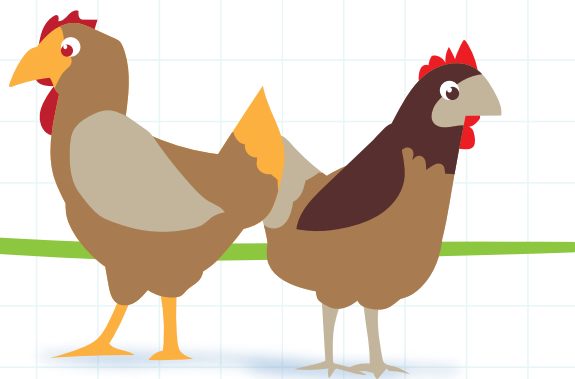


# PRODUCE SAFETY and Livestock on Your Farm



**Livestock are an integral part of many farms.** However, all animals—including domesticated animals (e.g. livestock and working animals) that you keep on your farm—can affect the safety of your produce because they can carry and spread human pathogens. The Produce Safety Rule (PSR) requires that you monitor your crop during the growing season and prior to harvest to assess whether contamination has occurred.<sup>1</sup> If you find significant evidence of contamination, the PSR requires that you identify—and not harvest—produce that is likely to be contaminated.<sup>2</sup>

Planning ahead and employing strategies to avoid contamination caused by domesticated animals during the growing season can help ensure safe produce.

## Reducing Risks with Livestock

- Separate livestock areas from produce fields and use fencing, gates and dedicated pathways to limit animal access to produce fields
- Regularly inspect fences and keep logs of inspections and any needed repairs
- Consider the topography of produce fields and packing areas in relation to pastures and areas where animals live to determine whether runoff of animal waste is a concern
- Observe wind patterns to determine whether contamination from animal areas or compost could blow onto produce areas on your farm
- If topography and/or wind patterns present a contamination risk, consider shifting locations or employ a mitigation strategy
  - Install berms high enough or ditches deep enough to prevent liquid runoff
  - Plant vegetative buffers (such as fast-growing trees) to serve as particulate barriers

## Reducing Risks of Rotational Grazing

- If you move livestock into produce fields to graze cover crops or crop residues, till produce fields after grazing to incorporate the raw manure, which may contain pathogens
- Consider handling rotational grazing like application of an untreated Biological Soil Amendment of Animal Origin (BSAAO) and apply a time interval between grazing and harvest. Current best practice for BSAAO application is to follow the National Organic Program:
  - 120 days (if the edible portion of your crop will grow within 1 foot of the ground)
  - 90 days (for all other food crops)
- If the time between grazing and harvest will be shorter than these intervals, take all measures reasonably necessary to identify – and not harvest – produce likely to be contaminated
  - Conduct a careful visual assessment of the growing area and all produce to be harvested
  - Take steps that will help avoid the harvest of contaminated produce, for example, place flags around the affected area

## Reducing Risks with Working Animals

- When possible, exclude working animals from the fields close to harvest and when the harvestable portion of your crop is growing
- If working animals will enter the fields during the growing season, establish written Standard Operating Procedures (SOPs) for how you will manage waste created by working animals in the field
- Consider using manure catcher bags on working animals or using drive rows – unplanted rows specifically for horse and wagons to take during harvest activities.
- Scout the field after use of working animals and promptly remove, bury and/or compost waste, and properly clean and sanitize equipment (bucket, shovels, gloves, etc.)
- If waste is left in fields:
  - Observe extended application intervals (above) or
  - Establish a no-harvest boundary around areas where waste is left (noting whether rain or irrigation spray caused contamination to spread)

## Reducing Risks with All Domesticated Animals

- Exclude or separate domesticated animals from areas in fully enclosed buildings where covered produce is handled and/or packed<sup>3</sup>
- Maintain a system for controlling animal excreta and litter and adequately control their excreta and litter. Examples of litter include feathers used for animal bedding<sup>4</sup>
- Train workers about the risk of cross-contamination from handling animals (or animal waste) – potential sources are hands, clothing, shoes and equipment
- Ensure that anyone in direct contact with animals (or animal waste) on your farm takes appropriate steps to minimize the likelihood of contaminating produce:
  - Require thorough handwashing with soap and water as soon as practical after handling animals
  - Have worker footwear that is dedicated to barn/animal area activities (such as cleaning stalls)
  - If your farm has a petting zoo or similar activity:
    - Encourage the flow of visitor traffic so that the petting zoo is the last stop, or in a way that aims to minimize contact with Pick-Your-Own products after touching animals;
    - Provide handwashing stations with soap, running water, paper towels and trash cans; and
    - Post signs reminding visitors and workers to wash their hands after touching the animals and before touching produce, for food safety reasons.



Questions? Contact the Maryland Department of Agriculture at 410-841-5769, [produce.safety@maryland.gov](mailto:produce.safety@maryland.gov)

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<sup>1</sup> 21 CFR § 112.83(b)(1)-(2)

<sup>2</sup> 21 CFR § 112.112

<sup>3</sup> 21 CFR § 112.127(a)(1)-(2)

<sup>4</sup> 21 CFR § 112.134(a)(1)-(2)