



MERCY FOR
ANIMALS

Controlled Atmosphere Stunning (CAS) Benefits Animals, Workers, Consumers, and the Environment

What is “Controlled Atmosphere Stunning” (CAS)?¹

“Controlled atmosphere stunning (CAS)” is the process of rendering poultry unconscious through exposure to a mixture of gas (nitrogen and argon or concentrations of carbon dioxide) before slaughter.² This is very different from traditional stunning for poultry—shackling live birds upside down by their legs and forcing their heads into electrified baths to render them unconscious before slaughter. Traditional stunning increases the likelihood that birds miss the stunning mechanism and move through the slaughter line fully conscious and aware, whereas CAS systems ensure birds are unconscious before being shackled. CAS, an alternative method to live-shackle slaughter, is growing in popularity around the world. Allocating federal funding to CAS would benefit animals, slaughterhouse workers, consumer and food safety, and the environment.

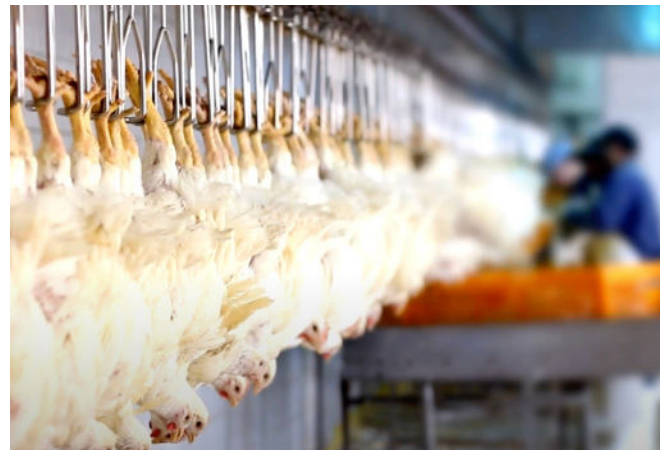
Animals Suffer Less With CAS & Consumers Prefer It

In recent years, consumers have been more conscious of the quality of their food, including the treatment of the animals they eat. Studies show that consumers are willing to pay more for products with a credible humane certification—a 2020 study found that consumers would be willing to switch brands or pay more to ensure birds were stunned using CAS.

¹ AVMA Guidelines for the Humane Slaughter of Animals: 2016 Edition, American Veterinary Medical Association (2016), <https://www.avma.org/sites/default/files/resources/Humane-Slaughter-Guidelines.pdf> (last visited Jan. 12, 2022) (The AVMA recognizes different “Atmospheric Methods” that include controlled atmosphere stunning (CAS), controlled atmosphere killing (CAK), and low atmospheric pressure stunning (LAPS). CAS is the most-researched Atmospheric Method, though Mercy For Animals supports CAK and LAPS, as well.)

² Complete citations are available upon request.

CAS promotes animal welfare, because overall, it causes less suffering. In live-shackle systems, live birds—who do not have diaphragms and cannot breathe properly upside down—are hung by their legs, resulting in intense stress. Stressed birds flap and fight, often missing stunning mechanisms and moving through the slaughter line fully conscious and aware. Frightened, panicked birds are difficult for workers to handle, leading to serious humane handling concerns including **bruising, broken bones, beatings, ripping bodies of birds from their shackled legs**, and other injuries to both the birds and workers.



When birds are rendered unconscious through CAS, they are not awake on the slaughter line, so they avoid cruel treatment and agonizing deaths at various points on the slaughter line. In CAS systems, birds are kept together, reducing stress related to isolation.

CAS Creates Better Work Environments for Slaughterhouse Workers

For worker safety, CAS is superior to traditional slaughter methods. In a CAS system, birds are stunned before being hung, which makes the job of catching and hanging considerably easier for plant

workers. Unconscious birds are not panicked, flapping, or putting off dust, creating a calmer and cleaner environment. In live-shackle plants, birds are alive and struggling during the shackling process, which can result in workers getting covered in blood, feces, and pathogens—this exposure is better contained in CAS systems.



Unlike in live-shackle plants, which require dim lighting to 'calm' birds, CAS systems allow for full lighting—because the birds are unconscious—resulting in fewer accidents and a more comfortable work environment. As one producer that uses CAS states online, “[t]he room is bright, clean and comfortable for our employees... it is more humane for both the chickens and for our employees, and it produces a far superior product.”

CAS Improves Consumer Food Safety & Quality

There is a reduced chance of error during stunning as CAS ensures a more uniform stunning process. In live-shackle systems, many birds do not get properly stunned and end up being scalded alive—the industry refers to them as “red birds.” These carcasses are considered adulterated, making them unfit for human consumption, but they still end up in our nation’s food system. Moreover, smaller birds may not be properly stunned in a water-bath, but an effective gas system is likely to stun more birds, regardless of size.



Live shackle slaughter systems put consumers at risk because, with more animals moving through the slaughter line while conscious, the opportunity for contamination and foodborne illness, such as *E. coli* and *Salmonella*, increases.

CAS Addresses Disease Transmission Concerns, Including COVID-19

Across the U.S., many slaughterhouses became COVID-19 hotspots. As of September 2021, “at least **1,466 meatpacking and food processing plants...** and **438 farms and production facilities** have had confirmed cases of Covid-19. At least **91,717 workers...** have tested **positive** for Covid-19 and at least **466 workers... have died.**”



Live-shackle slaughter systems require workers to stand elbow-to-elbow, which does not allow for workers to maintain the Centers for Disease Control (CDC)'s recommended six feet of distance between one another. In a CAS system, it is more likely that workers could maintain more distance, to combat the spread of COVID-19.



CAS Mitigates Negative Environmental Impacts Created by Animal Slaughter

As consumers demand more environmentally friendly products, food production will remain under the microscope. Companies who mitigate their environmental impact will present as forward-thinking alternatives to companies who do not.

CAS uses far less water than live-shackle slaughter, as it eliminates the need for stunning baths. Additionally, birds often defecate at the point of stun, meaning all birds in the bath become soiled and need more rinsing down the line. Improperly stunned birds are more likely to miss the kill blade and enter the scalding tanks alive. As live birds tend to defecate in the tanks, all birds in the tanks—or dipped in afterward—are contaminated and require excessive rinsing. Moreover, processing plants that switch to CAS have noted higher meat yield and as a result, less food waste.