Transitional Ventilation For Broilers

1. Purpose Of Transitional Ventilation

- To provide increased air exchange to remove excess heat without blowing air directly onto birds.
  Increased air exchange = increased heat removal.
- Used when:

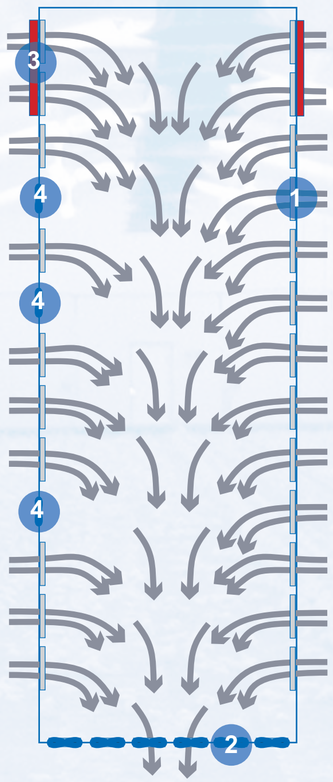
  - Outside temperature is too cold.
  - Birds are too young for tunnel ventilation.

2. Air Volume And Speed

- Pressure
  - Appropriate negative pressure is needed to:
    - Provide adequate air speed.
    - Direct air towards apex of roof.
    - Create some air movement over the birds.

- Air Volume
  - Increase number of side wall inlets open.
  - Increase inlet opening size.
  - Total inlet opening should allow 40-50% of tunnel fan capacity to be used.
- Fan numbers
  - Determined by number and size of inlet opening.
  - Temperature driven fans run continuously for temperature control.
- **Base settings on bird behavior.**

Typical Air Movement During Transitional Ventilation



1. **Side wall air inlets**
2. **Tunnel fans**
3. **Tunnel air inlets (closed)**
4. **Minimum ventilation fans (off)**

Note: During transitional ventilation air is pulled into the house through the side wall inlets only.

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Library photographs for teaching purposes.

3. Monitor And Evaluate

- **Evaluating bird behavior is the only real way to determine if transitional ventilation settings are correct.**

- Huddling birds - Air too cold / incorrect direction.

- Younger birds with less feathering feel air movement more than fully feathered (older) birds and will huddle together.

- **Corrective Actions**
  - Check negative pressure is still OK.
  - Turn off the last fan that came on.

- Birds become more active when transitional ventilation has been adjusted correctly.