Finding Optimal PEEP during HFV *

Switch to HFV from CV at same MAP by adjusting PEEP. Reduce IMV Rate to 5 bpm. Note current SaO₂ on pulse oximeter.

Switch CV to CPAP mode.

Does SaO₂ drop? (Wait 1 - 5 min.)

NO

PEEP is high enough, for the moment.

YES

PEEP is too low.

Switch back to IMV.

Increase PEEP by 1 - 2.

Wait for SaO₂ to return to acceptable value. (It may take ≈ 30 min.)

NO

Does FiO₂ needs to be increased?

YES

Use IMV = 0 - 3 bpm with IMV PIP 20 - 50% < HFV PIP

(hours later)

NO

Keep PEEP at this level until FiO₂ < 0.30

Don’t be shocked if optimal PEEP = 8 – 12 cm H₂O!

* when switching from CV to HFV.

Warnings: Lowering PEEP may improve SaO₂ in some cases. Optimal PEEP may be lower in patients with active air leaks or hemodynamic problems. Using IMV with high PEEP is hazardous. Do not assume high PEEP causes over-expansion.