

## Generic *E. coli* Checklist

For regulatory requirements: 9 C.F.R. 310.25 or 381.94 – Note that poultry and swine slaughter establishments also have the option to test for an indicator organism other than generic *E.coli* if they choose (e.g. Salmonella, Aerobatic Plate Count).

Procedure Component	Description	Completed/Correct
1. Sample collection	The samples are being collected at the correct location at the establishment.	X
2. Location and technique	Samples are being taken from the correct locations on the carcasses.	
	Sampling technique used: Sponging method	
	Sampling technique used: Whole carcass rinse	
3. Frequency	The samples are being taken at the correct frequency.	
4. Random carcass selection	The establishment has a procedure for randomly selecting which carcass to sample.	
5. Lab accreditation	The laboratory running the samples is accredited.	
6. Records of test results	The results are available on a graph or table to show the most recent 13 test results.	
	The chart values are labeled using CFU/cm <sup>2</sup> (carcass swab) or CFU/mL (rinse fluid).	
	Records of test results are kept for at least 12 months.	
	The establishment is using statistical process control (carcass sponge) or m/M values to determine if a value is out of control. If not, they have defined what values will indicate the process is out of control in a written statement.	
7. The written Generic <i>E. coli</i> procedure must contain all of the following:	The species from which samples are being collected	
	The location in the slaughter process that samples are being collected	
	The method for taking samples, including the procedure used: <ul style="list-style-type: none"> <li>• Where on carcass samples are being taken</li> <li>• Who is taking the samples</li> <li>• The lab where the samples will be sent</li> </ul>	
	The frequency at which samples are taken	
	The procedure used to randomly select the carcass that will be sampled	

Inspector's Signature: X

Date:

**For Additional Information:** MDA Dairy and Meat Inspection Division

651-201-6300 • MDA.MeatPoultryEgg@state.mn.us • 625 Robert Street North, Saint Paul, MN 55155-2538

## Generic *E. coli* Checklist Quick Reference Sheet

1. **Predominant species:** Generic *E. coli* sample collection should be performed on the species that the plant slaughters in the greatest number. The following species (or categories) are eligible:
  - a. Cattle
  - b. Chickens
  - c. Ducks and guineas
  - d. Hide-on carcasses
  - e. Horses, mules, or other equines
  - f. Sheep and goats
  - g. Swine
  - h. Turkeys and geese
2. **Location and technique**
  - a. Location in the plant's process: This refers to the place in the plant where the sample is collected.
    - i. Livestock samples: Collected after the carcasses have been in the cooler for 12 hours (no maximum time limit). If carcasses are inaccessible in the cooler, samples can be collected before the carcasses enter the cooler.
    - ii. Poultry samples: Collected at the end of the chiller or drip line or at the last readily accessible point prior to packaging or cut-up.
  - b. Correct locations on the carcass:
    - i. Sponge method for cattle, sheep, goats, and equines: Flank, brisket, and rump
    - ii. Sponge method for cattle, sheep, goats, and equines/hide-on carcasses: Inside the flank, brisket, and rump
    - iii. Sponge method for swine: Belly, ham, and jowls
    - iv. Poultry: Whole bird rinse
3. **Frequency:** All plants must collect 1 sample per week of slaughter beginning after June 1 each year until they have collected at least 13 good samples or have shown that their process is in control.
4. **Random carcass selection:** Each plant must have a method for determining which carcass they will randomly sample. Examples of acceptable methods include, but are not limited to:
  - a. Drawing cards
  - b. Rolling dice
  - c. Computer-generated random numbers
5. **Laboratory accreditation:** The lab running the samples must be accredited. Most labs, if not all of the labs, the plants use are accredited. If they are running the samples in their plant, they are probably not accredited.
6. **Records of test results**
  - a. Graph or chart: The plant must keep a running log of the test results in a graph or chart that indicates whether the sample passed or failed.
  - b. Values in the graph or chart must be appropriately labeled.
    - i. Carcass sponge: CFU/cm<sup>2</sup>
    - ii. Poultry rinse: CFU/mL
  - c. Results of testing must be kept for at least 12 months
  - d. Determining if the process is in control:
    - i. The traditional m/M values can be used for chicken whole-bird rinses only
      1.  $m = 100 \text{ CFU/mL}$

2.  $M = 1000 \text{ CFU/mL}$
  - ii. For carcass sponges, the plant can use two methods to determine their limits for assessing whether the process is in control:
    1. Use statistical process control from historical data to determine what acceptable limits are.
    2. If statistical process control is not feasible from historical data, choose limits based on what data is available and provide a written explanation for why those limits were chosen. This is most likely the case if the plant has had very few positive results in the past. Statistical process control can be used; however, it may not be accurate due to small sampling number. The most likely result will be that any positive test will be outside the acceptable limits.
- 7. Written procedure:** A written procedure must be available for review. The procedure must contain the following information:
- a. The species from which samples are being collected
  - b. The location in the slaughter process that samples are being collected
  - c. The method for taking samples, including the procedure used
    - i. Where on carcass samples are being taken
    - ii. Who is taking the samples
    - iii. Random selection procedure
    - iv. The lab where the samples will be sent
  - d. The frequency at which samples are taken
  - e. The procedure used to randomly select the carcass that will be sampled