Iron Deficiency Anemia- Topic of the Month

UPDATED MARCH 2026

Child Anemia data for MN WIC

Anemia is characterized by a lower-than-normal healthy red blood cell count in the body, which leads to reduced oxygen, often causing fatigue, weakness, cognitive difficulties, and irritability. Anemia in young children can lead to growth and developmental delays.

According to the Child Anemia in the Minnesota WIC Program, 2025 (PDF) factsheet, anemia in children has been decreasing, reaching 11.4% in 2024. However, there is a gap in data since hemoglobin was not taken during the pandemic, and rates of anemia in MN WIC still remain higher when compared to all U.S. children. The good news is that anemia can be prevented!

WIC plays a critical role in preventing, identifying, and resolving anemia by providing a thorough dietary assessment and tailored nutrition counseling that focuses on improving overall diet quality and iron absorption.

Nutrition assessment

A thorough nutrition assessment will help identify potential causes of low hemoglobin levels and contributing factors to Iron Deficiency Anemia. Assessing the *overall diet quality* is also important because other nutrients play a role in iron metabolism and contribute to red blood cell formation. These include zinc, copper, and vitamins B6 and B12.

The following are some things to consider when completing an assessment.

For 1–5-year-olds, consider:

- **Is the toddler or child "picky"**? Eats lots of "junk food", avoids eating meat or only eats processed meats like hot dogs, limited variety of foods.

- **How much milk is being consumed**? Is milk consumption > 24 oz? Is the child weaned from the bottle? Is milk replacing other foods? Does the parent know how much milk is appropriate?
- **Is the parent a vegetarian/vegan?** Is the toddler fed meats, what non-meat sources of iron do they eat?
- **Does the family have food insecurity?** This can contribute to Iron Deficiency Anemia. A referral may be needed.
- **Does the child drink large amounts of sweetened beverages?** Can impact overall diet intake and quality.
- **Have vitamins with iron been recommended by the health care provider?** Do they have them, do they take them, and if so, how often?
- **Have lead levels been tested?** Are they within an acceptable range?
- **Growth pattern?**
- **Behavioral concerns?**
- **Medications or health concerns?**

The assessment will help you to identify diet and behavioral factors that could later guide the focus for nutrition counseling and referrals (if needed).

Risk factor

Risk Code 201 - Low Hematocrit/Low Hemoglobin is assigned when the hemoglobin (hgb) or hematocrit concentration falls below the 95% confidence interval for healthy, well-nourished individuals of the same age, sex, and stage of pregnancy.

Child Values by Status

Status	Age	Hct. %	Hgb., Grams
Infant	5-12 months	33.0	11.0
Child	12-24 months	32.9	11.0
Child	24-60 months	33.0	11.1

Anemia counseling tips:

Once a nutrition assessment has been completed, utilize PCS Counseling Skills to open a conversation about anemia, taking into consideration the parent's knowledge, interest, and motivation to explore this topic.

Counseling Tips:

- **Explore:** What the participant already knows about anemia?

- **Offer:** Information about anemia based on the participant's interest and knowledge. Keep it simple. For parents of young children, share facts that may motivate change, like anemia can:
  - Make a child tired and cranky.
  - Lower the ability to fight off infections, causing the child to get sick more often.
  - Affects the ability to concentrate and learn.
- **Explore:** What they think about the information provided (Listen for change talk, and motivation to resolve the anemia).
- **Offer:** Education based on the nutrition assessment, considering what the participant already knows and would like to learn about anemia. Concentrate on easy, doable tips to increase iron intake and absorption, as well as overall diet quality. This might include talking about:
  - **Food's high in iron**: Point out WIC foods that are high in iron and discuss other foods that are good iron sources. Heme iron (the type found in animal products), such as red meat, fish, and chicken, is much better absorbed by the body compared to non-heme iron (the type in plants). Small quantities of meat in the diet can make a large contribution to important nutrients, including iron, if accepted by the participant.
  - **Explore**: What high-iron foods the participant typically eats, and those they might consider trying or eating more often. (Eating More: IRON (PDF))
  - **Tips for increasing non-heme iron absorption**: Iron-containing food + vitamin C food combos. Offer simple, doable tips such as eating WIC cereal as a snack with a small glass of WIC juice or citrus fruit, or eating a bean burrito with tomatoes for lunch.
  - **Minimizing foods that interfere with iron absorption.** If the assessment identified excess intake of foods that may adversely affect iron absorption, such as coffee, tea, and milk, **explore** whether the participant might be open to decreasing the quantity consumed and/or consuming these between meals.
  - **Overcoming barriers to taking iron supplements**. Often, multivitamins or iron supplements are recommended by health care providers. WIC can serve an important role in helping participants work through the barriers that may exist to taking the supplements consistently.
    - **Explore their hesitations about giving a child a supplement**
      - Perceived side effects, such as constipation or increased appetite.
      - Avoiding ingredients that may be in a tablet, such as gelatin, gluten, or dyes.
      - "Baby doesn't like it", such as with iron drops.
      - Confusion in choosing an over-the-counter multi-vitamin with iron (*most gummy vitamins do not contain iron*).
      - Cost (may be covered by insurance, with a prescription).

- **Ideas for remembering to give the child their iron supplement**
  - Place it in a visible place, *but inaccessible to toddlers* (can be poisonous).
  - Set a recurring alarm on their phone.

WIC Training Resources

- Prevent Iron Deficiency Anemia Module- For more information on Iron Deficiency Anemia and its effect on growth and development**.**
- Anemia Resources- For a complete list of anemia resources, reports, and data, and more information.
- Eating More: IRON (PDF)-For participant information and guidance, share the nutrition education card.
- Meaningful Minutes: WIC Skills in 10
  - Meaningful Minutes - Preventing Anemia in Children
  - Meaningful Minutes - Preventing Anemia in Infants
  - Meaningful Minutes - Preventing Anemia in Women

Additional Resources

- Iron (National Institute of Health (NIH) Facts for Health Professionals. Sept. 2025)
- Diagnosis and Prevention of Iron Deficiency and Iron-Deficiency Anemia in Infants and Children (0-3 Years of Age) AAP (American Academy of Pediatrics. Nov. 2010)
- Anemia in Children and Teens: Parents FAQs (Healthychildren.org; AAP. Jan. 2019)

References- Complete Listing of Hyperlinks

Child Anemia in the Minnesota WIC Program, 2025
(https://www.health.state.mn.us/docs/people/wic/localagency/reports/anemia/2025child.pdf)

201 - Low Hematocrit/Low Hemoglobin
(https://www.health.state.mn.us/people/wic/localagency/riskcodes/201.html)

PCS Counseling Skills
(https://www.health.state.mn.us/people/wic/localagency/training/pcs/skills/counseling.html)

Eating More: IRON
(https://www.health.state.mn.us/docs/people/wic/nutrition/english/geniron.pdf)

Prevent Iron Deficiency Anemia Module
(https://www.health.state.mn.us/training/cfh/wic/nutrition/nepresources/preventanemia/index.html)

Anemia Resources (https://www.health.state.mn.us/people/wic/localagency/anemia.html)

Meaningful Minutes: WIC Skills in 10
(https://www.health.state.mn.us/people/wic/localagency/nutrition/minutes.html)

Iron (https://ods.od.nih.gov/factsheets/Iron-HealthProfessional/)

Diagnosis and Prevention of Iron Deficiency and Iron-Deficiency Anemia in Infants and Children (0-3 Years of Age) AAP
(https://publications.aap.org/pediatrics/article/126/5/1040/65343/Diagnosis-and-Prevention-of-Iron-Deficiency-and?autologincheck=redirected?nfToken=00000000-0000-0000-0000-000000000000)

Anemia in Children and Teens: Parents FAQs (https://www.healthychildren.org/English/health-issues/conditions/chronic/Pages/Anemia-and-Your-Child.aspx?_ga=2.103475784.970902375.1671140095-229876160.1661443892&_gl=1*1van28o*_ga*MjI5ODc2MTYwLjE2NjE0NDM4OTI.*_ga_FD9D3XZVQQ*MTY3MTE0MDA5NS45LjEuMTY3MTE0MDI3My4wLjAuMA..)

Minnesota Department of Health - WIC Program, 625 Robert St N, PO BOX 64975, ST PAUL, MN 55164-0975; 1-800-657-3942, health.wic@state.mn.us, www.health.state.mn.us; to obtain this information in a different format, call: 1-800-657-3942.

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