

Poultry Extension Collaborative newsletter

A collaboration between Purdue University, University of Maryland, North Carolina State University and Virginia Tech

Mail-order chicks during the COVID-19 pandemic

The COVID-19 pandemic has brought changes to our everyday lives. The online shopping community is seeing an unprecedented surge in orders, which has led to an unprecedented surge in the volume of packages U.S. parcel shipping companies must transport and deliver. The chicken business is no exception - there have been reports of an increase in people buying chicks to start their own flocks of chickens (so-called panic buying chicks).

Information on exactly how many day-old poultry are mailed is unavailable. An estimated 1.2 million pounds of packages containing poultry was shipped in the first half of 2009 (Neuman, 2009). The current number can be expected to be even higher as the number of hatcheries providing mail-order service and the number of backyard producers continues to rise.

Starting a new flock or adding more chicks to your current flock may seem like a good idea to keep busy during COVID-19 social restrictions. However, with the current decline in ontime package deliveries, you should be cautious about shipping live animals. Some animals do not make it to their intended destination. In the case of day-old chicks, the current shipping delays may have unintended consequences for animal welfare.



MAILING CHICKS DURING COVID-19

- Animal welfare problems
- Why are chicks shipped?
- Chick biology 101
- USPS shipping process, requirements, and restrictions
- What can you do?

Why can mailing chicks be an animal welfare problem?

There are several key considerations when chicks are mailed. Some of these problems are easier to prevent than others. When issues with mailing chicks occur, they can cause three main problems for animal welfare.

1. Chicks cannot maintain their own body temperature and could experience cold stress or heat stress

Young chicks rely on their environment to maintain their body temperature. Chicks should be kept at a temperature of 95F (35C) in the first week, then temperature can be gradually decreased. It is not possible to ensure constant heat during transit for shipped chicks. This is especially critical in the winter months, because delivery vehicles are not necessarily equipped to protect chicks from the cold.

2. Chicks can experience hunger and thirst during long periods without food and water

Chicks are thought to be able to sustain themselves from their yolk reserves for up to 72 hours. However, if chicks would have the opportunity to feed, they do so after about 24 hours after hatch. Another aspect to consider is the hatching window. In commercial hatcheries, eggs are placed in incubators and hatchers.

Once eggs start to hatch, it can take up to 48 hours from the first hatching chick to the last. Some chicks may already be more than two days old before shipment and shipment would further delay their first access to feed and water.

3. Transportation itself can cause stress, fear, injury, and mortality

Transportation is stressful for animals at every step of the process. Chicks will be fearful while they experience handling, new environments, tossing or rough handling of the boxes, vibrations during transport, and changes in temperatures. Like other avian species, the inability to cope (deal) with transportation and handling stressors can result in injury and death. Mortality during transport is considered a welfare concern because chicks have likely suffered prior to dying.

Mistakes, such as chicks being sent to the wrong post office, do occur and can result in chicks dying. The majority of places that mail chicks make sure to mail them early in the week to ensure that the chicks are not left in the post office over the weekend. Once chicks arrive at the post office, it is imperative that they are picked up as soon as possible.

Why is mailing chicks a bigger problem right now?

With the current COVID-19 pandemic, many of us are experiencing delays. This includes delayed postal services for many reasons, such as staffing shortages or large package volumes. Consequently, shipping delays may result in higher chick mortality due to starvation, dehydration, or cold/heat stress.

Why are chicks shipped by mail?

Ordering chicks via mail is a common practice and the number of chicks transported across the United States has only increased since Postmaster General A. S. Burleson of the United States Postal Service (USPS) officially announced acceptance of live chicks for mailing in 1918.

Mail-order chicks are common as it is one of the easiest ways to get National Poultry Improvement Plan (NPIP) certified birds of any quantity (as low as 3 chicks). The convenience of ordering chicks through the mail has enabled hatcheries to grow in number as well as greatly expand their business. The practice also enables people to select from a variety of chicken breeds and allows people to start a flock at any time of the year. In addition, mail-order chicks have been assisted the preservation of rare poultry breeds.

Common customers of mail order hatcheries include:

- Backyard producers
- Local farm stores
- 4-H and FFA youth and kids
- Conservationists and hobbyists

Successful mail-delivery of chicks relies on the combination of careful planning for timing (hatch window), appropriate packaging, and effective communication with the hatchery and the postal office.



Chick biology 101

How is it possible for chicks to be mailed? The answer lies in their basic biology.

Once a hen lays a fertilized egg, it takes 21 days for the egg to hatch if the egg is kept within the optimal temperature range.

Inside the egg, the developing chick has most of what it needs, except for oxygen and heat. Oxygen enters the egg through tiny holes (pores) in the eggshell. Heat has to be provided either by a hen or an incubator. Also, eggs need to be turned for the chick to develop normally and hatch successfully.

Eggs either hatch naturally, with a hen sitting on and incubating the egg, or through the use of incubators that carefully monitor and control humidity and temperature levels. When chicks are ready to hatch, they break through the shell using an egg tooth (a hard structure on the beak) through a process called *pipping*. Chicken *chicks are precocial*, meaning that they are able to walk very soon after hatching.

After hatching, chicken chicks can survive for up to 72 hours without food because they survive on the yolk from the egg, the yolk sac, which is completely drawn into the chick's body by day 20 of incubation. It is critical that chicks are able to get access to food and water within 72 hours after hatching. Otherwise, they will not survive.

Chicks do not all hatch at the same time, which means that some chicks do not have as much of the yolk sac left by the time they arrive at the post office. Other factors, such as stress during transport and shipping, can lead to the yolk sac energy being depleted even faster, so it is crucial that the chicks are given access to food as soon as possible. Earlier access to food also promotes development of the chicks' digestive system, benefitting the chick in multiple ways.



USPS Shipping Process, Requirements, and Restrictions

The federal regulation for the shipping of chicks is included in Perishable Matter <u>Section 526.3</u> (<u>Mailable Live Animals: Live, day-old poultry</u>) of Publication 52 (Hazardous, Restricted, and Perishable Mail). USPS Publication 52 was incorporated into the Code of Federal Regulations in January 2018 (<u>39 C.F.R § 113</u>). Briefly, the details of the regulations revolve around assigning some responsibilities to shippers.



- **Species** Includes chickens, ducks, emus, geese, guinea birds, partridges, pheasants (April through August), quail, and turkeys.
- Vaccinations Cannot be shipped if they have been vaccinated for Newcastle disease with a live virus.
- Age Must be less than 24 hours old at shipping.
- **Timing** Must be mailed early enough in the week, so that they are not arriving at the post office during weekends or holidays.
- Box Must be properly ventilated to protect against suffocation and be of proper construction. Boxes are typically made of cardboard and are custom engineered for shipping chicks, with sides that are slanted to provide air space, contain straw or other substrate to allow for traction and warmth, and have holes on the side walls for effective air flow.
- Box Labels Must include a description of the contents such as "Live Animals", the shipping and return addresses, and the date and time the chicks hatched.



Although it is not included in the regulations, the shipper must also consider the number of sections and number of birds in each section of the shipping box. If too few chicks are in the box, they can move around too much and get injured. If too many chicks are in the box, the ventilation and temperature of the box can cause the birds to crowd and suffocate one another.

What can you do?

- Consider waiting to reduce the strain on the postal service.
- Do your homework and make sure you buy chicks
 from reputable hatcheries and have everything you need when the chicks arrive.
- Before placing your order, look up the predicted
 weather conditions during the days your chicks are in
 transport and delay placing your order during extreme
 weather.
- Know which post office chicks will be delivered to and have their phone number handy.
- Allow flexibility in your schedule for the days before and after the estimated arrival date of your chicks to the post office.
- Consider ordering fertilized eggs instead of chicks and hatch them yourselves, a cool project!



Resources

- Neuman, W. 2009. Keeping Their Eggs in Their Backyard Nests (NY Times).
- USPS Publication 52 -Section 5 Perishable Matter 526 Mailable Live Animals
- 39 C.F.R § 113 Hazardous, Restricted, and Perishable Mail (Publication 52).
- Mypetchicken.com About Ordering
- How Newborn Baby Chicks Travel Across the Country to Get to Your Backyard
- Ordering Baby Chicks? Avoid These 16 Rookie Mistakes

