



FOOTBATHS

HELPING OR HINDERING BIOSECURITY EFFORTS?



FOOTBATHS ARE NEVER AN ADEQUATE REPLACEMENT TO BOOT CHANGES WHEN MOVING FROM THE CONTROLLED ACCESS ZONE (CAZ) TO THE RESTRICTED AREA (RA).

The OFFSP requirement states that:

- » Farm workers and all people entering the RA, after the barn has been cleaned and/or disinfected and during the grow-out period up to the point the entire flock is shipped from the barn, must take precautions not to carry pathogens from outside the barn into the barn by way of their boots. This can be accomplished by having a dedicated pair of boots at each barn or by another acceptable means (e.g. plastic/disposable boots). This footwear change is to occur at the barrier between the CAZ and the RA. A footbath is not an acceptable method of decreasing the risk of contamination.

Having dedicated RA boots is the only way to ensure that boots from the CAZ environment don't bring bacteria or viruses into the RA and in contact with your flock.

WHAT'S THE PROBLEM WITH FOOTBATHS?

Footbaths are sometimes used to sanitize boots before entering the barn anteroom in an effort to reduce the viral and/or bacterial load on footwear.

However, because footbaths are difficult to maintain and use correctly, they may actually act as a reservoir for pathogens.

If footbaths are in use on your farm, it's important to follow the specific product recommendations for the proper mixing

guidelines, contact times, and footbath solution changes.

Footbaths are hard to maintain and use effectively due to the products' specific recommendations.

These include:

- » Scrubbing your boots so they are free of organic material **before** stepping into the footbath.

- Studies have demonstrated that using a footbath without removing organic material from boots is ineffective at disinfection^{1,2}.
 - » Mixing the disinfectant concentration correctly, and then maintaining that concentration level over time as the footbath is used.
 - Follow label instructions to ensure the disinfectant concentration is correct.
 - » Standing in the footbath solution for long enough to ensure the contact time is adequate for proper disinfection.
 - The required contact time with some products can be up to 5 minutes or more².
 - » Changing the footbath solution regularly and when dirt or organic matter is present, based on label recommendations.
- Wet footbaths should be changed daily, or more often if it collects dirt or manure³.
 - If boots are scrubbed while standing in the footbath, the disinfectant should be changed after each use².

Although going through the motions of using a footbath may increase awareness of biosecurity among farm personnel, extreme caution should be taken not to overestimate its effectiveness - there's a good chance the footbath isn't doing the job of protecting that you think it is.

Due to the need for scrubbing and prolonged contact times, footbaths are commonly used incorrectly and should never replace a full boot change prior to entering the Restricted Area.



References

1. S. Amass et al., 2001. Evaluation of the efficacy of peroxygen compound, Virkon, as a boot bath disinfectant. Journal of Swine Health and Production. **Available online.**
2. S. Amass et al., 2000. Evaluating the efficacy of boot baths in biosecurity protocols. Journal of Swine Health and Production. **Available online.**
3. USDA and Centre for Food Security and Public Health, Iowa State University. 2019. Information manual for implementing poultry biosecurity. **Available online.**