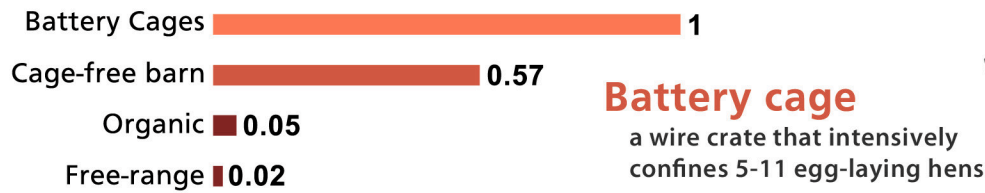


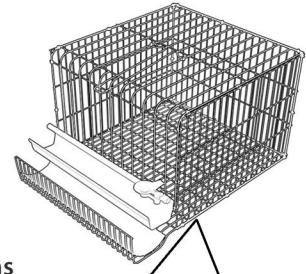
# Battery Cages Increase *Salmonella* Risk and Harm Chickens

## Odds Ratio of *Salmonella* Occurrence by Flock Production Type<sup>1</sup>

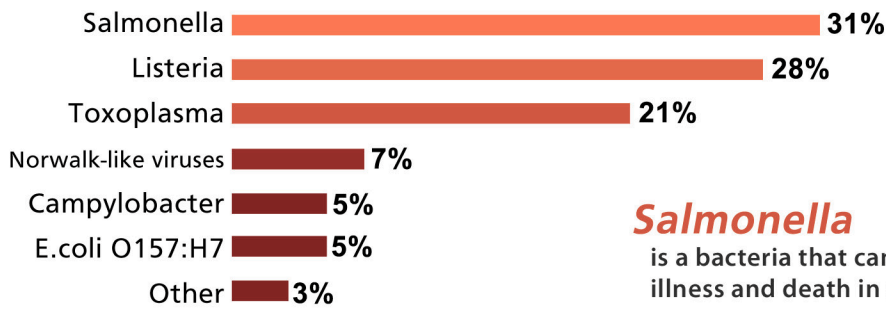


### Battery cage

a wire crate that intensively confines 5-11 egg-laying hens

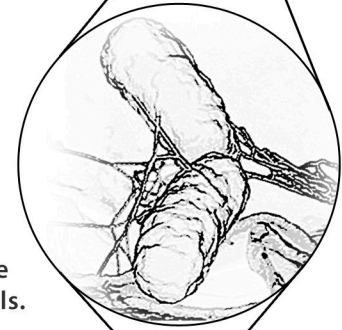


## Top Causes of Food Poisoning-Related Death<sup>2</sup>

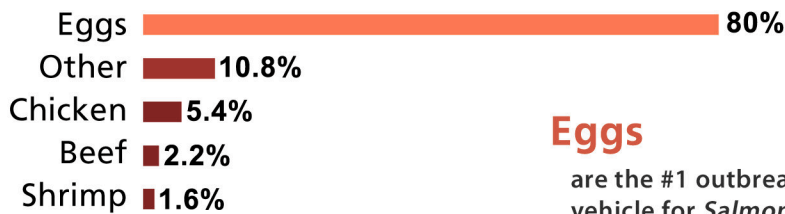


### Salmonella

is a bacteria that can cause illness and death in animals.

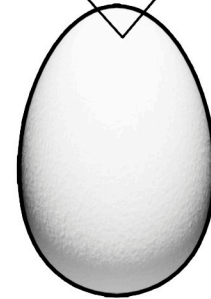


## Top Salmonella Outbreak Vehicles<sup>3</sup>



### Eggs

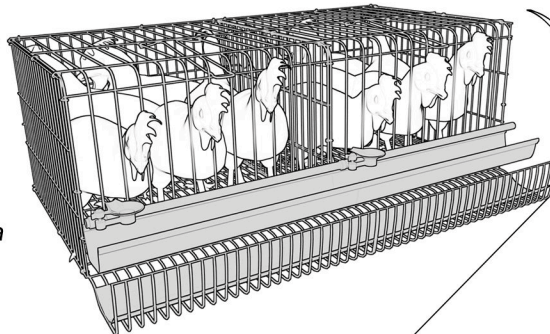
are the #1 outbreak vehicle for *Salmonella*



## Why Battery Cages Increase *Salmonella* Risk Factors<sup>4</sup>

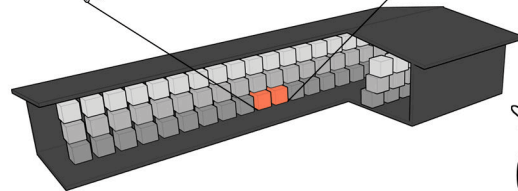
### Stress

Chickens in battery cages are under high stress, which inhibits their immune response. Stress hormones have been shown to boost the growth rate of *Salmonella* in chickens.



### Flock Size

One of the purposes of battery cages is large, high-density flocks. Flocks of over 100,000 birds are 4 times more likely to have *Salmonella*<sup>5</sup> and over 95% of all egg-laying flocks in the top 5 egg producing states are of 30,000 or greater.<sup>6</sup>

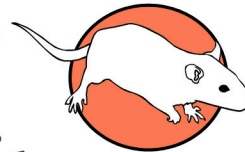


### Disinfection

Cage facilities confine hundreds of thousands of birds at high density within complex cage structures, which creates a large volume of fecal matter, and makes cleaning in and around the cages difficult.

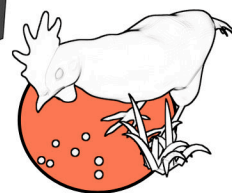
### Rodents and Flies

Rodents and flies carry and spread *Salmonella*, and are more prevalent on cage farms where they find ideal nesting and breeding grounds in the manure pits and can gain access to feed without interference from the caged birds.



### Isolation From Natural Bacteria

Free hens acquire natural gut bacteria that compete with *Salmonella*, and have been shown to recover more quickly from *Salmonella* infection.



# How Battery Cage Confinement Harms Chickens

## Denial of Natural Behaviors

Hens want to build private nests, roost at night, take dustbaths, and explore their surroundings. The prevention of these behaviors results in severe frustration.

## Denial of Movement

Battery cages restrict even basic movements like walking and extending limbs. United Egg Producers voluntary guidelines specify 67 square inches per hen, an area smaller than a single sheet of paper.

## Illness and Injury

Chickens in high-density flocks suffer respiratory disease and eye irritation from exposure to fecal dust, osteoporosis from lack of exercise, and foot disorders from standing on cage wire for their entire lives. Sometimes hens become trapped in the cage wire and die of dehydration.



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