

Good morning, and thank you for joining me on this call today. I am Miles McEvoy, Deputy Administrator for the National Organic Program, part of the USDA's Agricultural Marketing Service, or AMS.

Today, I want to talk about a final rule we have just published on organic livestock and poultry practices. I'll summarize the factors that shaped the development of the rule, discuss public comments we received, and highlight some of the specific requirements of the rule. This webinar will also provide you an opportunity to ask questions about the rule.



First, I'd like to briefly review who we are and why we regulate the standards for organic foods and production.

The National Organic Program, or NOP, which resides within the USDA's Agricultural Marketing Service, exists to ensure the integrity of products that are marketed as organic. The program is authorized by the Organic Foods Production Act, passed by Congress in 1990. The NOP ensures the integrity of organic products, in part, by establishing and enforcing clear standards.

Clear organic standards are essential to ensuring consumer confidence in the organic market. In 2015, the organic market was worth over \$43 billion in the U.S. sales alone. Clear rules also allow for effective enforcement and fair competition among certified organic livestock producers.

The purpose of the Organic Foods Production Act, part of the 1990 Farm Bill, is to establish national standards governing the marketing of certain agricultural products as organically produced products, to assure consumers that organically produced products meet a consistent standard, and to facilitate interstate commerce.

This rule, specifically, will serve to assure consumers that organically produced livestock products meet a consistent standard, by resolving the current ambiguity about outdoor access for poultry. The rule also establishes health and welfare requirements for raising, transporting, and slaughtering organic livestock and poultry.

## Organic Livestock and Poultry Practices • Final rule Publication in Federal Register on January 19, 2017 • Proposed rule Published April 13, 2016, with 90-day comment period Website link (final rule) • www.ams.usda.gov/rules-regulations/organic-livestock-and-poultry-practices

The rule I will discuss was published as a proposed rule on April 13<sup>th</sup> 2016 with a 60-day comment period that was subsequently extended for an additional 30-days. The final rule will be published in the Federal Register [tomorrow] but can be previewed today. We are also publishing a portion of our analysis of the final rule in the docket at regulations.gov.

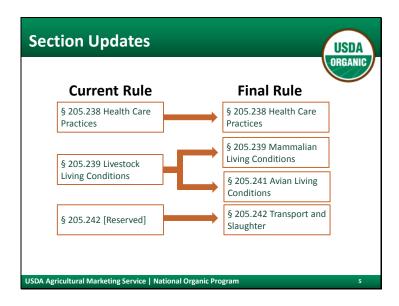
We have dedicated a webpage on the AMS web site that links to the rule and provides other related information. We are providing a link to the webpage in the chat bar now, and it was included in an Organic Insider email that we sent earlier today.



Prior to this rule, the USDA organic livestock standards included requirements in several areas, including:

- Describing when the life cycle of an organic animal begins day old chicks, lastthird of gestation (pregnancy) for mammalian livestock,
- Allowed feed and forage that may be provided to organic livestock,
- Allowed and prohibited practices to care for animal health, and
- Living conditions that must be provided, including pasture requirements for ruminant livestock such as cattle, goats, and sheep.

This rule builds upon these requirements and also adds new requirements.



Shown here is the relationship between the organization of the regulations under this rule, on the right, to the previous organization of the regulations.

As you can see, this rule rearranges the organic regulations by splitting the requirements for living conditions into two separate sections, one for avian species and one for mammalian species.

It also adds a new section, 242, for requirements related to the transport and slaughter of organic livestock and birds. The requirements about feed for organic livestock and the requirements about which animals qualify for organic production, Origin of Livestock, are not shown here, as they are not modified by this rule.

I'll go over the specific requirements in these various regulatory sections in further detail later in the presentation but want to return to the reasons and process for developing this rule.

## 1. Supports statutory objectives under Organic Foods Production Act of 1990 to: • Develop detailed organic standards • Assure consumers of consistent standards 2. Responds to recommendations from the National Organic Standards Board (NOSB) 3. Addresses a 2010 Office of Inspector General audit 4. Upholds consumer trust in the organic label

There were a number of factors that prompted AMS to develop this rule.

USDA Agricultural Marketing Service | National Organic Program

In the Organic Foods Production Act of 1990, Congress called for USDA to develop detailed regulations, with notice and public comment, to guide organic livestock standards. When AMS first published organic regulations in 2000 and announced the establishment of the National Organic Program, we also stated that we would work with the National Organic Standards Board, or NOSB, and the public to develop species-specific guidelines and space requirements for organic animals.

The NOSB is a citizen advisory committee that advises the USDA. The NOSB has 15 volunteer members who represent the entire organic sector, including: farmers and producers, handlers and processors, consumer representatives, retailers, environmental specialists and natural resource conservationists, a certifying agent representative, and a scientist.

In 2011, the NOSB completed a series of recommendations stating that USDA should expand and clarify existing animal welfare provisions in the organic livestock and poultry standards. The NOSB urged the USDA to complete

rulemaking that better aligns organic livestock and poultry standards with consumer expectations, especially regarding outdoor access for poultry.

The final rule draws upon the NOSB's recommendations, which were based on years of robust public comment, and is also consistent with feedback from many stakeholders.

Additionally, in 2010, a report from the USDA Office of the Inspector General found inconsistent application of outdoor access requirements and recommended that USDA issue guidance to clarify the requirements regarding outdoor access for poultry.

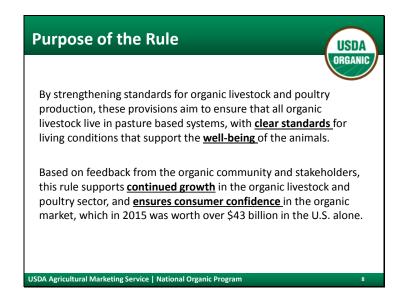
The USDA has also received significant stakeholder input, through public comments to the NOSB and the proposed rule. This feedback indicates that most organic stakeholders strongly support rulemaking to better align organic livestock and poultry practices with consumer expectations, organic principles, and the practices of the majority of current organic livestock and poultry producers.



To provide additional context, we illustrate here one of the primary reasons for developing this final rule. These photos show two certified organic poultry operations and the means by which they provide outdoor access for their organic birds.

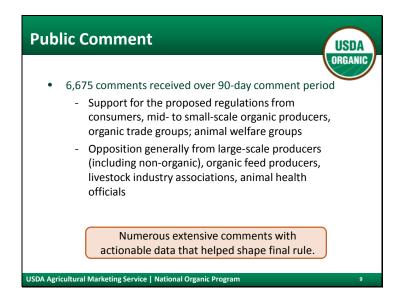
The top photo shows a house that uses an enclosed "porch" to provide birds with access to the outdoors. The lower photo shows an operation that provides birds with access to an unenclosed outdoor space that includes vegetation, direct sunlight, and more space per bird than the porch above.

Recommendations from the National Organic Standards Board stated that the "enclosed porch" is not sufficient to provide outdoor access. The NOSB and numerous public comments supported outdoor areas that included vegetated soil and not allow porch systems to be considered outside or eligible for organic certification.



Again, the final rule was written with two primary goals -

- To ensure that organic farms and businesses are consistently applying organic regulations for livestock and poultry operations; and
- To assure consumers that organically produced products meet a consistent standard, which will support consumer confidence in organically-labeled products and continued market growth.



AMS received about 67 hundred written comments in response to the proposed rule. We also received petitions from animal welfare groups during the comment period signed by over 100,000 people.

We received comments from a wide range of individuals and organizations, including producers, producer associations, handlers, certifying agents, consumers and consumer groups, animal welfare organizations, veterinarians, state government agencies, foreign government agencies, trade associations, and more.

We want to thank everyone that provided comments that helped shape the final rule. The comments provided detailed information and suggestions that we've incorporated into the final rule. Thank you.

Additionally, we worked with other agencies across the federal government, as we prepared the final rule...[on next slide]



## Those included:

The USDA Food Safety and Inspection Service for the transport and slaughter requirements,

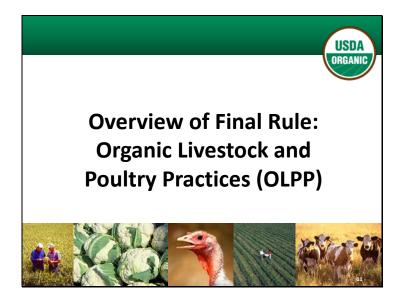
The USDA Natural Resources Conservation Service on outdoor space requirements and soil and water quality,

The USDA Animal Plant Health Inspection Service on provisions related to health care practices and biosecurity,

The Health and Human Service's Food and Drug Administration on food safety and biosecurity, and

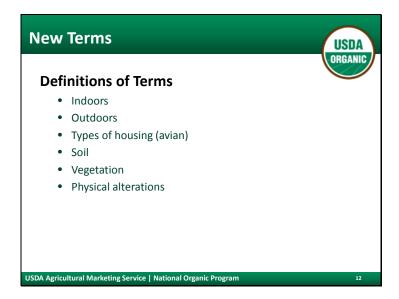
The U.S. Environmental Protection Agency on issues related to soil and water quality.

This collaboration assisted us in developing a final rule that allows us to fulfill our purpose while also acknowledging other important considerations.



So, in the next series of slides, I will be summarizing the final rule, including some of the changes that were made in response to public comments. I urge you to read the rule if you are interested in a more thorough description of public comments and our response to those comments.

This will be followed an opportunity for you to ask questions about the rule as described previously.

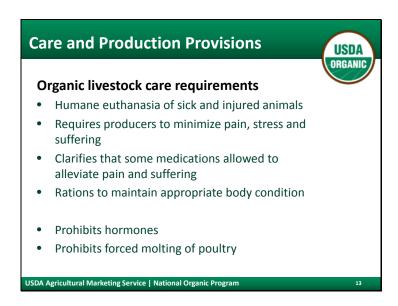


This final rule defines sixteen new terms that are used in the organic regulations. These definitions are important, since they provide clarity for certification and enforcement.

Two important terms we have defined are "indoors" and "outdoors". We have defined the "outdoors" as any area outside of an enclosed building or enclosed housing structure, but including roofed areas that are not enclosed. The rule defines the "indoors" as the space inside of an enclosed building or housing structure that has a solid, slatted, or perforated floor.

We have defined four types of avian housing under the definition of indoors, and we have clarified that pasture pens where birds are in direct contact with the soil are not indoors. These housing types are defined because each housing type has a differing space requirement.

Some other key terms we have defined include "soil", "vegetation", and various types of physical alterations.



The rule includes new requirements related to medical treatments, animal healthcare, and euthanasia.

To minimize the suffering of sick and injured animals, the rule requires humane euthanasia of sick and injured animals. It also prohibits some forms of euthanasia. For example, animals may not be euthanized by suffocation or by "manual blows" to the head. We have also referenced methods of euthanasia that are recommended by the American Veterinary Medical Association. I'll cover slaughter requirements, which are different than euthanasia requirements, later in the presentation.

The rule also requires that surgical procedures be done in a way that minimizes pain, stress and suffering. This includes the use of some medications, whereas, in the previous regulations, medications were only allowed to treat illness.

We are also requiring that animals be provided with a ration that will result in an appropriate body condition. We did receive some comments that it was unclear what was meant by the term "appropriate body condition". While we recognize that the requirement is general, we have kept the requirement to ensure that

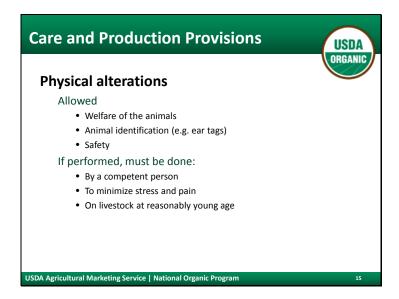
certifiers have the tools they need to enforce the standards and protect animal wellbeing. We plan to publish further guidance on how organic livestock producers and certifying agents can assess body condition in the near future.

The rule also clarifies that hormones are not allowed in organic production, for any reason, and that forced molting of poultry is not permitted.



This section of the rule also requires documentation of medical treatments in the producer's animal health records. Producers must also document and monitor the incidence of lameness in their animals, and the rule requires that producers develop parasite control plans to minimize internal parasites.

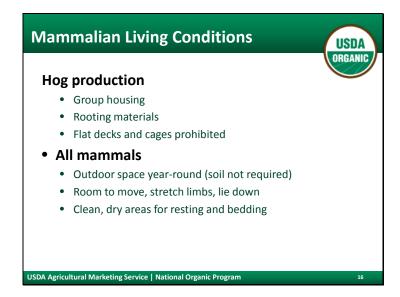
These requirements will help certifiers verify compliance with the requirements and help all parties to better monitor and address issues related to animal health and wellbeing before they become widespread.



The rule also prohibits certain physical alterations while restricting other types of physical alterations. Prohibited physical alterations include de-beaking of birds, docking of cows' tails, de-snooding, dubbing, and face branding of cattle, and mulesing of sheep.

Two types of physical alterations may only be used non-routinely and with documentation that alternatives failed. These are needle teeth clipping in pigs and tail docking in pigs. Additionally, beaks may not be clipped after 10 days of age, sheep tails may only be docked to the distal end of the caudal fold, and turkey toe trimming must be done with infra-red at the hatchery.

Any allowed physical alterations must be performed by a competent person and in a manner to minimize animal pain and stress. Like surgical procedures, the rule clarifies that allowed pain control medications may be used for these procedures.



Moving into the requirements for animal living conditions, I'll first cover mammalian animals and then move on to requirements for avian, or poultry, species.

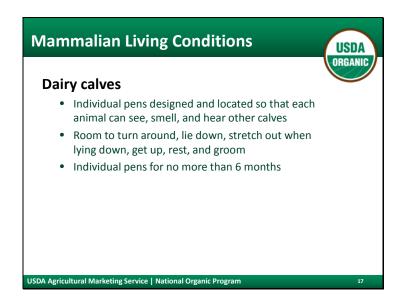
## The rule:

- prohibits keeping piglets in cages or on piglet flat decks,
- requires group housing for pigs, and
- requires that pigs be provided with rooting materials.

Additionally, the rule includes new requirements for all organic mammals, including:

- Over a 24-hour period, animals must have sufficient space and freedom to lie down, turn around, stand up, fully stretch their limbs, and express normal patterns of behavior; and
- Areas for bedding and resting must be sufficiently large, solidly built, and comfortable so that animals are kept clean and dry.

In the proposed rule, we required enough space for animals to lie down in "full lateral recumbence," as recommended by the NOSB. We received numerous comments from organic producers and organizations that this would prohibit common styles of dairy housing, including free stall barns. To respond to these concerns, we have removed the requirement. The final rule requires that housing provide sufficient space for animals to lie down, but does not require "full lateral recumbence"



The rule also includes some specific requirements for organic dairy calves.

Dairy calves are typically raised in individual pens, but the rule limits the amount of time that calves can be kept in these pens. It also places certain requirements on the size of the pens and requires that they be located so that calves are near other calves.



We received a lot of comments on the proposed requirement for soil in outdoor spaces for dairy and swine operations. Commenters were concerned that during certain times of the year, it would be impossible to maintain vegetation in outdoor spaces. We have maintained in the final rule a requirement for 50 percent soil in outdoor spaces for avian species, but we have not kept this soil requirement for other species in the final rule.

The final rule requires that any producer that has soil in outdoor areas maintain the maximum amount of vegetation on the soil, as appropriate for the season, climate, geography, and species of livestock. All producers must provide year-round access to the outdoors, even if the area does not include soil, and producers must protect soil and water quality. For ruminants, such as cows, sheep, and goats, producers must provide pasture during the grazing season to meet previously established requirements.



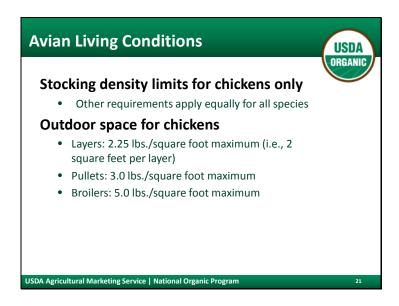
Continuing now with the requirements for avian species, the final rule requires that organic birds be provided with year-round access to the outdoors, except under certain circumstances that I'll cover in more detail later.

Outdoor access must be provided when temperatures are between 40-90 degrees Fahrenheit. Outdoor space must be at least 50% soil covered with maximum vegetation suited to the time of year and climate. The vegetation must be maintained in a manner that does not provide harborage for rodents or other pests.



The proposed rule included a requirement that all birds be able to exit the house in one hour.

In the final rule, we have removed that requirement. However, we have maintained the requirements that there are a sufficient number of exit doors, that birds have ready access to the outdoors, and that doors be appropriately distributed to allow for ready access to the outdoors.. Certifiers will need to ensure that doors are sufficient and that doors are distributed in a manner to meet the requirement of ready access to the outdoors.



Specific space requirements are established in the final rule for chickens, including layers, pullets, and broilers.

We have not established specific requirements for other species, such as turkeys, ducks, geese, or game birds. We received numerous comments about the proposed space requirements for turkeys, and, in the absence of final recommendation from the NOSB for turkeys, we have elected to address space requirements for these birds in future rulemaking, once we have received additional recommendations from the NOSB.

Producers of organic turkey and other species are still subject to all other requirements of the final rule, including access to the outdoors.

Outdoor space requirements for chickens are a maximum stocking density of 2.25 lbs. of layer per square foot. This is equivalent to 2 square feet per ISA Brown chicken, commonly used in organic egg production, assuming a typical weight. We retained the space requirements as pounds of bird per square foot to provide consistency across breeds and ages of flocks. Pullets are defined as chickens raised as layers that have not started to lay eggs. Outdoor space must be provided to not

exceed 3 lbs. of pullet per square foot. For broilers, outdoor space must be provided to not exceed 5 lbs. of bird per square foot.



I also want to cover a couple of other changes that we made in response to comments. The proposed rule did not allow for any space to be considered outdoors if it had a roof that was connected to the house. In the final rule, we have removed this specification. Any area that is not enclosed, meaning any area that is open to the rest of the outdoor space, can be counted as outdoors. For example, this could include modified porches that allow birds to move freely into the other outdoor areas; areas under shade structures connected to the main housing structure; and areas under building eaves.

Enclosed porches are not considered outdoors. Other spaces that are covered and that do not allow birds to move freely into other areas of the outdoor space cannot be counted as outdoor space.



As recommended by the NOSB and many commenters, the final rule includes the requirement for vegetation in outdoor areas.

Many commenters stated that the proposed requirement that outdoor access areas have at least 50 percent soil contradicted the current requirement for organic producers to maintain soil and water quality. So, we have required vegetation in outdoor areas to avoid circumstances in which birds on bare soil could compromise soil health or water quality. We worked closely with the Natural Resources Conservation Service to ensure alignment between the final rule and NRCS best practices, and we worked with the EPA to ensure that the requirements would protect soil and water quality.

Also, since FDA regulations require practices to prevent salmonella, we have included a requirement that vegetation be managed to not provide harborage for rodents or other pests, which could compromise food safety goals.



Some other requirement include restrictions on the use of artificial light, limits to the amount of ammonia in the air indoors, and requirements for perching space for laying chickens indoors.

Natural light must be sufficient in poultry houses, so that a person can read and write on sunny days without any artificial lights. Artificial lights may not be used for more than 16 hours per day. We did not require minimum hours of darkness to accommodate for organic poultry operations in northern latitudes that may have limited hours of darkness during the summer months.

Ammonia levels must be monitored and kept below 10 parts per million. If levels exceed 10 ppm, the producer must implement additional practices to reduce ammonia levels. In the final rule, we have also included a requirement for additional monitoring of ammonia levels, if they are found to be above 10 parts per million. The requirements do not permit levels higher than 25 parts per million in poultry houses.

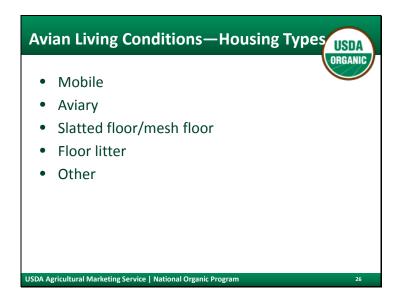


Birds must be able to move freely, stretch their wings, stand normally, and engage in natural behaviors.

Perch space is required for perching species at the rate of six inches per bird. The perch requirement has been finalized only for chicken layers, rather than for all birds, as proposed.

The rule also requires that birds have access to areas in the house for scratching and dust bathing, and establishes a minimum amount of solid floor area to allow for scratching and dust bathing.

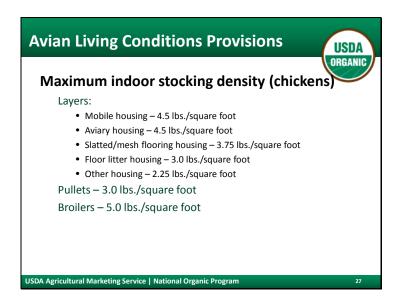
Slatted floors are permitted, but at least 30% must be solid floor area.



The final rule requires different amounts of indoor space, depending on the housing type. These housing types are described in the definitions section of the final rule.

Mobile housing is housing that is moved regularly during the grazing season and has a solid or perforated floor. We have differentiated this type of housing from pasture pens in the final rule, which are floorless pens that provide animals with direct access to soil and vegetation. Pasture pens are considered part of outdoor areas, mobile housing is considered indoor space.

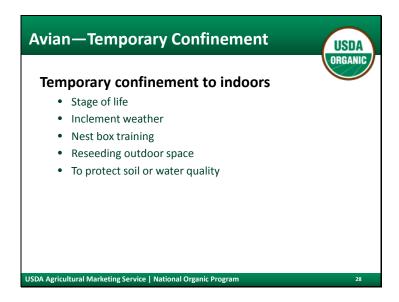
Indoor space requirements are established for four other types of housing: aviaries, slatted or mesh floored housing, floor litter housing, and other types of housing that do not fit into one of these categories.



Indoor stocking density for layers is variable depending upon the housing type.

The rule requires indoor space ranging from the equivalent of one square foot per laying chicken to two square feet per laying chicken, depending on housing type, assuming that each bird weighs 4 and a half pounds. AMS chose this option as it aligns with standard organic industry practice, animal welfare standards, reduces costs of the final rule, and is consistent with comments received on the proposed rule.

Similar to the outdoor stocking density requirements, we have only established indoor stocking density requirements for chickens. We intend to address space requirements for other types of birds in future rulemaking, once we have received additional recommendations from the NOSB.



While the rule requires outdoor space for birds, it includes some allowances for temporarily confining birds to the indoors. The final rule also includes some limits around these allowances. For example, it permits a maximum of 4 weeks for broilers to develop feathers before being provided with access to the outdoors; and establishes a temperature range of 40 degrees to 90 degrees when birds must be provided access to the outdoors. The rule continues to allow, as under the current regulations, for temporary confinement when soil or water quality would be put at risk by putting animals outdoors.

The rule permits a maximum of five weeks for nest box training, which was an increase from two weeks permitted in the proposed rule. Another change in the final rule is that we have included an allowance to temporarily confine birds to reseed outdoor areas. This allowance is important, as it will permit producers to meet the requirement for vegetation in outdoor spaces.

I would also like to note that there are similar provisions for the temporary confinement of non-avian organic animals, but those requirements remain largely unchanged from the current rule.



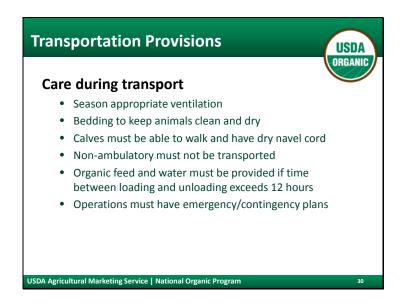
I also want to highlight temporary confinement in relation to biosecurity. This rule allows producers to temporarily confine livestock and poultry to protect their health, safety, or well-being. This flexibility allows producers to address concerns related to the spread of contagious diseases to such animals, such as highly pathogenic avian influenza. Based on public comments, the provision for documented occurrence of disease in a local area was removed.

While we have removed this requirement to allow for additional flexibility to protect flock health, producers must still be able to justify temporary confinement. This includes working with their certifier and state veterinarians.

The final rule does not require that producers provide "enrichments" in outdoor areas, and addresses concerns that this requirement would have attracted wild animals and rodents and compromised food safety and biosecurity goals.

The Food and Drug Administration provides draft guidance for egg producers that provide outdoor areas for their birds. The draft guidance provides best practices for producers to provide outdoor space in a manner that protects birds from

Salmonella and other diseases. AMS worked closely with FDA to ensure the final rule does not conflict with the FDA Egg Safety Rule.



The final rule also adds humane handling requirements for transporting livestock and poultry to sale or slaughter.

Included are protections for calves, non-ambulatory animals, and poultry.

Calves must have a dry navel cord and be able to stand and walk without human assistance to be transported off an organic operation. Any animal that would be classified as "non-ambulatory" cannot be transported. These animals must either be treated or euthanized.

For animals, except poultry, bedding must be provided to keep them clean, dry and comfortable during transport.

Finally, the rule requires contingency plans in case of emergencies during transport, and animals must be provided with feed and water if the transport time exceeds 12 hours.



Finally, the rule clarifies humane slaughter requirements for organic livestock. As other federal regulations address humane handling and slaughter, this rule clarifies that organic producers must comply with those regulations.

Additionally, the rule requires that if an organic producer is found to be in noncompliance with those other requirements, the producer must provide those records to their organic certifier, and demonstrate that they have taken actions to address the issues.



For smaller organic producers that are not regulated under the Poultry Products Inspection Act, this rule includes requirements to ensure that poultry are slaughtered in a humane manner that considers animal care at the time of their slaughter.

The rule does not permit birds to be hung, carried, or shackled by their legs if they are lame. It also requires that any bird be insensible before it is placed in the scalding tank. Scalding tanks are used to facilitate the de-feathering of birds after they are killed.

While the rule permits ritual slaughter, it requires that if birds are not slaughtered under religious protocols, that they be made unconscious before they are killed by bleeding. Small scale slaughter of birds by hand, where birds are not placed on automated system, is still permitted without a stunning step, which would have imposed an additional burden on small producers.



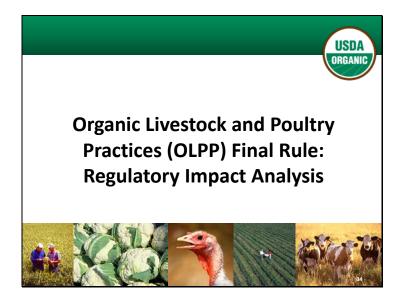
In regards to the implementation of the final rule - Within **one year** of the effective date of the final rule (March 20, 2018), all provisions, except for outdoor access requirements for layers and indoor space requirements for broilers, must be implemented.

Within **three years** of the effective date of the final rule (March 20, 2020), certified organic broiler operations must comply with *indoor* space requirements. This additional time will allow producers to build new facilities to maintain current production levels and to avoid reduced revenue from decreased production due to lower stocking densities.

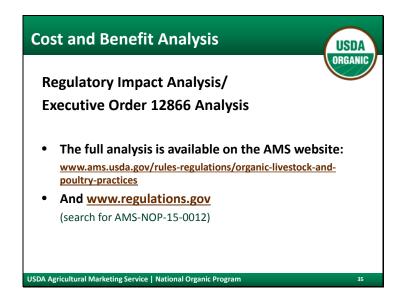
Egg laying operations which apply for organic certification three years or more after publication of the rule, must comply with all the requirements to obtain certification. The three year window between now and then provides time for operations to transition land to organic production that will be used as outdoor space for birds.

Within **five years** of publication of the final rule (March 21, 2022), all certified organic poultry operations must comply with the *outdoor* access requirements.

Prior to year five, producers may utilize porches and other soilless areas for outdoor access, and maintain current stocking densities outdoors; We expect that this period will allow many producers using porch systems to make the operational changes to comply with the requirements.

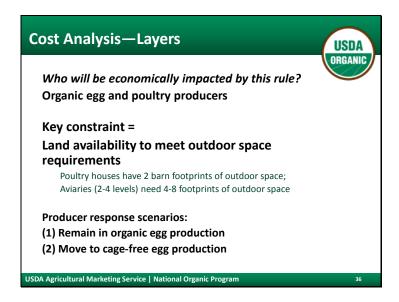


Now, I would like to talk about the costs and benefits of complying with the requirements of this rule which I just described.



This is known as the Regulatory Impact Analysis or Executive Order 12866 analysis – for this webinar, I will call this the cost/benefit analysis. In general, we measure and describe both the cost and benefit implications of this rule.

In the proposed rule, we specifically asked for comment on the accuracy of our estimates and assumptions. In this final rule, we address public comments and explain why we are or are not adjusting our assumptions, methods or estimates. The full analysis is published as a separate document which you can find on the AMS website at the link provided and on regulations.gov when you search for the number of this rule.

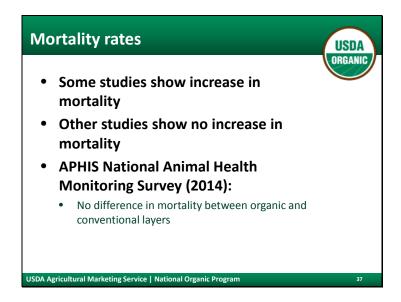


Let's start with the Costs – what is driving the costs of this rule? The outdoor access requirements for laying hens and the indoor access requirements for broiler chickens. We do not include cost estimates for mammalian livestock producers because they are already meeting the requirements in this rule. We estimate that they will have some recordkeeping costs that are captured in the Paperwork reduction Act and are estimated at \$3.9 million annually for organic livestock and poultry producers, as well as organic certifiers, and organic slaughter facilities. As explained above, we did make changes from the proposed to final rule in response to public comments to mitigate unintended costs for mammalian producers.

Since the outdoor space requirements are the main constraints for the organic egg operations, we projected how much land organic egg operations currently have available for outdoor space. Organic egg producers will need to provide more space per bird outdoors than indoors. Operations with aviary houses will need to provide twice as much space per bird outdoors than indoors because the difference in the maximum stocking density requirements for this housing type. Aviaries are multi-level houses and hold more birds than single-story houses.

Therefore, these operations need comparatively more land than a single-story house with the same building footprint.

Based on reviewing organic poultry operations Organic System Plans, we estimated that poultry houses have a 2:1 ratio of outdoor to indoor space. So generally, operations with single-story houses will have the land to meet the proposed outdoor stocking density. Aviaries, however, face a greater constraint to comply with this rule. For example, aviaries with 3 levels will need 6 house footprints of outdoor space. We estimate that they have land equivalent to 2 barn footprints and need to obtain additional land. Operations which need to obtain additional land will vary in terms of the constraints they face to obtaining that land. Given the numerous combinations of operation-specific decisions, we focused on two scenarios for how producers may respond: (1) Obtain sufficient land and comply with the outdoor space and remain in organic production; (2) Move to cage-free egg production. Now, let's discuss mortality rates and then we'll review how we calculated the estimated costs for each scenario.

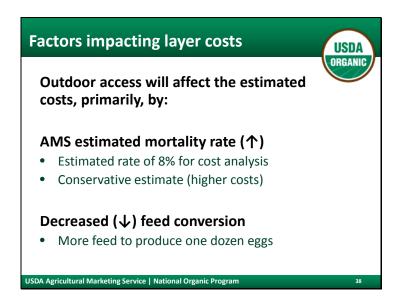


AMS is aware that mortality is an important measurement, and one of several indicators of animal welfare. In addition, AMS recognizes that mortality rate is affected by various factors, including outdoor access. There are few studies that examine whether access to outdoors results in increased mortality among poultry, and the findings of these studies vary tremendously, with some studies finding no correlation between access to outdoors and increased mortality and others noting a 10 to 20 percent increase in mortality. These studies often examine several performance indicators and were not designed to specifically study mortality rates.

AMS maintains that APHIS' published statistics on organic egg production for 2013 (APHIS, 2014) is the best resource to estimate how the requirements for outdoor access in this final rule would impact mortality rates because this captures mortality rates among commercial organic egg operations.

APHIS found that average mortality in U.S. organic layer flocks was 4.9 percent at 60 weeks and 6.8 percent over the useful life of the flock. It also found that on more than half of all farms, mortality at 60 weeks was below 4 percent, while only 11 percent of farms experienced mortality rates greater than 10 percent. This same survey reported that about 66 percent of organic production is raised on

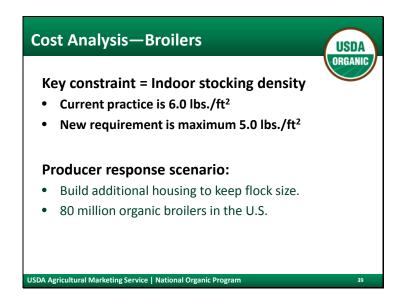
pasture or with uncovered outdoor access while 35 percent had porches or covered outdoor access; however, the survey does not report mortality rate based on type of outdoor access. Therefore, AMS is maintaining that the baseline mortality rate for organic layers is 5 percent; in the final rule, we are assuming that this rate represents organic operations generally and that there is no difference in mortality rates between organic and conventional layers.



Estimated costs for layers are primarily affected by mortality rates and feed conversion rates.

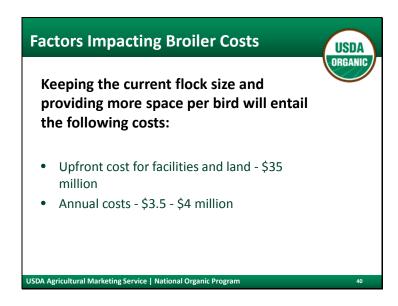
Though the APHIS NAHMS survey shows no difference in mortality rates between organic and conventional layers, we are retaining the projection that mortality will rise to 8 percent for calculating the cost estimates of the rule. The NAHMS data is the closest approximation for mortality rates in organic egg production systems - however we utilized a higher mortality rate to provide a conservative estimate of the cost of the final rule.

Another factor that will impact costs is the feed conversion rate. That is, how much feed is needed to produce one dozen eggs. We expect that birds expend more energy with increased outdoor access and need to consume more feed to produce eggs. Since feed is the major expense for organic egg producers, this rule would increase the costs to produce one dozen eggs.



This rule will require that organic broilers have more space per bird indoors than is the current industry practice. Based on public comments from organic broiler producers, we estimate that producers will build additional housing to keep their current production levels rather than reducing the number of birds to fit the existing housing. Using the current organic broiler population of 80 million birds, we calculated how much additional indoor space is needed to house the birds that would no longer fit into their current house under their current stocking densities. With this rule, the new indoor stocking density for broilers is 5.0 lbs/ft² compared to standard 6.0 lbs./ft current practice

Organic broiler producers supported the maximum indoor stocking density requirements but requested 3 years to build additional housing to comply with the indoor stocking density requirements for broilers which is provided for under the implementation schedule of the final rule.



If broiler producers keep their current number of birds, they will face one-time, up front costs to purchase land and construct housing.

We estimate that a broiler house which holds 20,000 birds costs \$300,000; this is the cost to construct housing for the birds which would not fit into the current housing because they will need more space per bird. We calculate that organic broiler producers would face costs of \$35 million to purchase land and construct new houses. These costs are spread over the 3 year implementation period. After the rule is fully implemented, four years after publication, we estimate increased annual costs of \$3.5 to \$4 million. This is for operating expenses – fewer birds in a house increases the costs per bird for things such as utilities.

stimated Impacts—Costs US				
Assumption	Affected population	Costs, millions <sup>a</sup>	Transfers, millions	Benefits, millions
Il producers remain n organic market; organic layer and roiler populations ontinue historical rowth rates after rule.	Organic layer and organic broiler production at full implementation of rule, i.e., 2022 for layers; 2020 for broilers.	\$28.7 - \$31.0	N/A	\$16.3 - \$49.5
0% of organic layer roduction in year 6 2022), moves to the age-free market. Organic layer and roiler populations ontinue historical rowth rates after ule.	Organic layer and organic broiler production at full implementation of rule, i.e., 2022 for layers; 2020 for broilers.	\$11.7 - \$12.0	\$79.5 - \$86.3	\$4.5 - \$13.8
0% of organic layer production in year 6 2022),moves to the age-free market.	Current organic layer production; organic broiler production at full implementation of rule in 2020.	\$8.2	\$45.6 - \$49.5	\$4.1 - \$12.4
2022),moves to the age-free market.	broiler production at full implementation of rule in 2020.			

As previous slides show, AMS made assumptions about how organic egg and broiler producers would respond to this rule. We have three scenarios for both the costs and benefits. This table shows the estimated impacts for each scenario.

First, let's look at the estimated costs and transfer impacts.

Basically, the amount of the impact is affected by (1) the size of affected population, e.g., increased organic egg production increases overall costs, and (2) whether a producer will stay in organic production or move to cage-free egg production. We measured the potential impacts by changing those factors to get a range of estimates.

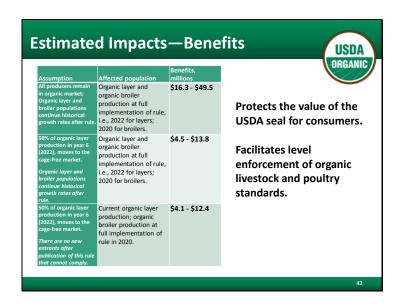
I will briefly cover each scenario:

 If we assume that all current organic egg and broiler producers remain in the organic market; and that each market continues to grow at past rates until the rule is fully implemented we expect the costs will be \$29 to \$31 million. This covers the compliance costs for current producers and any new entrants to the organic egg market during the implementation period.

- If we assume that the organic egg market continues to grow at historic growth rates through the implementation period, and then 50% of the market moves to cage-free chiefly because they may not have enough land for outdoor access, then the cost will be about \$12 million for producers who remain in the organic market. For producers who move to the cage-free market, there is a transfer impact of about \$80 to \$86 million per year. This is the difference in profit between organic and cage-free egg production. AMS believe this scenario significantly overestimates costs because producers will not continue to enter the market if they know they cannot comply with the new requirements. Therefore, it inflates the size of the affected population.
- For the third estimate, we assumed that organic producers who could not comply with this rule would not enter into organic production after this rule is published. We also expect that producers who are currently certified, but cannot comply will remain in the organic market and maximize profits until they must fully comply, at which time (year 6), they will move to the cage-free market. So, assuming that 50 percent of current egg production will not have sufficient land and moves to cage-free production, transfer impacts could approach \$50 million. We estimate costs of about \$8 million for producers that stay in the organic market.

Finally, we have separated out the potential cost for the paperwork burden. This covers the cost to meet the documenting and recordkeeping requirements related to this rule. For example, this rule will require that producers keep records on the percent of the herd or flock suffering from lameness; identify and record treatment of sick and injured animals, a plan to minimize internal parasites; a plan for prompt, humane euthanasia. We estimate the cost at \$3.9 million per year.

Just a few notes about how the costs were calculated. We looked at costs over a 15-year period, which is the time it takes to fully depreciate a broiler house (layer houses depreciate over 13 years). The estimated compliance costs recur each year after the rule is fully implemented. So for broilers, the same costs recur throughout years 4-15. And for layers, the same costs recur throughout years 6-15. The values presented in the previous slide are discounted and annualized to show the current value of how the total costs would be spread evenly over a 15 year period.



Now let's look at the corresponding benefits. First, there are benefits for which we did not assign a dollar value: protecting the value of the USDA seal for consumers and facilitating level enforcement of organic livestock and poultry standards. These are hugely important for the entire organic sector. Clear standards will bring more uniformity to practices on organic farms, improve the information in the marketplace about the meaning of the organic label and keep consumer confidence and demand for organic products.

We did estimate benefits based upon how consumers value outdoor access. Using research that consumers are willing to pay \$0.21 to \$0.49 for outdoor access, we calculated the value of the premium for the production that would newly have outdoor access as a result of this rule. This ranges broadly across the scenarios we considered because it is tied to the overall production quantity. So as the production quantity increases, the benefits increase. Like costs, the benefits accrue once the rule is fully implemented in years 6 through 15.

# Deportunities and Cost Savings Eliminates need for dual certification, costs of animal welfare certification in addition to organic certification Provides opportunities for organic egg producers to expand operations and new, pasture-based, operations to enter the organic market Provides fair competition with consistent standards for organic poultry production | STATE | Provided | National Organic Program | Progr

Providing clear regulations will have positive impacts. AMS believes increased market stability and a level playing field will encourage new entrants that were hesitant before. Public comments raised concern that increased costs incurred by this rule will dissuade new entrants. We note that the majority of organic producers already comply with the stocking densities of this rule, and thus are already bearing the costs that any new entrant would face once the rule is put into effect. Existing pasture-based operations indicated in public comments that under a level playing field, they plan to expand.

### **Summary**



- Ensures uniform application of practice standards and a level playing field.
- Strengthens consumer confidence in the organic standards for livestock and poultry, sustaining demand and protecting the value of the organic seal.
- Creates economic benefits for organic producers.
- Ensures that all organic animals live in pasture-based systems utilizing production practices that support their well-being and natural behavior.
- Clarifies options available to organic producers to help them achieve critical food safety, animal care, and biosecurity goals.

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In closing, the USDA is committed to supporting the continued growth of the organic livestock and poultry sector, and ensuring consumer confidence in the organic market, which in 2015 was worth over \$43 billion in the U.S. alone. A large part of the work we do is creating clear and enforceable standards that protect the organic integrity of products from farm to table. Based on feedback from the organic community, consumers, stakeholders, and independent experts, this rule strengthens consumer confidence in the organic standards for livestock and poultry, creates economic benefits for organic producers, and ensures that all organic animals live in pasture-based systems utilizing production practices that support their well-being and natural behavior. Developed in close consultation with sister agencies, the rule also clarifies options available to organic producers to help them achieve critical food safety and biosecurity goals.



# **Questions and Resources**



## **AMS Webpage**

- Links to final rule
- Fact Sheets and biosecurity information

## **USDA Service Centers**

- Conservation assistance
- Financial assistance
- offices.usda.gov

## **USDA Organic Website**

www.usda.gov/organic (links across USDA)

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