

2 Thumb–Encircling Hands Technique

The **2 thumb–encircling hands technique** is the preferred 2-rescuer chest compression technique for healthcare providers when physically feasible (Figure 36). It produces blood flow by compressing the chest with both the thumbs and the fingers. This technique produces better blood flow and more consistently results in appropriate depth or force of compression⁴⁶⁻⁴⁹ and may generate higher blood pressures.⁵⁰⁻⁵³

Step	Action
1	Draw an imaginary line between the nipples. Place both thumbs side by side in the center of the infant's chest on the breastbone, just below this line. This will allow you to compress on the lower half of the breastbone. Do not press on the xiphoid. The thumbs may overlap in very small infants.
2	Encircle the infant's chest and support the infant's back with the fingers of both hands.
3	With your hands encircling the chest, use both thumbs to depress the breastbone approximately $\frac{1}{3}$ to $\frac{1}{2}$ the depth of the infant's chest. As you push down with your thumbs, squeeze the infant's chest with your fingers.
4	After each compression completely release the pressure on the breastbone and chest and allow the chest to fully recoil.
5	Deliver compressions in a smooth fashion at a rate of 100 compressions per minute.
6	After every 15 compressions, pause briefly for the second rescuer to open the airway with a head tilt–chin lift and give 2 breaths (the chest should rise with the breath). Coordinate compressions and ventilations to avoid simultaneous delivery and to ensure adequate ventilation and chest expansion, especially when the airway is unprotected.
7	Continue compressions and breaths in a ratio of 15:2 (for 2 rescuers), switching roles every 2 minutes.

Review Questions

1. The correct rate for giving compressions to an infant is _____ compressions a minute.
2. The correct compression-ventilation ratio for 1-rescuer infant CPR is _____ compressions and _____ breaths.
3. The correct compression-ventilation ratio for 2-rescuer infant CPR is _____ compressions and _____ breaths.