Aviagen® Turkeys

Bulletin

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# Care for Early Week of Lay Poults

## Introduction

Early week of lay (EWOL) is defined as poults from the first 2 weeks of egg production. These poults are an aspect of all turkey production systems. In general, they are approximately 5% of the total number of poults produced by a breeder hen and all operations should expect to receive EWOL poults as part of the flow of turkey breeder production.

The care that the EWOL poults receive the first two days is critical. They tend to be smaller, have a larger yolk sac in proportion to their body weight, and require closer attention to detail. Studies have shown that after day two of placement, with proper management, there is no longer a link between EWOL egg weight and poult weight.

## Litter Quality and Depth

- Use a clean, dry mixture of coarse and fine softwood shavings. Avoid hardwoods and wet sawdust.
- Use new shavings for every flock in your cleaned and disinfected barn.
- Spread shavings evenly at 3-4 in. (8-10 cm) depth.
- Smooth and level shavings (no trenches or hills) prior to setting up equipment (See Figure 1).

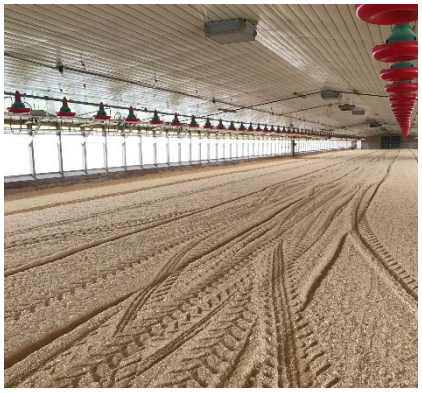

**Figure 1:** Clean, level shavings.

## Feed Availability

- Provide extra supplemental feeders.
- Ensure supplemental feeders are full, feedline pans are flooded, and control pans are manually triggered to run a minimum of 3 times per day.
- Place 30 lb (109 g/m$^2$) weight Kraft paper under all feed lines with approximately 4 lbs (2 kg) of feed between every 3$^{rd}$ feed pan (See Figure 2).
- Kraft paper can also be used under drinker lines as well to attract poults, but should be monitored for excessive wet spots which can grow mold.
- Ensure poults are within 5 ft (1.5 m) of feeders.
- Refill all supplemental feeders 3 times per day the first 1-5 days.
- Perform a crop fill test 12 hours post placement – check 100 poults for feed in their crop from three locations throughout the barn (See Aviagen Turkeys technical bulletin on how to measure crop fill). At least 90% of poults should have feed in their crops. If less than that, evaluate barn conditions and feed access.

**Figure 2:** Kraft paper under feeder and drinker lines.

## Water

- Use supplemental drinkers (4 per 1,000 poults). Dump 3 times per day to keep water clean and cool.
- Remove supplemental drinkers at the rate of 25% a day after 4-5 days.
- Flush nipple lines with cool, properly sanitized water, 3 times per day, long enough for cool water to exit line.
- Ensure nipple drinker line pressure is high enough for cups to be full for poults to see the water.
- Charge nipple drinker lines prior to placement.
- Level drinker lines to make sure poults have good access to all drinkers.
- Re-evaluate nipple line height and adjust after poults have compacted the litter.
- It is not recommended to add vitamins or antibiotics at placement (unless for a specific known problem as prescribed by a veterinarian).

## Temperature

- Proper barn temperature is critical to poult comfort because all turkey poults at placement are unable to regulate their body temperature.
- Preheat barn to target temperature, a minimum of 24 hours in summer and 48 hours in winter. In extremely cold climates, 72 hours may be necessary.
- Ensure floor temperature is the same as your target temperature. Ideally, where the birds access feed and water, the temperature range should be 92-95°F / 33-35°C to promote good poult activity (See Figure 3).
- Measure vent temps upon delivery to gauge if poults are within ideal range, 102-105°F / 39-40°C. If temps are outside of the ideal range, this may indicate a need to adjust your room temperature to reach ideal poult comfort zone.
- Monitor poult behavior in order to determine if additional adjustments are needed.

*Note: EWOL comfort zone could be slightly cooler due to ratio of yolk to body mass. Let the flock dictate where the temperature needs to be.*

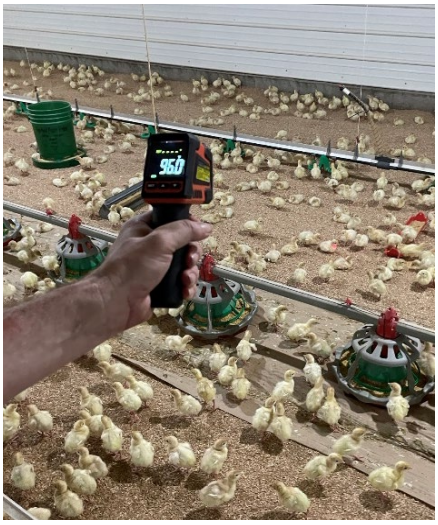


**Figure 3:** Use a temperature gun to monitor floor temperature.

## Lighting

- Confirm the lighting is uniform across the barn, with little to no shadows (See Figure 4).
- Provide poults with full light for the first 1-3 days so all poults have adequate time to find feed and water.
- Provide 4-6 hours of darkness after day 3 for optimal performance.
- Use dimmers to help control bird activity (piling, agitated, running).
- If dimmers are in use, start at 1.5 footcandles (15 lux). Increase by 2 footcandles every hour to 8-10 footcandles (80-100 lux). Monitor poult behavior to determine if adjustments are needed.


**Figure 4:** Use a light meter to ensure proper light levels.

## Flip overs and Tip overs

**Flip over: A poult that has flipped over on its back and cannot get back up.**
**Tip over: A poult that is full of feed and fallen over and cannot get back up.**

- A large percentage of these poults can be saved with proper care and attention.
- It is important to be prepared for this prior to placement. A separate, small ring with feed and water, but no heat source set up prior to placement is ideal.
- Walk the barn hourly to collect flip overs and tip overs.
- Separate them from the general population as soon as possible.
- Move to your previously set up location with reduced light intensity and decreased temperature, with access to feed and water.
- Once poults have recovered, reintroduce them with the general population.

## Troubleshooting – Symptoms & Solutions

| Symptom | Solution |
|---|---|
| **Loud & Running** | • Lower light intensity and adjust temperature as needed.<br>• Ensure drinkers are properly adjusted and flush lines. |
| **Sitting** | • Monitor $CO_2$.<br>• Possibly adjust ventilation.<br>• Check floor temperature.<br>• Check for drafts. |
| **Piling** | • Check if poults are too hot or too cold.<br>• High vent temperatures – consider decreasing heat.<br>• Low vent temperatures – consider increasing heat.<br>• Consider reducing light intensity.<br>• Check for drafts.<br>• Check for shadows.<br>• Check for noise.<br>• Check for equipment too close to the edge of the cardboard.<br>• Check for light leaks. |

## Key Points for EWOL poults

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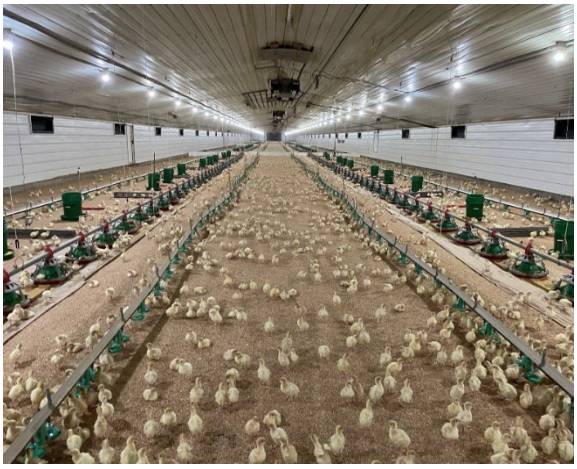
|---|
| ○ There should be communication between the farm and the hatchery about when EWOL poults are being delivered to be properly prepared. |
| ○ Preheat the barn 24-48 hours, prior to poult placement. |
| ○ Smooth and level litter (no trenches or hills) prior to setting up equipment. |
| ○ Confirm the lighting is uniform across the barn, with little to no shadows. |
| ○ Use supplemental feeders and drinkers. |
| ○ Spend time in the barns so you can make adjustments for the poults as needed. Give poults an hour to settle in and begin to make adjustments as needed. It is critical to get back into the barn at that time and make those changes early on to avoid causing any issues related to management. |

## Summary

Every farm can be successful with EWOL poults by taking the time to pay attention to details. They have the same genetic potential as all their breeder flock mates and can give you excellent results. Investing the time in the first 2 days after placement, will allow you to maximize the potential of your EWOL poults.





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