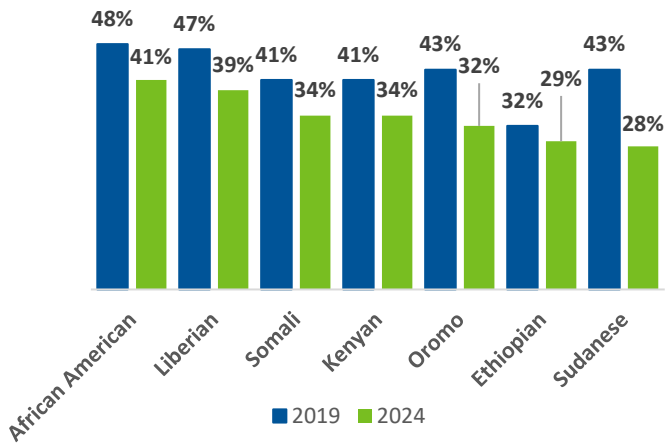
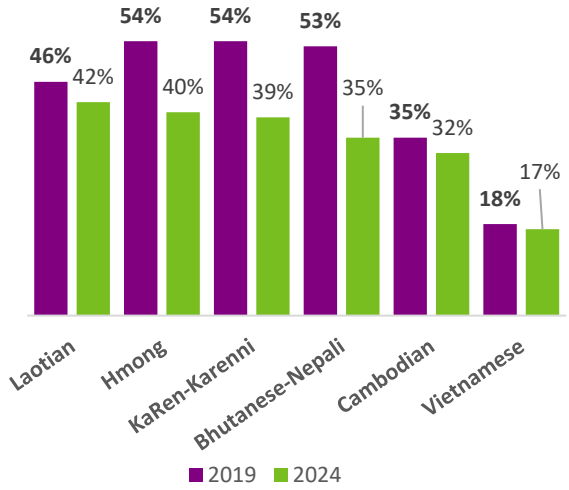
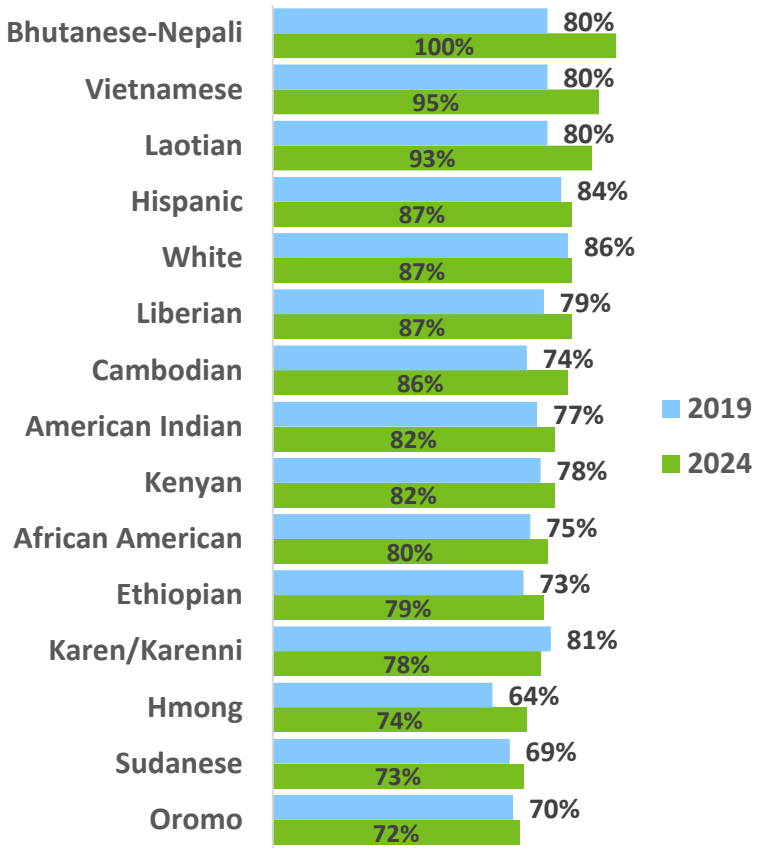


Figure 5. Postpartum anemia by Asian cultural identity in MN WIC



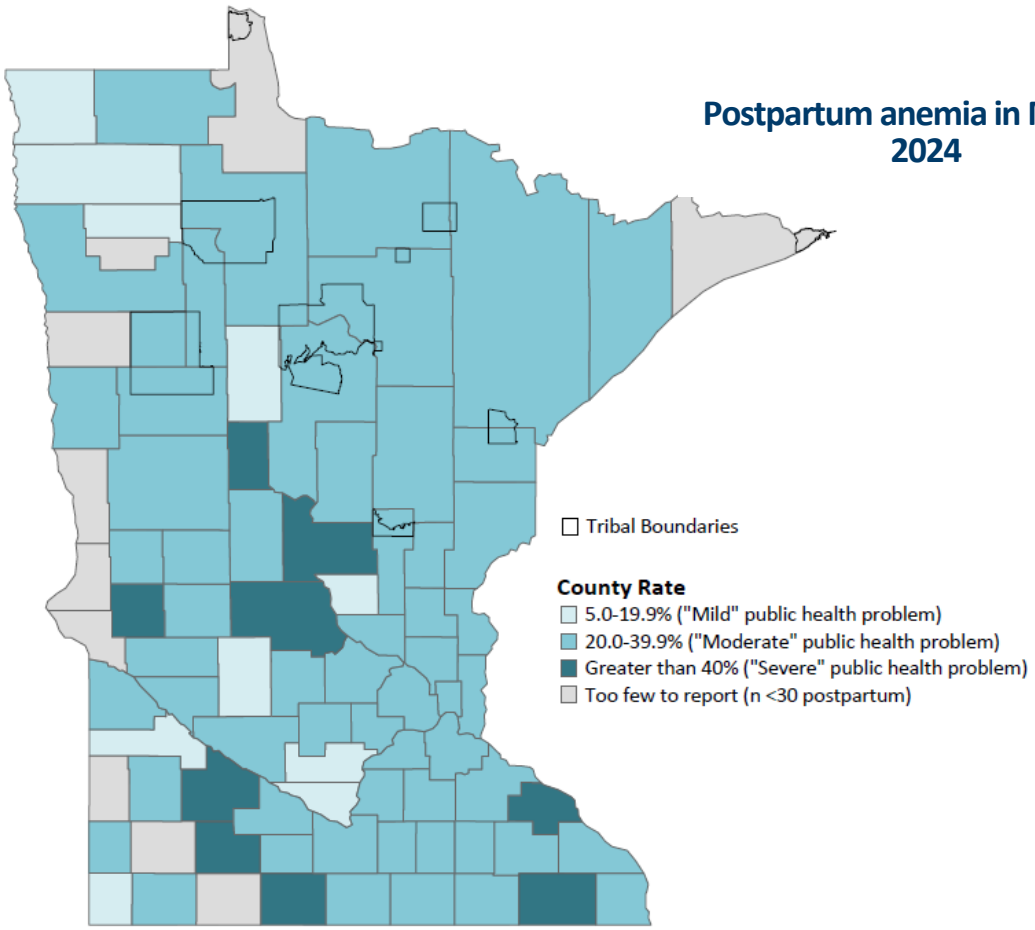
Postpartum anemia rates vary by cultural identity with African American, Liberian, Hmong, KaRen-Karenni and Bhutanese-Nepali having higher rates. All groups had lower rates of postpartum anemia in 2024 compared to 2019 (figures 4, 5).

Figure 6. Daily multivitamin use during pregnancy by cultural identity



Multivitamin/mineral use

- In 2024, 84% of postpartum people in MN WIC reported taking a daily multivitamin during pregnancy compared to 81% during 2019.
- Increases in daily multivitamin use increased for all cultural identity groups from 2019 to 2025.
- Daily multivitamin use varied by cultural identity, with women identifying as Sudanese, Hmong, and Oromo reporting the lowest levels (figure 6).
- In 2024, 24% of postpartum people reported taking a multivitamin before pregnancy compared to 22% during 2019.
- Providing education before and during pregnancy on multivitamin and mineral supplements that contain iron is important. Some cultural groups seek gelatin-free capsules. Gummy supplements should not be used since very few contain iron.



Actions to prevent anemia in women

Preconception

- Take 400 mcg Dietary Folate Equivalents (recommended for all women of childbearing age).
- Eat iron-containing foods daily, such as meats, legumes, and fortified grains, along with foods high in Vitamin C.
- Space pregnancies at 18 or more months apart.
- Resolve anemia from previous pregnancy before becoming pregnant.

Prenatal

- Get early, regular prenatal care.
- Take a daily prenatal supplement with 27 mg iron and 600 mcg Dietary Folate Equivalents. No gummies, as few contain iron.
- Eat iron-containing foods each day along with foods high in Vitamin C.
- Manage nausea and vomiting.
- If eligible, participate in WIC early in pregnancy and redeem benefits for all WIC foods each month. Participate in SNAP and food shelves if eligible.

Postpartum

- Get postpartum health care.
- Eat iron-containing foods each day along with foods high in Vitamin C.
- Participate in WIC as long as eligible. WIC provides 6 to 12 months of food for postpartum women based on breastfeeding status. Redeem benefits for all WIC foods each month.
- Take 400 mcg Dietary Folate Equivalents (recommended for all women of childbearing age).
- Enroll infant in WIC if eligible.

MINNESOTA WIC
Women, Infants & Children Nutrition Program

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