

1. Heart Disease Facts

- Heart disease is the leading cause of death in the U.S., more than all of the cancers combined
- 500,000 people die from heart disease every year
- 35% of heart attacks are fatal
- In 50% of men and 63% of women who died suddenly of CHD, there were no previous symptoms of this disease
- 70% of heart attacks originate from mild blockages of 20-50%
- Heart disease is the leading cause of death for women
- Heart disease is leading cause of death of those with type 2 diabetes
- 50% of people who have heart attacks have normal cholesterol levels
- Heart disease is preventable by early detection and lifestyle modifications (diet, exercise, smoking, alcohol intake, control of blood pressure and cholesterol)

2. Significance of Early Detection of Heart Disease

Early detection of cardiovascular disease would allow timely institution of preventive measures well before symptoms present. When clinical symptoms are present, such as chest pain or abnormal heart sounds, the current standard is to order a stress EKG (Electrocardiogram). The problem is that a stress EKG only detects a problem if one of the major arteries to your heart is 70% or more blocked. Yet 86% of heart attacks occur when there is less than 70% blockage.

3. Value of calcium scoring in early detection of heart disease

According to the American College of Cardiology, coronary calcium quantification is an excellent method of assessing atherosclerotic plaque presence at individual artery sites. Moreover, the amount of calcium correlates with the overall magnitude of atherosclerotic plaque burden. The presence of coronary artery calcification provides substantial, cost-effective, independent prognostic value in predicting incident CHD that is incremental to measured coronary risk factors.

4. HeartCam EBCT technology

HeartCam uses EBCT (electron beam computed tomography) technology for calcium scoring. The Electron Beam is what has turned this technology into the gold standard screening tool for cardiac risk assessment. That's because the Electron Beam is ultra-fast – it acquires images more than 20 times faster than the traditional CT - and uses less radiation than most MSCT scanners. Total radiation is equal to just a couple of chest x-rays. According to the most recent 2006 AHA scientific statement on the *Assessment of Coronary Artery Disease by Cardiac Computed Tomography*, "Cardiac CT technology is rapidly evolving. On the basis of the substantial validation data, EBCT remains the reference standard for CAC measurement."

EBT vs 64-slice technology as seen on Oprah and Time Magazine:

5. Eligibility requirements for fully-paid HeartCam test

Asymptomatic men and women 40 years of age, who have one or more of the following risk factors:

- A family history of early heart disease,
- Elevated cholesterol
- High blood pressure
- Over weight
- Current or prior tobacco usage or a history of prolonged exposure to second hand smoke.
- Diabetes
- Metabolic Syndrome
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If you have known Heart Disease you are disqualified for HeartCam test.

Examples follow:

Prior History of Heart Attack, Angio, Bypass or Stroke or Angio/Cardiac Cath

Other Disqualifying Factors

Pregnant, Weigh over 300 lbs

6. HeartCam Contact Information

HeartCam is a service provided in collaboration with Penn Cardiac Care at The University of Pennsylvania's Penn Presbyterian Hospital one of America's Top 100 Heart Hospitals.

Address: 38th & Market Streets, Philadelphia, PA 19103

Phone: 215-662-LIFE (5433)

Website: www.phillyheartcam.com

Frequently Asked Questions about HeartCam

Am I appropriate for a HeartCam?

Asymptomatic men and women 40 years of age, who have one or more of the following risk factors:

1. A family history of early heart disease,
2. Elevated cholesterol
3. High blood pressure
4. Over weight
5. Current or prior tobacco usage, or a history of prolonged exposure to second hand smoke.
6. Diabetes
7. Metabolic Syndrome

What is the significance of coronary artery calcium?

Coronary artery calcium is a significant marker for atherosclerosis. The early detection of coronary calcium allows for the early detection of coronary artery disease, which enables patients to make changes in their modifiable risk factors in order to stop, stabilize and perhaps even reverse the plaque

What is the EBT Calcium Score?

The HeartCam EBT Calcium Score is a measure of the amount of calcium found in the coronary arteries. Healthy coronary arteries are free of plaque and should have a score of zero (no identifiable calcium).

A positive test means: Calcium deposits were found indicating presence of coronary artery disease. The amount of calcium is related to the amount of disease, and would guide your doctor in recommending appropriate treatment, including diet, medication or further testing.

A negative test means: No calcium deposits were seen and your risk of heart attack is very low. You still should work on any modifiable risk factors (such as diet, exercise and smoking), and we recommend a repeat scan in 3-5 years.

Is there any discomfort?

None at all. You stay fully clothed and the entire scan takes only a few minutes. There are no shots, no dyes to drink and no medications to take. It isn't even claustrophobic.

I don't want to know if something is wrong.

Actually you do. Heart disease is extremely treatable and reversible. In fact, when detected early enough, most patients can be treated with medications and lifestyle changes. One of the goals behind EBT scanning is to detect heart disease early so that heart attacks; angioplasty or heart surgery can be avoided.

I feel fine. Why should I have a HeartCam scan?

Is HeartCam safe?

Yes, there are hundreds of papers from leading researchers outlining the accuracy and safety of HeartCam EBT Scanning. HeartCam does emit some radiation but the amount is comparable to that you would receive during a plane trip from New York to Los Angeles. In short, **HeartCam EBT technology is extremely safe.**

I just had a stress test. Do I still need a HeartCam?

Anyone who has ever undergone a stress test or treadmill test, as part of their annual physical should know stress tests will detect heart disease once you suffer from a blockage of greater than 60% within your arteries. Stress tests are designed to indicate who does and does not need angioplasty or surgery. When detected early, heart disease can be treated with simple lifestyle changes and medications. No other non-invasive technology can match HeartCam when it comes to the detection of heart disease at its earliest stage.

What is the difference between HeartCam and the 64-slice machines everyone is talking about?

64 slice angiography should be used for people with abnormal stress tests or who are symptomatic. 64 slice scanners give significantly more radiation and uses contrast dyes and beta blockers. It is not recommended for screening or risk assessment. HeartCam is appropriate for people who are asymptomatic and is a screening for early heart disease.