

Value of Diagnostics within Women's Health: Cardiovascular Disease



*CVD is the **leading cause** of death for women in the United States, with **1 in 5** female deaths due to CVD.*

Cardiovascular disease (CVD) broadly describes different conditions that can affect the heart and blood vessels. Some of the most common cardiovascular diseases in women are:

- ▶ **Arrhythmia:** When the heart beats too slowly, too fast, or in an irregular way.
- ▶ **Ischemic heart disease:** When plaque builds up in the walls of the arteries.
- ▶ **Heart failure:** When the heart is too weak to pump enough blood to support other organs in your body.

Ischemic heart disease, also known as coronary artery disease (CAD), is the most common heart disease and the leading cause of death for women. For many people, the first clue that they have CAD is a heart attack, although symptoms — which have been typically studied in men — often present differently in women.

Heart Attack Symptoms

Common in men and women	More common in women
<ul style="list-style-type: none">• Chest pain or discomfort (angina)• Pain or discomfort in the arms, shoulder, back, or jaw• Shortness of breath	<ul style="list-style-type: none">• Cold sweat outbreaks• Nausea or vomiting• Dizziness or lightheadedness• Heart palpitations• Unusual or unexplained fatigue

*Women experiencing a heart attack are **more likely to report mild symptoms or symptoms without chest pain, which can lead to delayed or missed diagnosis and worse health outcomes.***

CVD Risk Factors

- ▶ High LDL (low-density lipoprotein) cholesterol
- ▶ Smoking
- ▶ Diabetes
- ▶ Excess weight
- ▶ Unhealthy lifestyle (e.g., poor diet, physical inactivity, drinking too much alcohol)
- ▶ Psychosocial factors, including stress and depression



Additional Risk Factors Specific to Women:

- ▶ Early age of first period (before age 11)
- ▶ Being post-menopause, especially if one entered menopause early (before age 40)
- ▶ Complications during pregnancy (e.g., gestational diabetes, hypertensive disorders, recurrent miscarriages, preterm birth)
- ▶ Delivery of a low birth-weight or high birth-weight infant
- ▶ Breast cancer, polycystic ovary syndrome (PCOS), or autoimmune disease
- ▶ Hysterectomy

While there are many risk factors for CVD common to both men and women, there are a number of risk factors unique to women related to reproductive health, pregnancy, and menopause.

80% of women age 40 to 60 have one or more risk factor for coronary heart disease.

Diagnosing CVD

- ▶ **Blood tests** to measure lipid, lipoprotein A, C-reactive protein, and homocysteine levels
- ▶ **Imaging or scans** of the chest, heart, lungs, and blood vessels (e.g., chest x-ray, CT scan, MRI scan, or angiogram)
- ▶ **Electrocardiogram (ECG or EKG)** to record the electrical signals in the heart and check for irregular heartbeats
- ▶ **Echocardiogram** using sound waves to show how blood moves through the heart
- ▶ **Exercise tests or stress tests** to monitor how the heart reacts to physical activity

Other advanced imaging may include **cardiac catheterization**, which uses a dye to highlight blockages in the coronary arteries. PET and single-photon emission computerized tomography (SPECT) scans can also offer more nuanced information about how the heart is working.

Policy Opportunities

- ▶ **Increase Public Education and Awareness.** Ensuring the public is aware of risk factors, screening guidelines, and prevention strategies for CVD is essential for empowering women. Federal education and awareness campaigns are necessary to inform providers and women about how CVD specifically affects women and the resources available to reduce the impact of these conditions.
- ▶ **Address Health Disparities.** Women across racial and ethnic backgrounds experience different CVD risks. For example, compared to white women, Black women have more risk factors, develop disease earlier, and have higher mortality rates for CVD. Social determinants of health, such as access to healthy foods, exercise facilities, and care specialists, or exposure to discrimination in the health system also can exacerbate disparities. It is essential to address these barriers to promote heart health for all.
- ▶ **Champion Programs to Prevent Heart Disease and Stroke.** Policy officials at the local, state, and national levels should make efforts to regularly evaluate existing heart disease intervention programs, with steps to replicate, revise, and disseminate those programs which are most effective.

CVD Prevalence among adults 20+ years (2015-2018):

- 58.8% of Black females
- 42.7% of Hispanic females
- 42.5% of Asian females
- 42.1% of White females

References

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