

CARDIOVASCULAR CONDITIONS PREAMBLE

Cardiovascular disease may affect a driver's ability in a variety of ways, most particularly being the possibility of cardiac syncope or near syncope, due to either dysrhythmia or medications/devices used to treat the cardiac condition. Guidelines are provided for important categories of diagnoses that may require driving restriction or periodic review.

Supraventricular Arrhythmia (SVT) and Bradyarrhythmia:

In general, profile 2 would apply to individuals whose arrhythmia has been of a minor nature or so remote and well controlled that the patient is expected to drive without his/her condition presenting a risk to the public. In other cases of Supraventricular Tachycardia, Atrial Fibrillation, or bradydysrhythmias, the risk is related to the likelihood of recurrence, and the likelihood that recurrence may result in alteration or loss of consciousness.

Ventricular Tachycardia and Ventricular Fibrillation (VT and VF)

In cases of ventricular tachycardia or ventricular fibrillation risk for driving is related to the likelihood of recurrence and the likelihood that recurrence may result in an alteration of level of consciousness or loss of consciousness (AOC or LOC). Implantable Cardioverter-Defibrillators (ICD) present special circumstances and problems. Generally, a patient who receives such a device for a presenting rhythm that resulted in loss of consciousness (e.g., for secondary prevention,ⁱ following syncope or sudden death), or a person who experiences interference with abilities needed to control a motor vehicle, alteration or loss of consciousness associated with discharge of the device for an abnormal rhythm, should not drive for 6 months. Driving may be resumed after 6 months being free from an event. Patients who have a device implanted for primary preventionⁱ who have not presented a syncopal rhythm yet, may be allowed to resume driving within a week at the judgment of treating clinician.

Other Cardiac Conditions

This section includes other cardiac conditions which could cause syncope or near syncope; or that are severe enough to cause symptoms at rest that could affect driving or meet New York Heart Association Class IV criteria. For cardiac conditions which could cause syncope or near syncope, risk for driving is related to the likelihood of alteration or loss of consciousness.

Clinician recommendations about resumption of driving or the interval for review will be taken into consideration.

Vasovagal syncope is excluded from this FAP unless episodes have occurred while driving. Driving may resume after receiving treatment and being symptom free 3 months. For an unexplained alteration or loss of consciousness, please refer to that FAP.

Generalized Deconditioning:

A person with generalized deconditioning which reduces functional capacity should be evaluated using the "Miscellaneous Musculoskeletal and Neurological Conditions" FAP.

Footnotes:

¹Primary prevention refers to placement of an ICD in a person that has not experienced a sudden cardiac arrest but is at high risk for such an event. Placement in a person that has already experienced a cardiac event such as syncope or cardiac arrest is referred to as secondary prevention.

FUNCTIONAL ABILITY PROFILE
Cardiovascular Conditions¹: Ventricular Tachycardia/Ventricular Fibrillation¹

| Profile Levels | Degree of Impairment/ Potential for At Risk Driving | Condition Definition / Example | Interval for Review and Other Actions |
|-----------------------|---|--|--|
| 1. | No diagnosed condition | No known history of Ventricular Tachycardia (VT) or Ventricular Fibrillation (VF) | N/A |
| 2. | Condition fully recovered | Arrhythmia by history, not documented, asymptomatic | N/A |
| 3. | Active impairment (Profile levels are intended to describe potential for at risk driving; they are NOT consistent with clinical definitions for mild, moderate or severe.) | | |
| | a. Mild risk | Non-syncopal, non-sustained ventricular tachycardia. | 4 years |
| | b. Moderate risk | Sustained VT or VF, treated with medication or ICD ³ , more than 6 months without recurrence of syncope. For drivers with ICD, no pre or post shock syncope, alteration of consciousness, or interference with ability to control a motor vehicle, within past 6 months. | 2 years |
| | c. Severe risk | Sustained VT or VF untreated or treated with medication or ICD ² less than 6 months, or syncopal arrhythmia not responding to treatment; or New or worsening established conditions under investigation to | No driving |

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| | | determine potential risk for unsafe driving. | |
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¹ For further discussion regarding CARDIOVASCULAR CONDITIONS, please refer to PREAMBLE at the beginning of this section.

² ICD includes implantable cardioverter defibrillators

FUNCTIONAL ABILITY PROFILE
Cardiovascular Conditions¹: Supraventricular Arrhythmias²/Bradyarrhythmias

| Profile Levels | Degree of Impairment/ Potential for At Risk Driving | Condition Definition / Example | Interval for Review and Other Actions |
|-----------------------|---|---|--|
| 1. | No diagnosed condition | No known history of supraventricular arrhythmias or bradyarrhythmias | N/A |
| 2. | Condition fully recovered | Arrhythmias by history, not documented, asymptomatic; or Documented supraventricular arrhythmias (SVT) or bradyarrhythmias, with none in the last 18 months and no other identified heart disease. | N/A |
| 3. | Active impairment (Profile levels are intended to describe potential for at risk driving; they are NOT consistent with clinical definitions for mild, moderate or severe.) | Documented SVT or bradyarrhythmia and excluding transient arrhythmias or conduction defects associated with acute myocardial infarction. | |
| | a. Mild risk | Documented arrhythmias associated with syncope more than 18 months ago, asymptomatic; and/or A-fib or supraventricular tachycardia without syncope, only mildly symptomatic (e.g., dyspnea, mild lightheadedness). | 6 years |
| | b. Moderate risk | Documented arrhythmias associated with syncope within the past 6-18 months, mildly symptomatic (e.g., dyspnea, mild lightheadedness). | 2 years |
| | c. Severe risk | Documented arrhythmias associated with syncope within the past 6 months | No driving |

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| | | <p>or symptoms that interfere with normal functioning; or</p> <p>New conditions presumed to be arrhythmic under investigation to determine potential risk for unsafe driving.</p> | |
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1For further discussion regarding **CARDIOVASCULAR CONDITIONS**, please refer to **PREAMBLE** at the beginning of this section.

FUNCTIONAL ABILITY PROFILE
Cardiovascular Conditions¹: Other Cardiac²

| Profile Levels | Degree of Impairment/ Potential for At Risk Driving | Condition Definition / Example | Interval for Review and Other Actions |
|-----------------------|---|--|---|
| 1. | No known conditions | No history of any cardiac conditions | N/A |
| 2. | Condition fully recovered | History of a cardiac condition that has been resolved or does not warrant review ² according to FAP guidelines, and no history of cardiac syncope within the past 4 years. | N/A |
| 3. | Active impairment (Profile levels are intended to describe potential for at risk driving; they are NOT consistent with clinical definitions for mild, moderate or severe.) | Any cardiac condition not specified in another FAP and meets the criteria below. For vasovagal episodes see footnote ⁵ . | Clinician must specify diagnosis & reason for concern. |
| | a. Mild risk | On-going cardiac condition that warrants review due to risk of developing symptoms severe enough to affect ability to operate a motor vehicle; and/or History of syncopal episode greater than 18 months but less than 4 years. | 4 years |
| | b. Moderate risk | On-going condition that warrants more frequent review, or History of syncopal episode 6-18 months ago | 2 years Clinician may recommend shorter interval for review |
| | c. Severe risk | Condition precludes safe operation of a motor vehicle. This may be due to any of the following: the severity of the condition (E.g., angina or | No driving Clinician must specify reason for suspension ⁴ |

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| | | <p>shortness of breath at rest or with minimal activity (NYHA IV)); or</p> <p>Non-vasovagal syncopal episodes less than 6 months ago, and likelihood of recurrence unknown^{3, 5}; or</p> <p>New or suspected condition which requires further testing and follow-up to determine safety to operate; or</p> <p>History of vasovagal syncope while driving or with high-risk features, treated for less than 3 months, or untreated. See footnote³</p> | |
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¹ For further discussion regarding **CARDIOVASCULAR CONDITIONS**, please refer to Preamble at the beginning of this section.

² Other cardiac conditions which normally would not require review may include CAD, CHF, valvular heart disease or others.

³ Vasovagal syncope is excluded from this FAP as long as episodes have not occurred while driving or in high-risk setting (occurs without warning and in any position, has no clear precipitating causes, and/or occurs frequently). Driving may resume after receiving appropriate treatment and being symptom free 3 months. For unexplained alteration or loss of consciousness, refer to the “Unexplained Alteration of Consciousness” FAP.

⁴ Document reason for suspension, such as diagnosis and specific symptoms.

⁵ Definitive therapy for prevention of syncope may allow driving in less than 6 months on an individual basis.