

## Challenges to keep hens healthy in cage-free housing systems.

### Problem

Cage-free housing systems expose hens to several health risks that are associated with their increased contact with manure and in case of free-range access, also to the outdoor environment. Parasites, like worms and coccidiosis, need specific attention. In several cases, additional vaccinations against for example Erysipelas may be considered.

### Solution

In three Practices Abstracts on *Challenges to keep hens healthy in cage-free housing systems: endoparasites*, *Prerequisites for vaccinating pullets in cage-free systems: coccidiosis* and *Prerequisites for vaccinating pullets in cage-free systems: post-vaccination reactions*, the focus will be on the following topics: coccidiosis control in pullets including vaccination, worms in hens (mainly) and post-vaccination reactions in pullets.

### Benefits

In general, healthy hens produce better. Therefore, disease prevention is better than treatment. This naturally accounts for vaccinations since their primary goal is to prevent clinical symptoms of the disease. However, vaccines can also cause adverse post-vaccination reactions that may harm. For minimizing them, see *Practice Abstract on Prerequisites for vaccinating pullets in cage-free systems: post-vaccination reactions*. Applying a coccidiosis vaccine in a best practice way enables hens to reach full immunity during the rearing phase (see *Practice Abstract on Prerequisites for vaccinating pullets in cage-free systems: coccidiosis*). Other parasites, like worms, need a different approach. Since there are no vaccines available, the focus should be on proper cleaning and preventative monitoring (see *Practice Abstract on Challenges to keep hens healthy in cage-free housing systems: endoparasites*).

### APPLICABILITY BOX

#### Theme

Animal husbandry, Farm management

#### Keywords

Prevention, monitoring, Animal health; Animal welfare

#### Context

Transition to and operating cage-free housing system for pullets and laying hens

#### Best in

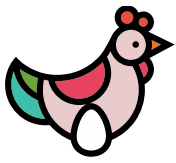
All cage-free housing systems: barn, free-range and organic production

#### Target audience

Farmers, farm advisors



**Figure 1. 2-week-old chick on chick paper. The paper clearly starts to disintegrate after 2 weeks (Source: Fair Poultry).**



## On-farm application

- See Practices Abstracts on *Challenges to keep hens healthy in cage-free housing systems: endoparasites*, *Prerequisites for vaccinating pullets in cage-free systems: coccidiosis* and *Prerequisites for vaccinating pullets in cage-free systems: post-vaccination reactions*.

## Further information

### Practice Abstracts

Practice Abstract on Challenges to keep hens healthy in cage-free housing systems: endoparasites:  
<https://bestpracticehens.eu/wp-content/uploads/2022/08/5-PA-Pullets-Health-endoparasites-2.pdf>

Practice Abstract on Prerequisites for vaccinating pullets in cage-free systems: coccidiosis:  
<https://bestpracticehens.eu/wp-content/uploads/2022/08/5-PA-Pullets-Health-coccidiosis-3.pdf>

Practice Abstract on Prerequisites for vaccinating pullets in cage-free systems: post-vaccination reactions:  
<https://bestpracticehens.eu/wp-content/uploads/2022/08/5-PA-Pullets-Health-vaccination.pdf>

## About this practice abstract and Best Practice Hens

### Publishers:

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**Best Practice Hens:** To support egg production in non-cage systems and improve animal welfare, a consortium consisting of 7 partners will develop Best Practices for Non-cage Egg Production Systems as a European Commission, DG SANTE pilot project. These Best Practices will provide practical support to egg producers to encourage them to convert from cage to non-cage systems, including organic production.

**Project website:** [www.bestpracticehens.eu/](http://www.bestpracticehens.eu/)

**Social media:** Facebook and LinkedIn (@bestpracticehens) & Twitter (@BestHens)

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