

MLS Echo Competency Study Guideline

The list below describes general areas of knowledge that are needed for the MLS Echo competency exam.

- Aortic Disease
- ASE normal measurements
- Basic echocardiographic knowledge
- Cardiac Remodeling
- Cardiomyopathies (hypertrophic, noncompaction, dilated, etc.)
- Congenital heart disease (Common – Bicuspid AoV, PDA, PFO, etc.)
- Coronary origin and location
- Covid
- General Cardiac Valvular Pathology
- Hypertrophic Cardiomyopathies
- Mitral Valve Disease
- Performing echocardiographic measurements
- Pericardial disease
- Right Heart Disease (ARVD, dilatation, etc.)
- Strain Echo
- Stress Echo
- Sudden Cardiac Death

Recommend References:

- ASE Advance Cardiac Sonographer (ACS) Study Guide
- Clinical Echocardiography review: A self-assessment tool 1st Addition by Allen I Klein MD FRCP(C) FACC FAHA (Editor), Craig R. Asher MD (Editor)
- The ESC Textbook of Sports Cardiology (The European Society of Cardiology Series) 1st Edition by Antonio Pelliccia (Editor), Hein Heidbuchel (Editor), Domenico Corrado (Editor), Mats Borjesson (Editor), Sanjay Sharma (Editor)
- A Sonographers Guide to the Assessment of Heart Disease; Bonita Anderson
- <https://jamanetwork.com/journals/jamacardiology/fullarticle/2492415>
- <https://www.sciencedirect.com/science/article/pii/S073510970401143X?via%3DiHub>
- <https://www.asecho.org/wp-content/uploads/2017/04/2017ValvularRegurgitationGuideline.pdf>
- <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2999879/>
- https://www.asecho.org/wp-content/uploads/2016/02/2015_ChamberQuantificationREV.pdf
- <https://www.bsecho.org/common/Uploaded%20files/Education/Protocols%20and%20guidelines/ARVC.pdf>

Study Guideline Reference Hints:

- MLS Protocol – Review the following
 - A.** Recommendations for Cardiac Chamber Quantification
- Textbook references – review the following
 - A.** Normal vs anomalous coronary artery origins
 - B.** Normal, dilated, LVH, Hypertrophic, Non-compaction left ventricle
 - C.** Normal, dilated right ventricle and ARVD echo parameters
 - D.** Athletes heart vs hypertrophic cardiomyopathy
 - E.** Strain
 - F.** Mechanical activity vs electrical activity
 - G.** Common congenital abnormalities (PFO,PDA,Bicuspid AoV, etc.)
 - H.** Common valvular abnormalities