Heart Sounds

Heart sounds are generated by the rapid acceleration and deceleration of blood and secondary vibrations in the cardiohemic system. Four heart sounds can potentially be ausculted. The first heart sound (S1) is associated with closure of the atrioventricular (AV) valves, and the second heart sound (S2) is associated with closure of the semilunar (aortic and pulmonic) valves. The third heart sound (S3) occurs in early diastole and is a result of rapid cessation of ventricular filling, while the fourth heart sound (S4) is associated with atrial systole (atrial contraction or atrial “kick”). In horses, all 4 sounds are normally audible. In cattle, typically only S1 and S2 are audible in normal individuals, although S3 or S4 can sometimes be heard. IV fluid administration in cattle can result in accentuation of S3 and/or S4. In dogs, cats, and ferrets, S1 and S2 are the only heart sounds normally audible. Less is known about goats, sheep, and pigs; however, only S1 and S2 are believed to be audible in these species.

Taken from <http://www.merckmanuals.com/vet/circulatory_system/heart_disease_and_heart_failure/diagnosis_of_heart_disease.html>