

Hypertension (Includes Chronic and Pregnancy-Induced)

**Definition/
cut-off value**

Presence of hypertension diagnosed by a physician as self reported by applicant/participant/caregiver; or as reported or documented by a physician, or someone working under physician's orders.

**Participant
category and
priority level**

Category	Priority
Pregnant Women	I
Breastfeeding Women	I
Non-Breastfeeding Women	III
Infants	I
Children	III

Justification

Women with chronic hypertension are at risk for complications of pregnancy such as pre-eclampsia. An estimated 15% of women with hypertension also have renal or cardiac involvement.

Hypertension is the most common medical complication of pregnancy, occurring in 7% of all pregnancies.

Factors associated with these hypertensive disorders include low income, low educational attainment, and poor nutrition. Hypertension during pregnancy may lead to low birth weight, fetal growth restriction, and premature delivery, as well as maternal, fetal, and neonatal morbidity.

Decreased calcium intake in early pregnancy may increase the risk of pregnancy induced hypertension, while increasing calcium intake has been shown to lower blood pressure and may prevent the risk of hypertensive disorders. Zinc deficiency, protein deficiency, excess salt intake, essential fatty acid deficiencies, and magnesium deficiencies have all been associated with increased rates of pregnancy-induced hypertension and pre-eclampsia. There is evidence that dietary changes aid in the prevention and control of hypertension. The WIC program provides foods and nutrition education compatible with treatment and prevention of hypertension during pregnancy.

Children with higher blood pressure are more likely to become adult hypertensives. The definition of hypertension during childhood is age-specific. Blood pressure and overweight status have been suggested as criteria to identify, monitor, and treat hypertensive children. Nutrition-related prevention efforts in high risk children include avoiding overweight, consuming a moderate salt intake, and maintaining an active lifestyle (8).

345 (continued)

Clarifications/ Guidelines

Before assigning this risk code, document the presence of hypertension on the health history form.

Even though the Institute of Medicine recommended not using pre-eclampsia and eclampsia as risk factors, USDA has stated that these conditions are allowed under risk code 345. The position of USDA is to recognize pregnancy-induced hypertension, the less severe condition that may lead to the more severe conditions, pre-eclampsia and eclampsia. The reason that these conditions are not included in the definition is that USDA wants the State Agencies to get away from using these terms and to use the term pregnancy-induced hypertension. Therefore, if a woman is diagnosed with either pre-eclampsia or eclampsia, she would be certified with the risk code 345, pregnancy-induced hypertension, the precursor of pre-eclampsia and eclampsia.

Self-reporting of a diagnosis by a medical professional should not be confused with self-diagnosis, where a person simply claims to have or to have had a medical condition without any reference to professional diagnosis. A self-reported medical diagnosis (“My doctor says that I have/my son or daughter has...”) should prompt the CA to validate the presence of the condition by asking more pointed questions related to that diagnosis.

References

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 2. Krause's: Food Nutrition and Diet Therapy 8th Edition; 1992; pp. 387-388.
 3. Institute of Medicine: Nutrition During Pregnancy: Part I, Weight Gain; and Part II, Nutrient Supplements; National Academy Press; 1990.
 4. Dekker, G.A. and Sibai, Baha, M.: Early detection of preeclampsia; Amer. Journal of Obstet. and Gynecol; 1991; 165(1):160.
 5. Belizian, JM, Villar J, Gonzalez L, Campodonico L, Bergel E.: Calcium supplementation to prevent hypertensive disorders of pregnancy; New England Journal of Medicine; 1991; 325(20): 1399.
 6. O'Brien, W.F.: The Prediction of Preeclampsia; Clinical Obstetrics and Gynecology; 1992; 35(2):351.
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8. Trams, CM, and Pipes, PL: *Nutrition in infancy and Childhood*; 6th edition; WCB McGraw-Hill; 1997; pp. 238-258.