










Table 17.4 Classifications of Heart Murmurs

MURMUR	CARDIAC CYCLE TIMING	AUSCULTATION SITE	CONFIGURATION OF SOUND	CONTINUITY
Aortic stenosis	Midsystolic	RSB, 2nd ICS		Crescendo-decrescendo, continuous
Pulmonary stenosis	Midsystolic	LSB, 2nd to 3rd ICS		Crescendo-decrescendo, continuous
Mitral regurgitation	Systole	Apex		Holosystolic, continuous
Tricuspid regurgitation	Systole	4th ICS, LSB		Holosystolic, continuous
Mitral stenosis	Diastole	Apical		Rumble that increases in sound toward the end, continuous
Tricuspid stenosis	Diastole	Lower LSB		Rumble that increases in sound toward the end, continuous
Ventricular septal defect (left-to-right shunt)	Systole	3rd, 4th, 5th ICS, LSB		Holosystolic, continuous
Aortic regurgitation	Diastole (early)	3rd ICS, LSB		Decrescendo, continuous
Pulmonic regurgitation	Diastole (early)	3rd ICS, LSB		Decrescendo, continuous

(continued)

Table 17.4 Classifications of Heart Murmurs (*continued*)

MURMUR	QUALITY	PITCH	RADIATION	CHANGES WITH RESPIRATIONS
Aortic stenosis	Usually harsh, coarse	Medium	Most commonly into neck into carotid area and down left sternal border, possibly apex	Expiration may intensify the murmur
Pulmonary stenosis	Usually harsh	Medium	Toward the left upper neck and shoulder areas	Inspiration may intensify the murmur
Mitral regurgitation	Blowing and can be harsh in sound quality	High	Usually to left axilla, LSB, and base	Expiration may intensify the murmur
Tricuspid regurgitation	Blowing	High	May radiate to LSB and MCL but not to axilla	Inspiration may intensify the murmur
Mitral stenosis	Rumbling	Low and best heard with bell	Rare	Expiration may intensify the murmur
Tricuspid stenosis	Rumbling	Low	Rare	Inspiration may intensify the murmur
Ventricular septal defect (left-to-right shunt)	Harsh	High	May radiate across precordium but not to axilla	Expiration may intensify the murmur
Aortic regurgitation	Blowing	High, best auscultated with diaphragm unless client is sitting up and leaning forward	May radiate to 2nd ICS, RSB and may proceed to apex	Expiration may intensify the murmur if the client leans forward and sits up
Pulmonic regurgitation	Blowing	High, best auscultated with diaphragm	May radiate to 2nd ICS, RSB and may proceed to apex	Inspiration may intensify the murmur