Midlands Occupational Medicine

Providing comprehensive occupational healthcare

DOT Certification Handbook

Updated January 1, 2014

RESPIRATORY DISORDERS

- OBSTRUCTIVE SLEEP APNEA
- COPD
- PNEUMOTHORAX
- LUNG CANCER
- ASTHMA

NEUROLOGIC DISORDERS

- SEIZURES
- TRAUMATIC BRAIN INJURY
- HEADACHE
- MENINGITIS
- TIA/CVA
- PARKINSONS/MULTIPLE SCLEROSIS

ENDOCRINE DISORDERS

- DIABETES MELLITUS

PSYCHIATRIC DISORDERS

- ADD/ADHD
- MAJOR DEPRESSIVE DISORDER/BIPOLAR DISORDER
- SCHIZOPHRENIA/PSYCHOTIC DISORDERS
- ECT THERAPY
- PERSONALITY DISORDERS

*Some guidelines noted within this handbook are suggested guidelines based upon “Best Practices” as suggested by the Dept. of Transportation, therefore, unless an absolute disqualification is noted below, a DOT provider may override the guidelines herein

ABSOLUTE DISQUALIFICATIONS

-History of epilepsy (whether treated or not)

-History of diabetes requiring insulin control unless accompanied by an exemption

-When vision parameters (e.g., acuity, horizontal field of vision, color) fall below minimum standards unless accompanied by an exemption

-When hearing measurements with or without a hearing aid fall below minimum standards

-Currently taking methadone and/or suboxone

-Currently taking any TCA or MAOI type medication

-Current clinical diagnosis of alcoholism

-Controlled substance use including a narcotic, an amphetamine, or another habit-forming drug without a prescription from the treating physician

Exemptions

Vision Exemption

-Need to have copy of annual specialist eye examination that is part of the exemption requirement

-The vision exemption itself is good for 2 years BUT the specialist exam has to occur every year

-If otherwise qualified, check box for vision exemption on form

-Keep a copy of the exemption and specialist report to attach to form

-The motor carrier is required to ensure proper documentation

Insulin Waiver

-If otherwise qualified, complete form and mark check box for "federal diabetes exemption" and give to driver for them to consider applying for insulin exemption

-To be considered for exemption

1 month wait if previously treated and insulin is new

2 month wait if new diagnosis and not on prior treatment

-Driver must present exemption

-CDME must review 5 year medical history and driver needs to present this to you

-Ask and document symptoms, monitoring and hypoglycemic reactions

-Certify for 1 year maximum if all other qualification standards are met and has insulin waiver

Skilled Performance Evaluation

-Please remember that loss of a hand or foot or significant impairment of such is grounds for a SPE evaluation

-You have discretion for anatomical or functional deficits that are less than a whole hand or foot

-Need to gauge prehension and pedal use

-SPEs are for FIXED deficits only

-If everything else on the exam is okay, certify as usual (2 years unless some other condition indicates otherwise) but check the box that says SPE certificate required

MEDICATIONS REQUIRING PRESCRIBING PHYSICIAN RECOMMENDATION

The following is a list, although not an exclusive list of medications, that if actively being taken by a DOT candidate should have written verification from the prescribing physician noting that the patient is stable on the current dose and the disease process is controlled by use of this medication without any significant side effects that may impair driving.

(use form letter to obtain clearance from prescribing physician prior to certifying driver if needed).

Maximum certification period on any of these medications is 1 year

- Any narcotic medication
- Any SSRI/SNRI
- Sedative/Hypnotic medications (benzos, muscle relaxants, etc)
- Provigil (wait time of 6 weeks post initiation before certifying)
- Chantix (recommended not to certify while taking Chantix)
- Incretins (Byetta and Victoza)
- Stimulants

LABORATORY/PROCEDURE TESTING REQUIREMENTS

Midlands Occupational Medicine will require proof of testing within the specified timeframe for applicable conditions as noted below. Drivers will not be certified without adequate proof of compliance.

Coumadin use – requires updated (within 1 month) INR within therapeutic target range
Do not certify if no INR is provided or if INR is sub-therapeutic
Maximum certification period is 1 year

Diabetes – requires recent (within 6 months) Hemoglobin A1c of less than 10
Maximum certification period is 1 year

Sleep Apnea - must show proof of compliance via CPAP print out with minimally acceptable compliance of at least 4 hours per day of use on 70 percent of days
Maximum certification period is 1 year

Chronic Kidney Disease – recent Creatinine and GFR (within 6 months)

Exercise Stress Test
Post PCI – every 2 years
Post MI – every 2 years
Angina Pectoris – every 2 years
Post CABG – every year beginning 5 years after surgery

Echocardiogram
Aortic stenosis – every 1 – 5 years
Marfans Syndrome
Aortic Regurgitation – every 6 months to 3 years depending on severity
Atrial Septal Defect
Congestive Heart Failure – every year
Ebstien Anomaly – every year for severe cases
Tetrology of Fallot – every year
Corrected Transposition – every year
Mitral Regurgitation – every year for moderate to severe cases

Pacemaker Function
Required to show adequate function yearly

SPECIALTY REFERRAL REQUIREMENTS

Cardiac

Need specialty clearance after *acute*:

- MI
- CABG
- Stent or balloon
- Post surgery for aneurysm
- Valve Replacement
- SVT or Ventricular arrhythmia episode
- Pacemaker placement
- Syncopal episode

Need specialty *periodic* clearance (usually annually) for these conditions :

- AAA if 4.0-5.0 cm and asymptomatic
- Post MI
- Stable Angina
- Valve replacement
- Stable arrhythmia
- Post CABG
- Post PCI
- Stable arrhythmia
- Post heart transplant (every 6 months)

Neurologic

Practically every chronic neurologic condition requires periodic specialty evaluation

Most neurologic conditions also require neurologic clearance from a CMV knowledgeable specialty neurologist at initial certification evaluation as well

Endocrine

Diabetes requiring insulin waiver requires periodic specialty evaluation

Ophthalmology

Vision impairment with vision waiver requires periodic specialty evaluation

Psychiatry

Major Depression and Bipolar requires biennial mental health evaluation

Cardiovascular Disorders

ANEURYSMS

DIAGNOSIS	PHYSIOLOGY	CERTIFCATION	RECERTIFICATION
Abdominal Aortic Aneurysm (AAA)	Evaluate for associated cardiovascular diseases.		
	Aneurysm <4.0 cm.	Yes, if asymptomatic.	Annual
	Aneurysm 4.0 to <5.0 cm. Ultrasound to identify change in size.	Yes if: Asymptomatic; Cleared by vascular specialist. No, if: Symptomatic; Surgery recommended by vascular specialist.	Annual Ultrasound for change in size.
		Yes if: At least 3 months after surgical repair; Cleared by cardiovascular specialist. No.	Annual
	Aneurysm >5.0 cm.	Yes if: At least 3 months after surgical repair; Cleared by cardiovascular specialist.	Annual
Thoracic Aneurysm	Evaluate for associated cardiovascular diseases.	No, if >3.5 cm. Yes if: At least 3 months after surgical repair; Cleared by cardiovascular specialist.	Annual
Aneurysms of Other Vessels	Assess for risk of rupture and for associated cardiovascular diseases.	No Yes if: At least 3 months after surgical repair; Cleared by cardiovascular specialist.	Annual

AORTIC CONGENTIAL HEART DISEASE

DIAGNOSIS	PHYSIOLOGY	CERTIFCATION	RECERTIFICATION
Bicuspid Aortic Valve	May result in aortic stenosis or regurgitation (see section on Valvular Diseases), aortic root enlargement, aortic aneurysm formation and aortic rupture.	See section on Valvular Diseases. No if: Aortic transverse diameter >5.5 cm. Yes if: Surgical intervention successfully performed.	See section on Valvular Diseases. Annual
Subvalvular Aortic Stenosis	Mild = favorable. Has potential for progression. Moderate or severe = unfavorable.	Yes if: Aortic; No valvular abnormality or hypertrophic cardiomyopathy. No if: Symptomatic and mean pressure gradient >30 mm Hg. Yes if: At least 3 months after successful surgical resection when cleared by cardiologist knowledgeable in congenital heart disease.	Annual Evaluation by cardiologist knowledgeable in adult congenital heart disease is required. Annual Evaluation by cardiologist knowledgeable in adult congenital heart disease required, including echocardiogram.
Discrete Supravalvular Aortic Stenosis	Unfavorable prognosis due to associated coronary and aortic disorder.	No, unless surgery. Yes if: At least 3 months postsurgical intervention; Cleared by cardiologist knowledgeable in adult congenital heart disease.	Annual Evaluation by cardiologist knowledgeable in adult congenital heart disease is recommended.
Marfan Syndrome	Cardiovascular disorders are the major cause of morbidity and mortality including risk of sudden death.	Yes if: No cardiovascular involvement. No if: Any aortic root	Annual Evaluation by cardiologist knowledgeable in adult congenital heart disease required including aortic root imaging and echocardiography.

Marfan Syndrome (cont)		enlargement; Moderate or more severe aortic regurgitation; > mild mitral regurgitation related to mitral valve prolapse; LV dysfunction with EF <40% and no associated valve disease.	

AORTIC REGURGITATION

DIAGNOSIS	PHYSIOLOGY	CERTIFCATION	RECERTIFICATION
Mild Aortic Regurgitation		Yes, if asymptomatic.	Annual Echocardiogram every 2 to 3 years.
Moderate Aortic Regurgitation		Yes, if: Normal LV function; No or mild LV enlargement.	Annual Echocardiogram every 2 to 3 years.
Severe Aortic Regurgitation		Yes if: Asymptomatic; Normal LV function (EF = 50%); LV dilatation (LVEDD <60mm, LVESD <50mm). If LVEDD = 60mm or LVESD = 50mm. No if: Symptoms; Unable to complete Bruce protocol Stage II; Reduced EF <50%, LV dilatation LVEDD >70mm or LVESD >55mm. Yes if: Valve surgery and at least 3 months post surgery; Asymptomatic; Cleared by cardiologist.	Every 6 months Echocardiogram every 6 to 12 months. Every 4.–6 months Echocardiogram every 4.–6 months if no surgery performed. Annual

AORTIC STENOSIS

DIAGNOSIS	PHYSIOLOGY	CERTIFCATION	RECERTIFICATION
Mild Aortic Stenosis (AVA >1.5 cm2)	If symptoms are consistent with aortic stenosis but calculated valve area suggests mild aortic stenosis, the severity of the stenosis and an alternative explanation for symptoms needs to be reassessed.	Yes, if Asymptomatic.	Annual Echocardiogram every 5 years.
Moderate Aortic Stenosis (AVA 1.0-1.5 cm2)		Yes, if: Asymptomatic; Yes if: At least 3 months after surgery. No if: Angina, heart failure, syncope; Atrial fibrillation; LV dysfunction with EF <50%; Thromboembolism.	Annual Echocardiogram every 1 to 2 years. Annual
Severe Aortic Stenosis (AVA <1.0 cm2)		No, irrespective of symptoms or LV function. Yes, if at least 3 months after surgery.	 Annual

ATRIAL SEPTAL DEFECTS

DIAGNOSIS	PHYSIOLOGY	CERTIFCATION	RECERTIFICATION
Atrial Septal Defect (ASD): Ostium Secundum	Small ASD = favorable	Yes if asymptomatic	Annual Evaluation by cardiologist knowledgeable in congential heart disease including chocardiogram.
	Moderate to large ASD = unfavorable	No if: Symptoms of dyspnea, palpitations or a paradoxical embolus; Pulmonary hypertension; Right-to-left shunt; Pulmonary to ystemic flow ratio >1.5 to 1. Yes if: At least 3 months after surgery or at least 4 weeks after device closure; Asymptomatic and clearance by a cardiologist knowledgeable in adult congenital heart disease	Annual Evaluation by cardiologist knowledgeable in congential heart disease every 2 years
ASD: Ostium Primum	Small ASD = favorable prognosis.	Yes if: Asymptomatic.	Annual Evaluation by cardiologist knowledgeable in adult congenital heart disease required including echocardiogram.
	Moderate to large ASD = unfavorable prognosis.	No if: Symptoms of dyspnea, palpitations or a paradoxical embolus; Echo-Doppler demonstrates pulmonary artery pressure >50% systemic; Echo-Doppler demonstrates right-to-left shunt; Pulmonary to systemic flow ratio greater than 1.5 to 1; Heart block on an	

ASD: Ostium Primum (cont.)		electrocardiogram; More than mild mitral valve regurgitation; Left ventricular outflow tract obstruction with a gradient >30 mm Hg. Yes if: At least 3 months after surgical intervention if none of the above disqualifying criteria; No symptomatic arrhythmia and no significant residual shunt; Cleared by cardiologist knowledgeable in adult congenital heart disease.	Annual Evaluation by cardiologist knowledgeable in adult congenital heart disease.
Sinus Venosus Atrial Septal Defect	Usually associated with anomalous pulmonary venous connection. Prognosis depends on size of atrial septal defect. Commonly associated with sinus node dysfunction, particularly after surgery.	Yes if: Small shunt and hemodynamically insignificant. No if: Symptoms of dyspnea, palpitations or a paradoxical embolus; Echo-Doppler examination demonstrating pulmonary artery pressure greater than 50% systemic; Echo-Doppler examination demonstrating a right-to-left shunt; Pulmonary to systemic flow ratio greater than 1.5 to 1; Heart block or sinus node dysfunction on an	Annual Evaluation by cardiologist knowledgeable in adult congenital heart disease.

		electrocardiogram. Yes if: At least 3 months after surgical intervention; Hemodynamics are favorable; Cleared by cardiologist knowledgeable in adult congenital heart disease.	Annual Evaluation by cardiologist knowledgeable in adult congenital heart disease, including Holter Monitor.

BUNDLE BRANCH BLOCKS AND HEMIBLOCKS

DIAGNOSIS	PHYSIOLOGY	CERTIFCATION	RECERTIFICATION
Bundle Branch Block Axis Deviation	Progression of disease in the conduction system can lead to third degree heart block with total loss of electrical connection between the atria and ventricles causing syncope or sudden death.	Yes if: Asymptomatic. (Depends on risk from underlying heart disease.) Yes, if treated for symptomatic disease (see pacemaker); No disqualifying heart disease; Cleared by cardiologist. No, if symptomatic.	Every 2 years Annual

CARDIOMYOPATHIES AND CONGESTIVE HEART FAILURE (CHF)

DIAGNOSIS	PHYSIOLOGY	CERTIFCATION	RECERTIFICATION
Hypertrophic Cardiomyopathy		No.	
Idiopathic Dilated Cardiomyopathy and Congestive Heart Failure		No, if symptomatic CHF. No if: Asymptomatic; Ventricular arrhythmias present; LVEF 50%. No if: Asymptomatic; No ventricular arrhythmias; LVEF <40%. Yes if: Asymptomatic; No ventricular arrhythmias; LVEF 40% to 50%.	 Annual Requires annual cardiology evaluation including Echocardiography and Holter monitoring.
Restrictive Cardiomyopathy		No	

COMMERCIAL DRIVERS WITH KNOWN CORONARY HEART DISEASE (CHD)

DIAGNOSIS	PHYSIOLOGY	CERTIFCATION	RECERTIFICATION
Post Myocardial Infarction (MI)	Risk of recurrent major cardiac event highest within the first months post-MI. Drivers in a rehabilitation program can receive comprehensive secondary prevention therapy.	No if: Recurrent angina symptoms; Post-MI ejection fraction <40% (by echocardiogram or ventriculogram); Abnormal ETT demonstrated prior to planned work return; Ischemic changes on rest ECG; Poor tolerance to current cardiovascular medications. Yes if: At least 2 months post-MI; Cleared by cardiologist; No angina; Post-MI ejection fraction >40% (by echocardiogram or ventriculogram); Tolerance to current cardiovascular medications.	Annual Biennial ETT at minimum (If test positive or inconclusive, imaging stress test may be indicated). Cardiologist examination recommended.
Angina Pectoris	Lower end of spectrum among CHD patients for risk of adverse clinical outcomes. Condition usually implies at least one coronary artery has hemodynamically significant narrowing.	Yes, if asymptomatic. No if: Rest angina or change in angina pattern within 3 months of examination; Abnormal ETT; Ischemic changes on rest ECG; Intolerance to cardiovascular therapy.	Annual Biennial ETT at minimum (If test positive or inconclusive, imaging stress test may be indicated). Cardiologist examination recommended.
Post Percutaneous Coronary Intervention (PCI)	Rapid recovery for elective PCIs for stable angina.	Yes if: At least 1 week after procedure;	Annual Recommend cardiologist examination.

Post Percutaneous Coronary Intervention (PCI) (cont)	Delayed re-stenosis is the major PCI limitation and requires intensive secondary prevention.	Approval by cardiologist; Tolerance to medications . ETT 3 to 6 months after PCI. No if: Incomplete healing or complication at vascular access site; Rest angina; Ischemic ECG changes.	Biennial ETT at minimum (If test positive or inconclusive, imaging stress test may be indicated).
Post Coronary Artery Bypass Surgery (CABG)	Delay in return to work to allow sternal incision healing. Because of increasing risk of graft closure over time, ETT is obtained.	Yes if: At least 3 months after CABG; LVEF □40% post CABG; Approval by cardiologist; Asymptomatic; Tolerance to medications.	Annual After 5 years: Annual ETT. Imaging stress test may be indicated.

COMMERCIAL DRIVERS WITHOUT KNOWN CORONARY HEART DISEASE (CHD)

DIAGNOSIS	PHYSIOLOGY	CERTIFCATION	RECERTIFICATION
Asymptomatic, healthy	Low CHD event risk. Assess for clinically apparent risk factors. Use, when possible, Framingham risk score model to predict 10-year CHD event risk. Increasing age is a surrogate marker for increasing atherosclerotic plaque burden.	Yes, if asymptomatic; Rarely disqualifying alone.	Biennial
Asymptomatic, high risk person (as designated by CHD risk-equivalent condition) Asymptomatic, high risk person >45 years with multiple risk factors for CHD	Sub-clinical coronary atherosclerosis is a concern. High-risk status requires close physician follow-up and aggressive comprehensive risk factor management.	Yes if: asymptomatic. No if: Abnormal ETT; Ischemic changes on ECG; Functional incapacitation by one of conditions.	Annual

CONGENITAL HEART DISEASE

DIAGNOSIS	PHYSIOLOGY	CERTIFCATION	RECERTIFICATION
Patent Ductus Arteriosus (PDA)	Small = favorable. Moderate to large = unfavorable	Yes, if small shunt. No if: Symptoms of dyspnea or palpitations; Pulmonary hypertension; Right to left shunt; Progressive LV enlargement or decreased systolic function. Yes if: At least 3 months after surgery or 1 month after device closure; None of above disqualifying criteria; Cleared by cardiologist knowledgeable in adult congenital heart disease.	Annual Annual Should have evaluation by cardiologist knowledgeable in adult congenital heart disease.
Coarctation of the Aorta	Mild = favorable. Moderate or severe = unfavorable prognosis.	Yes if: Mild and unoperated; BP controlled; No associated disqualifying disease. No	Annual Evaluation by cardiologist knowledgeable in adult congenital heart disease recommended.
Coarctation of the Aorta after intervention	Unfavorable prognosis with persistent risk of cardiovascular events.	Yes, if perfect repair	Annual Evaluation by cardiologist knowledgeable in adult congenital heart disease required.
Other causes of right ventricular outflow obstruction in persons with congenital heart disease	Double chambered right ventricle. Infundibular pulmonary stenosis. Supravalvar pulmonary stenosis. Pulmonary artery stenosis.	Yes if: Hemodynamic data and criteria similar to individuals with isolated pulmonary valve stenosis who are eligible for certification.	Annual Recommend evaluation by cardiologist knowledgeable in adult congenital heart disease.

Pulmonary Valve Stenosis (PS)	Mild and moderate = favorable. Severe PS may be unfavorable, associated with arrhythmias and rarely sudden death.	Yes, if mild or moderate. No if: Symptoms of dyspnea, palpitations or syncope; Pulmonary valve peak gradient >50 mm Hg with normal output; RV pressure >50% systemic pressure; >mild RVH; >mild RV dysfunction; >moderate pulmonary valve regurgitation; Main pulmonary artery >5 cm. Yes if: 3 months after surgical valvotomy or 1 month after balloon valvuloplasty; None of above disqualifying criteria; Cleared by cardiologist knowledgeable in adult congenital heart disease.	Annual Evaluation by cardiologist knowledgeable in adult congenital heart disease. Annual Recommend evaluation by cardiologist knowledgeable in adult congenital heart disease.
Ebstein Anomaly	Mild = favorable. Moderate and severe variants = unfavorable.	Yes if: Mild; Asymptomatic; No intracardiac lesions; No shunt; No symptomatic arrhythmia or accessory conduction; Only mild cardiac enlargement; Only mild RV dysfunction. No if: Yes if: At least 3 months postsurgical intervention; None of above disqualifying features.	Annual Evaluation by cardiologist knowledgeable in adult congenital heart disease. Annual Echocardiogram and evaluation by cardiologist knowledgeable in adult congenital heart disease required.

Tetralogy of Fallot	Unfavorable in the unrepaired state. Repaired = variable prognosis.	No, if uncorrected. Yes if: Excellent result obtained from surgery; Asymptomatic; No significant pulmonary or tricuspid valve regurgitation; No pulmonary stenosis; No history of arrhythmias; No residual shunt.	Annual Evaluation by cardiologist knowledgeable in adult congenital heart disease required, including EKG, 24-hour Holter Monitor, exercise testing, Doppler Echocardiogram.
Transposition of the Great Vessels	Unfavorable if uncorrectable. Atrial switch repair (Mustard or Senning procedures). Unfavorable long-term prognosis. After Rastelli repair. After arterial switch repair, prognosis appears favorable.	No No Yes if: Asymptomatic and excellent result obtained from surgery No if: No (Data currently not sufficient to support qualification in this group).	 Annual Evaluation by cardiologist knowledgeable in adult congenital heart disease.
Congenitally Corrected Transposition	95% have associated intracardiac lesions. Conduction system is inherently abnormal.	Yes if: None of below disqualifying criteria. No if: Symptoms of dyspnea, palpitations, syncope or paradoxical embolus; Intracardiac lesion such	Annual Required annual evaluation by cardiologist knowledgeable in adult congenital heart disease and echocardiography and 24-hour Holter Monitor.

Congenitally Corrected Transposition (cont)		as VSD; >moderate pulmonary stenosis with a pulmonary ventricular Pressure >50% systemic; >mild RV or LV enlargement or dysfunction; Moderate or greater tricuspid valve (systemic atrioventricular valve) regurgitation; History of atrial or ventricular arrhythmia; ECG with heart block; Right-to-left shunt or significant residual left-to-right shunt. Yes if: At least 3 months after surgery; None of above disqualifying criteria; Prosthetic valve.–must meet requirements for that valve; Cleared by cardiologist knowledgeable in adult congenital heart disease.	Annual Evaluation by cardiologist knowledgeable in adult congenital heart disease.

HEART TRANSPLANTATION

DIAGNOSIS	PHYSIOLOGY	CERTIFCATION	RECERTIFICATION
Heart Transplantation	Special attention to: Accelerated atherosclerosis, transplant rejection, general health.	Yes if: At least 1 year posttransplant; Asymptomatic; Stable on medications; No rejection; Consent from cardiologist to drive commercially	Biannual Clearance by cardiologist required.

HYPERTENSION

DIAGNOSIS	PHYSIOLOGY	CERTIFCATION	RECERTIFICATION
Essential Hypertension	Evaluate for other clinical CVD including TOD..† Presence of TOD, CVD or diabetes may affect therapy selected.	Yes, if asymptomatic. Rarely disqualifying alone.	Biennial
Stage 1 (140-159/90-99 mm Hg)	Usually asymptomatic. Low risk for near-term incapacitating event.	Yes Rarely disqualifying alone.	Annual BP <140/90 at annual exam. If not, but <160/100, certification extended one time for 3 months.
Stage 2 (160.–179/100.–109 mm Hg)	Low risk for incapacitating event. Risk increased in presence of TOD. Indication for pharmacologic therapy.	Yes One time certification for 3 months. Yes, at recheck if: BP <140/90 mm Hg; Certify for 1 year from date of initial exam.	Annual BP <140/90.
Stage 3 (□180/110 mm Hg)	High risk for acute hypertension-related event.	No Immediately disqualifying. Yes, at recheck if: BP <140/90 mm Hg; Treatment is well tolerated; Certify for 6 months from date of initial exam.	 Every 6 months BP <140/90.
Secondary Hypertension	Evaluation warranted if persistently hypertensive on maximal or nearmaximal doses of 2-3 pharmacologic agents. May be amenable to surgical/specific therapy.	Based on above stages. Yes if: Stage 1 or nonhypertensive; At least 3 months after surgical correction.	 Every 6 months BP <140/90.

IMPLANTABLE DEFIBRILLATORS

DIAGNOSIS	PHYSIOLOGY	CERTIFCATION	RECERTIFICATION
Primary Prevention	Patient has high risk for death and sudden incapacitation	No	
Secondary Prevention	Patient demonstrated to have high risk for death and sudden incapacitation.	No	

MITRAL REGURGITATION

DIAGNOSIS	PHYSIOLOGY	CERTIFCATION	RECERTIFICATION
Mild Mitral Regurgitation		Yes, if: Asymptomatic; Normal LV size and function; Normal PAP.	Annual Annual echo not necessary.
Moderate Mitral Regurgitation		Yes, if: Asymptomatic; Normal LV size and function; Normal PAP.	Annual Annual Echocardiogram.
Severe Mitral Regurgitation		Yes, if asymptomatic. Yes if: At least 3 months postsurgery; Asymptomatic; Cleared by cardiologist. No if: Symptomatic; Inability to achieve >6 METS on Bruce protocol; Ruptured chordae or flail leaflet; Atrial fibrillation; LV dysfunction; Thromboembolism; Pulmonary artery pressure >50% of systolic arterial pressure	Annual Echocardiogram every 6-12 months. Exercise testing may be helpful to assess symptoms. Annual

MITRAL STENOSIS

DIAGNOSIS	PHYSIOLOGY	CERTIFCATION	RECERTIFICATION
Mild Mitral Stenosis MVA □1.6 cm2	In the presence of symptoms consistent with moderate to severe mitral stenosis but a calculated valve area suggesting mild mitral stenosis, the severity of the stenosis should be reassessed and an alternative explanation for symptoms should be considered.	Yes, if asymptomatic.	Annual
Moderate Mitral Stenosis MVA 1.0 to 1.6 cm2		Yes, if asymptomatic.	Annual
Severe Mitral Stenosis MVA □1.0 cm2		No if: NYHA Class II or higher; Atrial fibrillation; Pulmonary artery pressure >50% of systemic pressure; Inability to exercise for >6 Mets on Bruce protocol (Stage II). Yes if: At least 4 weeks post percutaneous balloon mitral valvotomy; At least 3 months post surgical commissurotomy; Clearance by cardiologist.	Annual Annual evaluation by a cardiologist.

PACEMAKERS

DIAGNOSIS	PHYSIOLOGY	CERTIFCATION	RECERTIFICATION
Sinus Node Dysfunction	Variable long-term prognosis depending on underlying disease, but cerebral hypoperfusion corrected by support of heart rate by pacemaker.	No Yes if: 1 month after pacemaker implantation; Documented correct function by pacemaker center; Underlying disease is not disqualifying.	Annual Documented pacemaker checks.
Atrioventricular (AV) Block	Variable long-term prognosis depending on underlying disease, but cerebral hypoperfusion correct by support of the heart rate by pacemaker.	No Yes if: 1 month after pacemaker implantation; Documented correct function by pacemaker center; Underlying disease is not disqualifying	Annual Documented pacemaker checks.
Neurocardiogenic Syncope	Excellent long-term survival prognosis, but there is risk for syncope that may be due to cardioinhibitory (slowing heart rate) or vasodepressor (drop in blood pressure) components, or both. Pacemaker will affect only cardioinhibitory component but will lessen effect of vasodepressor component.	No, with symptoms. Yes if: 3 months after pacemaker implantation; Documented correct function by pacemaker center; Absence of symptom recurrence.	Annual Documented pacemaker checks. Absence of symptom recurrence.
Hypersensitive Carotid Sinus with Syncope	Excellent long-term survival prognosis, but there is risk for syncope that may be due to cardioinhibitory (slowing heart rate) or vasodepressor (drop in blood pressure) components, or both. Pacemaker will affect only cardioinhibitory component, but will lessen effect of vasodepressor component.	No, with symptoms. Yes if: 3 months after Pacemaker implantation; Documented correct function by pacemaker center; Absence of symptom recurrence.	Annual Documented regular pacemaker checks. Absence of symptom recurrence.

PERIPHERAL VASCULAR DISEASE

DIAGNOSIS	PHYSIOLOGY	CERTIFCATION	RECERTIFICATION
Peripheral Vascular Disease (PVD)	Evaluate for associated cardiovascular diseases.	Yes, if no other disqualifying cardiovascular condition.	Annual
Intermittent Claudication	Most common presenting manifestation of occlusive arterial disease. Rest pain.	Yes if: At least 3 months after surgery; Relief of symptoms; No other disqualifying cardiovascular disease. No, if symptoms. Yes if: At least 3 months after surgery; Relief of symptoms and signs; No other disqualifying cardiovascular disease.	Annual Annual

SUPRAVENTRICULAR TACHYCARDIAS

DIAGNOSIS	PHYSIOLOGY	CERTIFCATION	RECERTIFICATION
Lone Atrial Fibrillation	Good prognosis and low risk for stroke.	Yes	Annual
Atrial fibrillation as cause of or a risk for stroke	Risk for stroke decreased by anticoagulation.	Yes if: Anticoagulated adequately for at least 1 month; Anticoagulation monitored by at least monthly INR; Rate/rhythm control deemed adequate (Recommend assessment by cardiologist). In atrial fibrillation at time of return to work;	Annual
Atrial fibrillation following thoracic surgery	Good prognosis and duration usually limited.	Yes if: Anticoagulated adequately for at least 1 month; Anticoagulation monitored by at least monthly INR; Rate/rhythm control deemed adequate (Recommend assessment by cardiologist).	Annual
Atrial Flutter	Same as for atrial fibrillation.	Same as for atrial fibrillation. Yes if: Isthmus ablation performed and at least 1 month after procedure; Arrhythmia successfully treated; Cleared by electrophysiologist.	Same as for atrial fibrillation. Annual
Multifocal Atrial Tachycardia Multifocal Atrial	Often associated with comorbidities, such as lung disease, that may impair prognosis.	Yes if: Asymptomatic; Unless associated condition is disqualifying. No, if symptomatic.	Annual

Tachycardia (cont)		Yes if: Symptoms controlled and secondary cause is not exclusionary.	Annual
Atrioventricular Nodal Reentrant Tachycardia (AVNRT) Atrioventricular Reentrant Tachycardia (AVRT) and Wolff-Parkinson-White (WPW) Syndrome Atrial Tachycardia Junctional Tachycardia	Prognosis generally excellent, but may rarely have syncope or symptoms of cerebral hypoperfusion. For those with WPW, preexcitation presents risk for death or syncope if atrial fibrillation develops.	No if: Symptomatic; WPW with atrial fibrillation. Yes if: Asymptomatic; Treated and asymptomatic for at least 1 month and assessed and cleared by expert in cardiac arrhythmias.	Annual Recommend consultation with cardiologist.

VALVE REPLACEMENT

DIAGNOSIS	PHYSIOLOGY	CERTIFCATION	RECERTIFICATION
Mechanical Valves		Yes if: At least 3 months post-op; Asymptomatic; Cleared by cardiologist. No if: Symptomatic; LV dysfunction-EF <40%; Thromboembolic complication post procedure; Plumonary hypertension; Unable to maintain adequate anticoagulation (base on monthly INR checks).	Annual Recommended evaluation by cardiologist.
Prosthetic valve dysfunction		No Yes if: Surgically corrected; At least 3 months post-op; Asymptomatic; Cleared by cardiologist.	Annual Recommended evaluation by cardiologist
Biologic Prostheses	Anticoagulant therapy not necessary in patients in sinus rhythm (after initial 3 months), in absence of prior emboli or hypercoagulable state.	Yes if: At least 3 months post-op; Asymptomatic; None of above disqualifying criteria for mechanical valves; Cleared by cardiologist.	Annual Recommend evaluation by cardiologist.*

VENOUS DISEASE

DIAGNOSIS	PHYSIOLOGY	CERTIFCATION	RECERTIFICATION
Acute Deep Vein Thrombosis (DVT)		No, if symptoms. Yes if: No residual acute deep venous thrombosis; If on Coumadin: Regulated for at least 1 month; INR monitored at least monthly	Annual
Superficial Phlebitis		Yes if: DVT ruled out; No other disqualifying cardiovascular disease.	Biennial
Pulmonary Embolus		No, if symptoms. Yes if: No pulmonary embolism for at least 3 months; On appropriate long-term treatment; If on Coumadin: Regulated for at least 1 month; INR monitored at least monthly; No other disqualifying cardiovascular disease.	Annual
Chronic Thrombotic Venous Disease		Yes, if no symptoms.	Biennial
Varicose veins		Yes, if no complications.	Biennial
Coumadin	Use of INR required.	Yes if: Stabilized for 1 month; INR monitored at least monthly.	Annual

VENTRICULAR ARRHYTHMIAS

DIAGNOSIS	PHYSIOLOGY	CERTIFCATION	RECERTIFICATION
Coronary Heart Disease (CHD)	Sustained VT: Poor prognosis and high risk. NSVT, LVEF <0.40: Unfavorable prognosis. NSVT, LVEF <0.40: Generally considered to have good prognosis.	No No No, if symptomatic. Yes if: Asymptomatic; At least 1 month after drug or other therapy is successful; Cleared by cardiologist.	 Annual Cardiology examination required.
Dilated Cardiomyopathy	NSVT (LVEF <0.40). Sustained VT, any LVEF. Syncope/near syncope, any LVEF: High risk.	No No No	
Hypertrophic Cardiomyopathy	Variable but uncertain prognosis.	No	
Right Ventricular Outflow VT	Favorable prognosis and low risk for syncope.	No, if symptomatic. Yes, if asymptomatic. Yes if: At least 1 month after drug or other therapy successful; Asymptomatic; Cleared by electrophysiologist.	 Annual Recommend evaluation by cardiologist. Annual Evaluation by cardiologist required.
Idiopathic Left Ventricular VT	Favorable prognosis and low risk for syncope.	No, if symptomatic Yes, if asymptomatic. Yes if: At least 1 month after successful drug therapy or ablation; Cleared by electrophysiologist.	Annual Recommend evaluation by cardiologist. Annual Evaluation by cardiologist required.
Long QT Interval Syndrome	High risk for ventricular arrhythmic death.	No	
Brugada Syndrome	High risk for ventricular arrhythmic death.	No	

VENTRICULAR SEPTAL DEFECTS

DIAGNOSIS	PHYSIOLOGY	CERTIFCATION	RECERTIFICATION
Ventricular Septal Defect	Small = favorable.	Yes, if small shunt.	Annual Evaluation by cardiologist knowledgeable in adult congenital heart disease recommended.
	Moderate to large VSD has effect on pulmonary pressure and ventricular size and function.	No if: Moderate to large VSD; Symptoms of dyspnea, palpitations or syncope; Pulmonary artery hypertension; Right-to-left shunt, left ventricular enlargement or reduced function; Pulmonary to systemic flow ratio greater than 1.5 to 1.	Annual Evaluation by cardiologist knowledgeable in adult congenital heart disease, including 24-hour Holter Monitoring.
		Yes if: At least 3 months after surgery; None of above disqualifying criteria; No serious dysrhythmia on 24-hour Holter Monitoring; QRS interval <120 ms (If right ventricle conduction delay >120 ms on ECG, can be certified if invasive HIS bundle studies show no infra-His block or other serious electrophysiologic disorder); Cleared by cardiologist knowledgeable in adult congenital heart disease.	

RESPIRATORY DISORDERS

DIAGNOSIS	CERTIFCATION	RECERTIFICATION
Obstructive Sleep Apnea	No if symptomatic Confessed or observed excessive daytime sleepiness Previous diagnosis with poor compliance or no follow up Yes if: Wait period - 1 month after starting CPAP Wait period – 3 months after surgical corrections Asymptomatic with proof of compliance Previous diagnosis with compliance claimed but no evidence - One time 3 month card	Annual
COPD	Yes if asymptomatic No if: Hypoxemia at rest Chronic respiratory failure History of continual cough or cough syncope If FEV1 is < 65% predicted, ABG should be evaluated	Annual Guidance documents do suggest PFT in all smokers > 35 years of age
Pneumothorax	Certification is okay for 2 years if one time episode and confirm the following: Healing by x-ray Asymptomatic Acceptable pulmonary parameters No if: Two or more spontaneous episodes	Biennial
Lung Cancer	Yes if: Cure after resection or radiation Meets PFT criteria Asymptomatic	Monitored at 3 month intervals for 2 years then yearly for 5 years
Asthma	Yes if asymptomatic No if: Continual uncontrolled symptoms Significant impairment of function (FEV1 < 65%) Significant hypoxemia (PaO_2 < 65 mm Hg)	Biennial

NEUROLOGIC DISORDERS

DIAGNOSIS	CERTIFCATION	RECERTIFICATION
Seizures	No if history of epilepsy	
	Yes if asymptomatic with clearance from neurologist who understands CMV driving conditions	Annual
Acute seizure due to structural brain insult	Waiting Period of 1 year for: Mild insult without early seizures	Annual
	Waiting Period of 2 years for: Moderate insult without early seizures Mild insult with early seizures	Annual
	Waiting Period of 5 years for: Moderate insult with early seizures	Annual
Traumatic Brain Injury	Must be off seizure medications and seizure free Certification requires normal neurological examination and clearance by neurologist familiar with CMV duties	
	Mild TBI with no seizures (< 30 min LOC, no dural penetration) - 2 year maximum certification, judgment on waiting period	Biennial
	Mild TBI with early seizures - Minimum 2 year wait, 1 year maximum certification	Annual
	Moderate TBI (>30 min < 24 hr LOC, no dural penetration) - Minimum 2 year wait if no early seizures, 5 year wait if seizures = 1 yr max certify	Annual
	Severe TBI (> 24 hr LOC or any dural penetration)	
Headache	No if symptomatic or undetermined etiology	
	Yes if symptoms controlled and treatment tolerated without side effects or sedation	Biennial

Meningitis Aseptic	No wait period	Biennial
Bacterial meningitis without early seizures Viral encephalitis without early seizures	Wait Period of 1	Annual
Bacterial meningitis with early seizures	Wait Period of 5 years	Annual
Viral encephalitis with early seizures	Wait period of 10 years	Annual
Transient Ischemic Attack (TIA)	Yes if: Minimum wait is 1 year after TIA; Asymptomatic, cleared by Neurologist	Annual
Cerebrovascular Accident (CVA)	Yes if: Minimum wait is 1 year after CVA; Asymptomatic, cleared by Neurologist Minimum wait is 5 years for cortical and subcortical stroke due to seizure risk	Annual
Parkinson's Disease	Typically disqualify	
Multiple Sclerosis	Certify if: If mild symptoms Tolerate meds without side effects NO on-off effects Normal or above neuropsych battery results NO mood disorder	6 months with Neurologist clearance

ENDOCRINE DISORDERS

DIAGNOSIS	CERTIFCATION	RECERTIFICATION
Diabetes Mellitus	Yes if asymptomatic and stable on medications No if: One severe hypoglycemic episode in last 12 months Seizure LOC Need assist from someone else Period of impaired cognitive function Two or more severe episodes in past 5 years Loss of position sensation Loss of pedal sensation Resting tachycardia Orthostatic hypotension Peripheral or proliferative neuropathy	Annual

RENAL DISORDERS

DIAGNOSIS	CERTIFCATION	RECERTIFICATION
Chronic Kidney Disease	No if on dialysis CKD Stage 1, 2 or 3 Stage 1 or 2 = certify for 2 years if stable Stage 3 = certify for 1 year if stable CKD Stage 4	 Biennial Annual 6 Months with nephrology clearance

Table 139. Stages of Chronic Kidney Disease: Clinical Presentations

Stage	Description	GFR Range (mL/min/1.73 m^2)	Clinical Presentations*
	At increased risk	≥60 (without markers of damage)	CKD risk factors
1	Kidney damage with normal or ↑ GFR	≥90	Markers of damage (Nephrotic syndrome, Nephritic syndrome, Tubular syndromes, Urinary tract symptoms, Asymptomatic urinalysis abnormalities, Asymptomatic radiologic abnormalities, Hypertension due to kidney disease)
2	Kidney damage with mild ↓ GFR	60–89	Mild complications
3	Moderate ↓ GFR	30–59	Moderate complications
4	Severe ↓ GFR	15–29	Severe complications
5	Kidney Failure	<15 (or dialysis)	Uremia, Cardiovascular disease

* Includes presentations from preceding stages. Chronic kidney disease is defined as either kidney damage or GFR <60 mL/min/1.73 m^2 for ≥3 months. Kidney damage is defined as pathologic abnormalities or markers of damage, including abnormalities in blood or urine tests or imaging studies

PSYCHIATRIC DISORDERS

DIAGNOSIS	CERTIFCATION	RECERTIFICATION
ADD/ADHD	No if: Active psychosis Prominent negative symptoms Adverse medication effects Yes if: Treatment stable and safe Compliant NO side effects from meds Comprehensive evaluation from a mental health professional with clearance	Annual
Major Depressive Disorder/Bipolar Disorder	Minimum 6 month wait period that is symptom free after non-psychotic major depression Minimum 1 year wait period that is symptom free after severe depressive, suicide attempt or manic episode Requires mental health evaluation and subsequently every two years	Annual Annual
Schizophrenia/Psychotic Disorders	No if: Schizophrenia Active psychosis Prominent negative symptoms Medication interferes with safe driving May consider certification AFTER waiting period if mental health professional clears and medications are okay for: 6 month wait Brief reactive psychosis Schizophreniform disorder 1 year wait for Any other psychotic disorder (except schizophrenia)	Annual
ECT	No if ongoing treatment Yes if: Minimum 6 month wait Requires comprehensive mental evaluation	Annual
Personality Disorder	Requires mental health evaluation	Annual