

# Decision Considerations - Disease Protocols - Coronary Heart Disease (CHD Protocol)

For the purpose of airman certification coronary heart disease (CHD) is divided into 4 broad categories, with or without myocardial infarction (MI):

- **Open revascularization of any coronary artery(s) and left main coronary artery stenting** (with or without MI). Open revascularization includes coronary artery bypass grafting (CABG; on- or off-pump), minimally invasive procedures by incision, and robot operations. Left main coronary artery stenting carries the same risk of future cardiac events as CABG, thus it is treated the same for certification or qualification purposes
- **Percutaneous intervention** (with or without MI). This includes angioplasty (PTCA) and bare metal or drug-eluting stents
- **MI without any open or percutaneous intervention**
- **MI from non-coronary artery disease causes.** Examples include epinephrine injection, cardiac trauma, complications of catheterization, blood clotting disorders (e.g. PT/PTT, Protein S and C, Factor V Leiden), etc.

Recovery time before consideration and required tests will vary by the airman medical certificate applied for and the categories above.

- A. Recovery time for first- and second-class:
  - a. 6 months: Open revascularization of any coronary artery(s) or left main coronary artery stenting
  - b. 3 months:
    - Percutaneous intervention **excluding** left main coronary artery interventions
    - Myocardial infarction (MI), uncomplicated, without any open or percutaneous intervention procedures
    - MI from non-coronary artery disease
- B. Required documentation for all pilots with MI due to non-coronary artery disease:
  - a. Current status report from the treating physician

- b. Copies of all medical records (inpatient and outpatient) pertaining to the event, including all labs, tests, or study results and reports.
- C. Required documentation for all pilots with any of the remaining conditions above:
- The required documentation, including GXT and cardiac catheterization, must be accomplished no sooner than either 6 months or 3 months post-event, depending on the underlying condition as listed in Paragraph A. above
  - Copies of all medical records (inpatient and outpatient) pertaining to the event, including all labs, tests, or study results and reports.
  - Current status report from the treating cardiologist (cardiovascular evaluation (CVE)) including:
    - Personal and family medical history assessment; clinical cardiac and general physical examination; assessment and statement regarding the applicant's functional capacity and prognosis for incapacitation
    - Documentation of counselling on modifiable cardiovascular risk factors
    - All medications and side-effects, if any
    - Labs (lipids, blood glucose)
  - Current Bruce Protocol Stress Test (GXT):
    - Third-class airmen - maximal plain GXT
    - First and unlimited second-class airmen require maximal radionuclide GXT.
    - For specific GXT requirements see [Guidelines for GXT](#)
- D. Additional required documentation for first and unlimited\* second - class airmen
- For conditions requiring 6-month recovery:
    - 6-month post event cardiac catheterization
    - 6-month post event maximal radionuclide GXT (see above)
  - For conditions requiring 3-month recovery:
    - 3-month post event cardiac catheterization
    - 3-month post event maximal radionuclide GXT (see above)
  - The applicant should indicate if a lower class medical certificate is acceptable (if they are found ineligible for the class sought)
- E. Additional required documentation for percutaneous coronary intervention: The applicant must provide the operative or post procedure report. If a STENT was placed, the report must include make of STENT, implant location(s), and the length and diameter of each STENT.

A **SPECT** myocardial perfusion exercise stress test using technetium agents and/or thallium may be required for consideration for any class if clinically indicated or if the exercise stress test is abnormal by any of the usual parameters. The interpretive report and all **SPECT** images, preferably in black and white, must be submitted.

Note: If cardiac catheterization and/or coronary angiography have been performed, all reports and actual films (if films are requested) must be submitted for review. Copies should be made of all films to safeguard against loss. Films should be labeled with the applicant's name and return address.