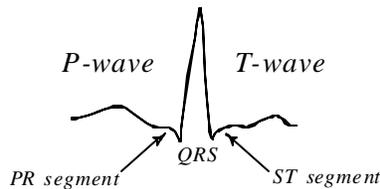


## Electrocardiogram and T-wave Changes

The heart has a “specialized conductive system” consisting of nerves and cells that allow quick and consistent passage of electrical impulses. The electrocardiogram (ECG) is a medical test used to measure the heart’s electrical impulses, helping to discover problems in this system or possible underlying heart disease. The major components of the heart’s electrical cycle are the **P-wave**, **QRS complex**, and the **T-wave**.



Abnormalities of the ST segment may consist of either abnormal straightening, depression, or elevation. ST segment changes can be caused by serious impairments such as hypertension or coronary artery disease. However, changes may also be related to medications (especially digitalis—a common drug used for treatment of atrial fibrillation) or abnormalities of the body’s potassium content. When ST segment changes are further evaluated with a treadmill, thallium scan, arteriogram, exercise echocardiogram or other similar cardiac test, no rating may be possible if these above tests are normal.

T-wave changes are one of the most common abnormalities noted on an ECG. Changes in the T-wave may be a normal variant in some healthy individuals, or related to age, body configuration or position, medications, anemia, pericarditis, and a host of other conditions. T-wave abnormalities may also be caused by virtually any type of cardiovascular disorder such as coronary artery disease, valve impairments, and hypertensive cardiovascular disease. A serious underlying cardiac impairment is much more likely if the T-waves are deeply inverted rather than simply flattened. T-wave abnormalities are classified by their degree of abnormality. T-wave changes are either considered to be minor or major changes. Ratings will depend upon this classification and the presence or absence of other risk factors.

ST segment and T-wave changes with no known cardiovascular history are rated as follows:

|                      | <u>Females Age 0-59 and Males Age 0-39</u> | <u>Females Age 60 and up and Males Age 40 and up</u> |
|----------------------|--|--|
| ST segment changes   | Table B                                    | Table C  |
| Major T-wave changes | Table B                                    | Table C  |
| Minor T-wave changes | No rating                                  | Table B  |

Unfavorable factors which may result in a higher rating are: recent changes in the ECG pattern, recent chest pain, or poor cardiovascular risk factors.

Favorable factors which may reduce the rating are: stable ECG pattern for five years or more, normal treadmill, thallium or similar tests, or favorable coronary risk factors.

To get an idea of how a client with a history of ST or T-Wave changes would be viewed in the underwriting process, please feel free to use the Ask “Rx” *per underwriter* on the reverse side for an informal quote.

***The electrocardiogram is a simple and inexpensive test which is used in combination with other cardiovascular risk factors in the underwriting evaluation for significant coronary disease.***

**For Internal Use Only. Not For Use With The Public.**

*This material is intended for insurance informational purposes only and is not personal medical advice for clients.*

