

Embryo mortality patterns



Category	Subcategories	Possible causes
Farm	Cull eggs	Breeder diseases, nutritional deficiencies,...
	Farm cracks	Weak shells, poor handling,...
	Eggs set upside down	Human error, machine error,...
	True infertiles (blastodisc)	Breeder issues
	Contamination	Poor nest hygiene, excessive micro cracks,...
Early mortality (1-7 days)	<p>24 Hrs 48 Hrs 3 Day 4 Day 5 Day 6 Day 7 Day</p>	
	24/48 hrs	Poor storage conditions, excessive fumigation,...
	Blood ring (Day 3)	Poor preheating, temperature too high, too low or fluctuation,...
	Black eye (Day 5)	Nutritional deficiencies, temperature too high or too low,...
	Day 6-7	Temperature too high, mycotoxins,...
Mid mortality (8-14 days)	<p>8 Day 9 Day 10 Day 11 Day 12 Day 13 Day 14 Day</p>	
	Day 8-9	High, low or fluctuating temperatures, chemical residues,...
	Day 10-14	High, low or fluctuating temperatures, chemical residues,...
Late mortality (15-21 days)	<p>15 Day 16 Day 17 Day 18 Day 19 Day 20 Day 21 Day</p>	
	Day 15-17	High temperatures, inadequate turning,...
	Day 18	Transfer issues, overheating,...
	Day 19	Eggs transferred into too high temperatures or wet baskets/hatchers
	Day 20	High hatcher temperatures, insufficient weight loss
	Transfer damage	Poor handling, faulty automation,...
	Malpositions	Egg incubated upside down
Malformations	Temperature fluctuations or physical shocks early in incubation,...	