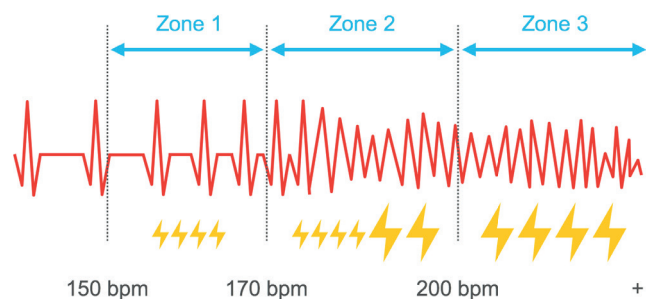# DETECTING ARRHYTHMIAS

Heart rate criteria—zones

Key take-away points

- ICDs use heart rate criteria to recognize ventricular tachycardia (VT) and ventricular fibrillation (VF).
- Once a heart rate exceeds a programmable threshold, therapy is considered.
- Heart rate zones enable us to offer different therapy protocols for different dangerous arrhythmias.

Rhythm	Onset	Ventricular rate	QRS morphology	AV association	Regular R-to-R
Sinus tachycardia		>100 bpm		$As = Vs$	👍
Atrial fibrillation		~ 30–200 bpm		$As > Vs$	👎
Ventricular tachycardia		~ 170 bpm +		$As < Vs$	👍
Ventricular fibrillation		Up to ~ 500 bpm		$As < Vs$	👎

Zone 1 — 150 bpm — 170 bpm — Zone 2 — 200 bpm — Zone 3 — +

Notes