

Controlled Atmosphere Stunning (CAS) is Preferable to Live-Shackle Slaughter for Poultry, 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.

	CAS	Live-Shackle Slaughter
Stunning Method	Renders poultry unconscious through exposure to a mixture of gas before slaughter.	Shackles live birds upside down by their legs and forces their heads into electrified baths to render them unconscious before slaughter.
Animal Welfare	Unconscious birds do not flap or fight, leading to fewer injuries to the animals and humane handling violations. Birds are kept together, reducing stress related to isolation.	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. Conscious, frightened birds are difficult to handle, resulting in serious injuries and humane handling violations
Worker Safety	Unconscious birds are easier for workers to handle. Birds are unconscious during the shackling process, reducing worker exposure to blood, feces, and pathogens. Minimizes worker accidents and creates a better work environment by having full lighting.	Catching and hanging birds is difficult when they are conscious and panicked. Panicked birds flap, struggle, and put off dust making a high-stress, unsanitary work environment. Birds are alive and struggling during the shackling process, which can result in workers getting covered in blood, feces, and pathogens. Requires dim lighting to ‘calm’ birds, leading to increased worker accidents.
Food Safety	Eliminates “red birds” by properly stunning animals at the beginning of the slaughter line. Uniform stunning of animals, regardless of size. Less opportunity for contamination and foodborne illness.	Allows “red birds” to end up in our nation’s food system by stunning animals improperly. Creates opportunities for contamination and foodborne illness by allowing fully conscious animals to move through the slaughter line.
Disease Transmission, Including COVID-19	Requires fewer workers on the slaughter line so that they may maintain social distancing.	Requires workers to stand elbow-to-elbow. Does not allow for CDC-recommended six-foot social distancing.
Environmental Impacts	Uses less water and energy. Results in higher meat yield and less food waste.	Requires excessive amounts of water for stunning baths and for rinsing carcasses after the scald tank, where they become contaminated with feces from birds who were scalded alive. Creates food waste by improperly killing animals, making them unfit for human consumption.

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.