

## **4-H INCUBATION & EMBRYOLOGY: Important Guidelines to Ensure Safety and Proper Care of Chicks After Hatching**

### **IMPORTANT MESSAGE TO ADULTS WHO HAVE REGISTERED A GROUP TO PARTICIPATE IN THE EMBRYOLOGY PROGRAM**

Embryology provides a unique opportunity for children and adults to learn about baby chick development and the miracle of life. However, participation in the program also requires responsibility. **Baby chicks are living creatures, dependent on the adults and students to provide for their needs. As such, adults and students alike need to accept responsibility for the care and well-being of the animals.** University Outreach and Extension recommends the following steps to ensure the safety and proper care of baby chicks after hatching:

1. ***Before picking up the eggs, make prior arrangements with a farm or other location to take the chicks soon after hatching.***
2. ***If you notice a chick having "trouble" hatching, let nature take its course.***  
Chicks hatch on their own. Most chicks that require help to escape from the shell will be too weak to survive. To aid the hatching process, keep the humidity high in the incubator through the hatching process. Be sure there's plenty of water in the water pan. High humidity keeps the chick from sticking to the shell. To help increase humidity, it may be helpful to place a moist (not dripping), brown paper towel on top of the eggs.
3. ***Plan to remove the chicks from the classroom and take them to an appropriate rearing facility within the week of birth.***  
Chicks grow quickly. Usually, they hatch on a Tuesday and should be taken to a farm or other appropriate facility by Friday of that same week.
4. ***Only adults, or students under close adult supervision, should handle chicks.***  
Classroom educational activities, such as measuring and weighing the chicks, are acceptable. However, handling should be kept to a minimum and should only be permitted under close adult supervision to ensure the safety of the chicks.

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5. ***Provide safe, temporary housing for chicks using an open-topped cardboard box, covered with wire mesh, such as chicken wire.***  
Temperature is very important. It should be 95 degrees in the chicks' box at all times. *(Don't turn the light off at night!)* Allow at least 6 square inches per chick. Everything the chicks need must be provided in the box. You should provide medicated starter feed, water, and a supplemental heat source, such as a light bulb in a reflector placed above one corner of the box. Place about a 2-inch layer of sawdust, kitty litter or shredded paper in the floor of the box to help keep the chicks warm and dry. Clean out the litter as it becomes soiled and wet. This is especially important as

the chicks become older and create more waste. Spills and wet areas should be cleaned immediately.

**6. Keep specially prepared, medicated starter chick feed from a feed store—and water before chicks at all times.**

Change the water daily. Be sure to replace feed as needed.

**7. If you take the chicks out of the box temporarily, be careful to place them on a non-slick surface.**

Chicks need a “gripping” surface. Do not put them on a slick floor. The best place for them to be is in the box with properly prepared flooring consisting of sawdust, kitty litter or shredded paper.

**8. Watch the chicks—and listen—for signs that they may be in distress. “Chick talk” is the “key” to comfort.** When contented, well fed, and supplied with proper heat, comfortable baby chicks talk in a low-toned, contented “cheep,” and they walk freely about the box. When chilly, the chicks cheep in a tremulous voice, or in a shrill tone. Chicks that are uncomfortable because of damp litter, warmth, or hunger and thirst emit a rapid and high-pitched sound. They also “clump” together in an effort to stay warm if they are cold. If you notice signs that any chicks may be ill, or you have any questions about their care, please call the Extension Center immediately.

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*The above guidelines are intended to emphasize special precautions to ensure safety and proper care of the chicks after hatching. Adult leaders should also review the following materials, which are available through University Outreach and Extension:*

**Printed materials**

*Hatching Chicks in the Classroom.* (1993). Missouri Science Project Program Guide, Leaders Guide LG1501. University of Missouri Extension and Missouri Department of Elementary and Secondary Education.

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**Printed materials (cont.)**

Lyons, Jesse J., Department of Animal Sciences. (1998, January). *Small Flock Series: Incubation of Poultry*. Agricultural publication G8353, University of Missouri, Columbia.

**Online materials**

The above agricultural publication, G8353, *Small Flock Series: Incubation of Poultry*, is also available online:

<http://muextension.missouri.edu/xplor/agguides/poultry/g08353.htm>

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