



## Checklist - Ventilation

This is the fourth checklist which we hope will be useful when investigating how well your hatchery handles the needs of ventilation.

### AIR HANDLING UNITS

- Clean air ducts and filters regularly.
- Keep cooling coils clean and avoid blockages.
- Check belts regularly; change when cracked.
- Check filter change warning pressure sensors for filter condition, making sure the sensors are working properly.

### PLENUMS

- Be sure that temperature, RH and CO<sub>2</sub> levels are consistent across the plenum.
- Make sure that all access hatches are closed properly.
- If present, clean cooling coils and humidifiers regularly.

### AIR PRESSURE

- Calibrate pressure sensors and check air volumes of rooms or plenums on a monthly basis.
- Check reference points regularly.
- Use a filter attached to the reference tube outside end.
- Avoid pressure fluctuations.
- The pressure sensor range should be less than 10 times that of the target pressure for the room, as they have a 1% error of reading value. If the target pressure set point is 5pa, the sensor should have a maximum 50pa range.

### EGG STORAGE ROOM

- The temperature of the egg store should be consistent throughout the room.
- If humidity exceeds 90%, ventilate to reduce it and avoid fungal growth.

### SETTER AND HATCHER ROOMS

- Maintain 22-28°C temperature and 50-60% RH in setter and hatcher rooms.
- Keep doors closed.
- Keep CO<sub>2</sub> levels below 1000ppm.
- Clean and maintain spray nozzles regularly if present.
- Never wash empty hatcher while the hatch continues in the same room. This can cause high humidity and a risk of contamination.
- Calibrate room/plenum inlet dampers regularly.
- Clean hatcher exhausts regularly.
- Avoid sharp angled bends in flexible exhaust ducts.

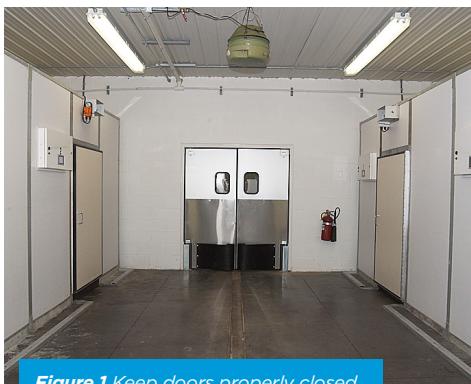


Figure 1 Keep doors properly closed.



## Checklist - Ventilation *Continued*



**Figure 2** Avoid sharp bends in flexible ducts.

### TRANSFER ROOM

- Aim for a room pressure less than the setter room and more than the hatcher room.
- Provide extra ventilation when using in ovo vaccination.
- Keep doors closed during transfer unless actually in use.

### VACCINE PREPARATION ROOM

- Hold at a higher positive pressure than any other surrounding room.
- Ventilate continuously.
- Use a high efficiency particulate air (HEPA) filter if possible.
- Use double slider windows for vaccine serving.