# 479 Medical Disorders During Pregnancy

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Each year, ~3.75 million births occur in the United States, and >130 million births occur worldwide. A significant proportion of births are complicated by medical disorders. Advances in medical care and fertility treatment have increased the number of women with serious medical problems seeking pregnancy. Medical problems that interfere with the physiologic adaptations of pregnancy increase the risk for poor pregnancy outcome. Conversely, in some instances, pregnancy events may have implications for an individual's long-term health.

## HYPERTENSION

**(See also Chap. 277)** Cardiac output increases by 40% in pregnancy, with most of the increase due to an increase in stroke volume. Heart rate increases by ~10 beats/min during the third trimester. In the second trimester, systemic vascular resistance decreases, and this decline is associated with a fall in blood pressure. A blood pressure of ≥140/90 mmHg is abnormal and is associated with an increase in perinatal morbidity and mortality. The diagnosis of hypertension requires the measurement of two elevated blood pressures at least 4 h apart. Hypertension during pregnancy is classified as preeclampsia, gestational hypertension, or chronic hypertension. These classifications are distinguished based on timing in pregnancy and the presence of associated features (see below).

### ■ PREECLAMPSIA

Approximately 5–7% of all pregnant women develop *preeclampsia*, the new onset of hypertension (blood pressure ≥140/90 mmHg) and proteinuria (either a 24-h urinary protein >300 mg/24 h or a protein-creatinine ratio ≥0.3) after 20 weeks of gestation. Preeclampsia can