

Evaluating Brooding Temperature

During the brooding period, optimal chick body temperature is provided through the correct environmental conditions.

Correct placement conditions: Litter temp = 28.0-30.0 °C (82.4-86.0 °F) Air temp at chick level = 30.0 °C (86.0 °F) Ideal RH = 60-70% Floor temp = 28.0-30.0 °C (82.4-89.6 °F)

Body Weight g (lb)	Dry Bulb Temperature °C (°F)			
	40 RH%	50 RH%	60 RH%	70 RH%
44 (0.10)	36.0 (96.8)	33.2 (91.8)	30.8 (87.4)	29.2 (84.6)
100 (0.22)	33.7 (92.7)	31.2 (88.2)	28.9 (84.0)	27.3 (81.1)
180 (0.40)	32.5 (90.5)	29.9 (85.8)	27.7 (81.9)	26.0 (78.8)
290 (0.64)	31.3 (88.3)	28.6 (83.5)	26.7 (80.1)	25.0 (77.0)
425 (0.94)	30.2 (86.4)	27.8 (82.0)	25.7 (78.3)	24.0 (75.2)
590 (1.30)	29.0 (84.2)	26.8 (80.2)	24.8 (76.6)	23.0 (73.4)
790 (1.74)	27.7 (81.9)	25.5 (77.9)	23.6 (74.5)	21.9 (71.4)
1015 (2.24)	26.9 (80.4)	24.7 (76.5)	22.7 (72.9)	21.3 (70.3)
1260 (2.78)	25.7 (78.3)	23.5 (74.3)	21.7 (71.1)	20.2 (68.4)
>1530 (3.37)	24.8 (76.6)	22.7 (72.9)	20.7 (69.3)	19.3 (66.7)

Note: Dry bulb temperatures, at the ideal RH are colored green.

Interaction between Temperature and Relative Humidity (RH)



Ideal



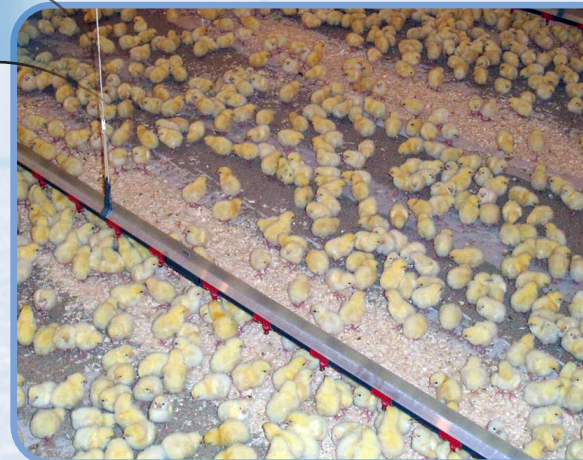
Cold



Chicks:

- huddle together
- become distressed and noisy

Increase temperature and / or RH
Check ventilation | Check air flows



Chicks:

- spread evenly across the brooding area

No action required



Hot



Chicks:

- move the edges of the house / brooding area
- are quieter than normal
- spread their wings and begin to pant

Decrease temperature and / or RH - Check ventilation

Monitor Chicks

Measure vent temperature.

Vent Temp
39.4 - 40.5 °C
(103.0 - 105.0 °F)

Crop fill

2 hrs = >75%
8 hrs = >80%
12 hrs = >85%
24 hrs = >95%

Percentage of birds with full crops.

