

The Human Cost of Animal Slaughter:

The Psychological Impact of Animal Slaughter on Slaughterhouse Workers and the Spillover Effects in their Communities

Ryan Mahabir

We Consume to Spell their Doom: Introduction

It's a hot Memorial Day afternoon. The grill is fired up, ready to cook some hotdogs and hamburgers. As you enjoy the food and festivities in honor of the military personnel who have died serving the country have you thought about the cows, pigs, and other animals who had their lives cut short to produce the very meal you are eating? Have you considered the slaughterhouse worker who had the arduous task of ending the animal's life so that it could be processed into ground beef for the burger? That same slaughterhouse worker is tasked with killing animals eight hours a day so that you can enjoy a cookout. Every hour, "1,000,000 chickens, 14,000 pigs, and 4,000 cows are slaughtered for human consumption in the United States."¹ These workers perform a job that, by its very nature, puts them at risk of psychological disorders.²

A slaughterhouse worker is "an individual who works in a facility that kills and processes farmed animals for the consumption of meat."³ Slaughterhouse industry practices are a threat to worker health and safety and, more broadly, public health.⁴ Ideally, public health should promote

¹ *At Slaughter*, ANIMAL WELFARE INSTITUTE, <https://awionline.org/content/farm-animals-at-slaughter>.

² Michael Lebowitz, *A Call to Action: Psychological Harm in Slaughterhouse Worker*, THE YALE GLOBAL HEALTH REVIEW (Jan. 25, 2016), <https://yaleglobalhealthreview.com/2016/01/25/a-call-to-action-psychological-harm-in-slaughterhouse-workers/>.

³ Jessica Slade and Emma Alleyne, *The psychological impact of slaughterhouse employment: A systematic literature review*, TRAUMA, VIOLENCE, & ABUSE, Jul. 7, 2021, at 2.

⁴ Eric Schlosser, *America's Slaughterhouses Aren't Just Killing Animals*, THE ATLANTIC (May 12, 2020), <https://www.theatlantic.com/ideas/archive/2020/05/essentials-meatpeacking-coronavirus/611437/>.

and protect the health of people and the communities where they live and work.⁵ Public health works to set safety standards to protect workers, prevent injuries and shed light on why some populations are more likely to suffer from poor health than others.⁶ Slaughterhouse workers are one such population whose work puts them at risk of psychological disorder and at risk of engaging in other detrimental behaviors that negatively affect their communities.⁷

Animal slaughter primarily takes place in slaughterhouses far from public view. Moreover, various state “ag-gag” laws suppress potential whistleblowers and undercover activists by punishing them for recording footage inside slaughterhouses.⁸ Distancing them from much-needed media attention and support. Slaughterhouse floor workers, or meatpacking workers, have an essential role in the factory farm industry. Still, their work is rarely discussed in the media and among the public. Slaughterhouse workers’ mental health has been largely unstudied and continues to deteriorate without any active solutions.

This paper identifies the occupational hazards of slaughterhouse work, exploring how they create a uniquely stressful, dangerous, and violent environment. The paper analyzes how the routinized killing of animals affects slaughterhouse workers’ physical and mental state and the spillover public health effects on their families and their community. Further, the paper posits a much higher incidence of serious psychological distress and alcohol abuse among slaughterhouse workers than non-slaughterhouse workers. Also, there is a higher incidence of domestic violence and violent and sexual crime in communities around slaughterhouses than in communities elsewhere. In the final portion of the analysis, the paper compares the rate of these negative

⁵ *What is Public Health?*, AMERICAN PUBLIC HEALTH ASSOCIATION, <https://www.apha.org/what-is-public-health>.

⁶ *Id.*

⁷ Lebowhl, *supra* note 2.

⁸ *Ag-Gag Laws*, ANIMAL LEGAL DEFENSE FUND, <https://aldf.org/issue/ag-gag/>.

outcomes for slaughterhouse workers to other “dirty jobs” and veterans. Veterans serve as a comparator population because their former occupation has similarly violent characteristics to slaughterhouse work.

The paper concludes by proposing the education of consumers about veganism and reallocating government subsidies to incentivize a vegan lifestyle while disincentivizing an animal-based one. This paper aims to humanize slaughterhouse workers by shedding light on the grueling working conditions and their impact on slaughterhouse workers’ well-being and highlighting veganism as a straightforward solution.

How the Sausage is Made: The Animal Agriculture Industry

A. National Scale of the Factory Farm Industry

There are very few occupations that require the intentional killing of living beings.⁹ Active duty military, veterinarians, and researchers who experiment on animals are some of the only other professions with a similar traumatic component.¹⁰ Unlike, the mental health of war veterans, which has been significantly studied¹¹, very little is known about the effects of working in slaughterhouses, even though meat is so prevalent in daily life.¹² In January 2021, commercial meat production for the United States alone totaled 4.80 billion pounds.¹³ That’s the weight of nearly 3 Pyramid of Gizas.¹⁴ The meatpacking industry, specifically the portion that involves the

⁹ Slade, *supra* note 3, at 1.

¹⁰ *Id.*

¹¹ *Troubling Veteran Mental Health Facts and Statistics that Need to be Addressed*, NATIONAL VETERANS FOUNDATION (Mar. 25, 2016), <https://nvf.org/veteran-mental-health-facts-statistics/>.

¹² Slade, *supra* note 3, at 1.

¹³ *Livestock Slaughter*, UNITED STATES DEPARTMENT OF AGRICULTURE (Feb. 25, 2021), https://www.nass.usda.gov/Publications/Todays_Reports/reports/lstk0221.pdf.

¹⁴ David Cassel, *The Ultimate Logistics Problem: Building the Great Pyramid of Giza*, The Newstack (Oct. 8, 2017), <https://thenewstack.io/ultimate-logistics-problem-building-great-pyramid/#:~:text=Each%20block%20weighs%20at%20least,or%20over%2013%20billion%20pounds.>

slaughter of animals, employs between 77,980¹⁵ to 144,300¹⁶ individuals. To supply such a daunting amount of meat with so few employees, workers are pushed to kill more animals in less time.¹⁷

B. Animal Slaughter Techniques and Procedures

Animal slaughter refers to the killing of animals for food, clothing, etc.¹⁸ Every day, 25 million animals are slaughtered in the U.S.¹⁹ There are various techniques and procedures for animal slaughter, each equally horrifying. Even before the animals arrive at the slaughterhouse, they face an arduous journey being transported from where they were reared²⁰ that many will not survive. In the U.S., around “4 million chickens, 726,000 pigs, and 29,000 cattle die in transport every year.”²¹ Once the surviving animals arrive, they face a litany of brutal procedures, including head trauma, electrocution, or gassing, in an attempt to make their imminent deaths as painless as possible.²²

After transportation, The three phases in the slaughter process are pre-slaughter handling, stunning, and slaughter. Pre-slaughter handling begins once the animals arrive at the slaughterhouse.²³ Here, the goal is to reduce the animals’ stress levels as much as possible.²⁴ This

¹⁵ *Occupational Employment and Wage Statistics*, U.S. BUREAU OF LABOR STATISTICS (May, 2020), <https://www.bls.gov/oes/current/oes513023.htm>.

¹⁶ *Employment and Wages in the Meat Industry*, American Meat Institute (Oct. 2012), <https://www.meatinstitute.org/index.php?ht=a/GetDocumentAction/i/82885#:~:text=EMPLOYMENT%20AND%20WAGES%20IN%20THE,dogs%2C%20ham%20and%20other%20products>.

¹⁷ *Slaughterhouse Workers*, FOOD EMPOWERMENT PROJECT, <https://foodispower.org/human-labor-slavery/slaughterhouse-workers/>.

¹⁸ Jo-Anne McArthur, *Everything you need to know about animal slaughter*, THE HUMANE LEAGUE (Jun. 15, 2021), <https://thehumaneleague.org/article/animal-slaughter>.

¹⁹ *Id.*

²⁰ Antonio Velarde and Antoni Dalmau, *Slaughter without stunning*, ADVANCES IN AGRICULTURAL ANIMAL WELFARE (2018), <https://www.sciencedirect.com/topics/agricultural-and-biological-sciences/slaughter>.

²¹ McArthur, *supra* note 17.

²² *Id.*

²³ Chiara Disanto et al., *Stress Factors During Cattle Slaughter*, ITALIAN JOURNAL OF FOOD SAFETY (Aug. 28, 2014), <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5076716/pdf/ijfs-2014-3-1682.pdf>.

²⁴ *Id.*

is done by eliminating disturbances and distractions like flashing lights, loud noises, rapidly moving objects, like fans, and utilizing non-slip floors, and limiting the use of electric prods.²⁵

While this may seem like these facilities want to make the animals' final moments as peaceful as possible, these procedures only exist to keep the slaughter line moving as quickly as possible and preserve meat quality.²⁶ Stress triggers chemical responses in the animal's body resulting in paler²⁷, tougher meat.

After pre-slaughter handling, the animals are guided into chutes where they are restrained for the stunning phase.²⁸ Under the Humane Methods of Slaughter Act (HMSA), livestock other than poultry, are supposed to be handled and slaughtered using humane methods.²⁹ Pursuant to § 1902(a) of the HMSA, livestock animals must be "rendered insensible to pain ... before being shackled, hoisted, thrown, cast, or cut."³⁰ The goal of humane slaughter under the HMSA is aspirational and often is not achieved. Under the statute, an animal may be rendered unconscious "by a single blow or gunshot or an electrical, chemical or other means that is rapid and effective."³¹ Acceptable methods to kill or stun include the "use of carbon dioxide gas, captive bolt stunners, firearms, and electrocution."³² If a stunner is used, it may be either a penetrating stunner that drives a bolt into the brain, or a non-penetrating stunner that drives a bolt with a

²⁵ *Id.*

²⁶ *Id.*

²⁷ *Id.*; Temple Grandin, *The effect of stress on livestock and meat quality prior to and during slaughter*, INTERNATIONAL JOURNAL FOR THE STUDY OF ANIMAL PROBLEMS (1980), https://www.wellbeingintlstudiesrepository.org/cgi/viewcontent.cgi?article=1019&context=acwp_faafp.

²⁸ Temple Grandin, *Behavioral principles of livestock handling*, THE PROFESSIONAL ANIMAL SCIENTIST (Dec., 1989), <https://www.sciencedirect.com/science/article/abs/pii/S1080744615323044>.

²⁹ Cynthia F. Hodges, *Detailed Discussion of the Humane Methods of Slaughter Act*, ANIMAL LEGAL & HISTORICAL CENTER (2010), <https://www.animallaw.info/article/detailed-discussion-humane-methods-slaughter-act#id-1> (citing Humane Method of Slaughter Act, 7 U.S.C. §§ 1902(a) (2015)).

³⁰ *Id.*

³¹ *Id.*

³² *Id.*

flattened circular head against the external surface of the head over the brain.³³ These bolt guns and the protocols to use them do not guarantee that the animal will be rendered unconscious. One study found that 10.4% of cattle who were accurately shot with a bolt gun were still conscious.³⁴ Swine, sheep, calves, cattle, and goats may be electrocuted to produce surgical anesthesia (a state in which the animal feels no pain) or to kill them outright.³⁵ Carbon dioxide gas may be used to produce anesthesia in sheep and calves and may be used to kill swine.³⁶

In addition to poultry, animals killed in ritual slaughter are exempted from the HMSA.³⁷ To avoid a possible unconstitutional impingement on the practice of religion fully conscious animals are shackled, hoisted, and have their carotid arteries severed, eventually losing consciousness from blood loss.³⁸ By the HMSA's terms, this handling and slaughter method is considered humane.³⁹

The clear disregard for animal suffering under the HMSA is a trend that extends to the treatment of slaughterhouse workers by their superiors. Slaughterhouse workers must routinely engage in these gruesome practices with little to no consideration for their physical well-being or support from the government or their superiors. As one worker recalled, “[o]nce the company got fined for safety violations and the manager told us: ‘Be careful or we’ll have to pay more fines’ – not be careful because you might get hurt.”⁴⁰

³³ *Id.* (citing 9 C.F.R § 313.15(b)(1)(i) (2004)).

³⁴ S. Atkinson, *Assessment Of Stun Quality At Commercial Slaughter In Cattle Shot With Captive Bolt*, ANIMAL WELFARE (2013), https://www.slu.se/globalassets/ew/org/inst/hmh/hmh-pdf/atkinson_etal_2013_assessment_of_stun_quality.pdf ,

³⁵ Hodges, *supra* note 28 (citing 9 C.F.R. § 313.30(a)(1) (1985)).

³⁶ *Id.* (citing 9 C.F.R § 313.15(b)(1)(i) (2004)).

³⁷ *Id.*

³⁸ *Id.*

³⁹ *Id.* (citing Humane Method of Slaughter Act, 7 U.S.C. §§ 1902(b) (2015)).

⁴⁰ Slaughterhouse Workers, *supra* note 16.

C. Profile of a Slaughterhouse Worker

Just as the meat industry does not consider the mental health and physical well-being of the animals they exploit and slaughter, The meat industry has done little to protect the mental health of its employees.⁴¹ As a recent example, former President Trump’s executive order during the pandemic to keep slaughterhouses open despite COVID-19 outbreaks killing workers shows the meat industry treating their employees as replaceable cogs in a machine.⁴² This treatment is both dangerous to their health and detrimental to their mental and psychological well-being.⁴³

Slaughterhouse work is extremely dangerous, physically demanding, and pays very low wages.⁴⁴ In fact, the average slaughterhouse worker makes only \$25,010 per year, slightly above the poverty line for a family of four.⁴⁵ Nearly half of all meatpacking workers live in low-income families, and about 12% earn income below the poverty line.⁴⁶ This compares to 20.6% of all U.S. workers from low-income families and 6.7% of all workers with income below the poverty level.⁴⁷ Meatpacking workers also “disproportionately lack health insurance (15.5%), have one or more children to care for (44.3%), and are less educated (2.5%) have a college degree or more.”⁴⁸

⁴¹ Grant Lingel, *Profit Over People: The Meat Industry’s Exploitation of Vulnerable Workers*, SENTIENT MEDIA (Apr. 30, 2020), <https://sentientmedia.org/profit-over-people-the-meat-industrys-exploitation-of-vulnerable-workers/>.

⁴² *Id.*

⁴³ *Id.*

⁴⁴ *Id.*

⁴⁵ *Id.*

⁴⁶ Shawn Fremstad et al., *Meatpacking Workers are a Diverse Group Who Need Better Protections*, CEPR (Apr. 29, 2020), <https://cepr.net/meatpacking-workers-are-a-diverse-group-who-need-better-protections/>.

⁴⁷ *Id.*

⁴⁸ *Id.*

Most workers are “at-will” employees, meaning they can be easily fired for any legal reason at a supervisor’s discretion.⁴⁹ The threat of termination “discourages workers from reporting safety concerns, injuries, or other serious issues.”⁵⁰ Supervisors use a variety of intimidation tactics to suppress workers’ concerns and emphasize they are easily replaceable.⁵¹ As a result, workers are conditioned to “accept a hazardous and demeaning work environment” to remain employed.⁵²

People of color, immigrants, and people in relatively low-income families are disproportionately employed in meatpacking plants.⁵³ Nearly one-half of meatpacking workers are Hispanic, and one-quarter are Black.⁵⁴ Immigrants are particularly overrepresented in slaughterhouse work.⁵⁵ About 17% of workers in the U.S. workforce today are immigrants,⁵⁶ but 51.5% of meatpacking workers are immigrants. Around 25% of these workers live in households in which “all of the members (age [fourteen] or older) have limited proficiency in English,” over six times the rate for U.S. workers overall.⁵⁷

To make matters worse, a growing percentage of these workers are undocumented immigrants.⁵⁸ Undocumented immigrants are often unable to voice their concerns for their mental and physical health because doing so puts them at great risk of deportation and being

⁴⁹ Slaughterhouse Workers, *supra* note 16.

⁵⁰ *Id.*

⁵¹ *Id.*

⁵² *Id.*

⁵³ Fremstad, *supra* note 45.

⁵⁴ *Id.*

⁵⁵ *Id.*

⁵⁶ *Foreign-born workers made up 17.4 percent of labor force in 2019*, U.S. BUREAU OF LABOR STATISTICS (May 29, 2020), <https://www.bls.gov/opub/ted/2020/foreign-born-workers-made-up-17-point-4-percent-of-labor-force-in-2019.htm>.

⁵⁷ Fremstad, *supra* note 45.

⁵⁸ Lingel, *supra* note 40.

separated from their families.⁵⁹ In some situations, they may fear being sent back to conflict zones or war-torn regions.⁶⁰ Many of these workers don't understand the native language where they work and are unable to speak out about the atrocities happening behind the slaughterhouse walls.⁶¹ Instead, they simply accept their situations and continue to work, knowing that they are replaceable.⁶² This is not only true in the U.S., but other countries as well. One British slaughterhouse worker noted that many of her co-workers were "migrant workers, predominantly from Eastern Europe, whose English wasn't good enough for them to seek help if they were struggling."⁶³

These issues regarding mental health are compounded by the slaughterhouse work culture of suppressing emotions to avoid showing weakness.⁶⁴ Repression of emotion can also be defined as the "intentional and automatic method by which individuals exert control over the emotions they have."⁶⁵ Effective emotional regulation enables the individual to cope with stressful scenarios.⁶⁶ However, when taken to the extreme, regulation becomes suppression, which may pose a danger to emotional and cognitive health.⁶⁷ It may thus become a potential development or maintenance factor in mental or physical disease conditions.⁶⁸ Emotional

⁵⁹ *Id.*

⁶⁰ *Id.*

⁶¹ *Id.*

⁶² *Id.*

⁶³ *Confessions of a slaughterhouse worker*, BBC NEWS (Jan. 6, 2020), <https://www.bbc.com/news/stories-50986683>.

⁶⁴ *Id.*

⁶⁵ Jainish Patel and Pritesh Patel, *Consequences of repression of emotion: Physical health, mental health and general well being*, INTERNATIONAL JOURNAL OF PSYCHOTHERAPY PRACTICE AND RESEARCH (Feb. 12, 2019), <https://openaccesspub.org/article/999/ijpr-18-2564.pdf> (citing J. Gross, *Emotional expression in cancer onset and progression*, SOCIAL SCIENCE & MEDICINE, (1989))

⁶⁶ *Id.*

⁶⁷ *Id.*

⁶⁸ *Id.* (citing Howard Berenbaum et al., *A taxonomy of emotional disturbances*, CLINICAL PSYCHOLOGY: SCIENCE AND PRACTICE (May 11, 2006), <https://onlinelibrary.wiley.com/doi/abs/10.1093/clipsy.bpg011>; R. W. Levenson, *Hiding feelings: the acute effects of inhibiting negative and positive emotion*, JOURNAL OF ABNORMAL PSYCHOLOGY (1997), <https://pubmed.ncbi.nlm.nih.gov/9103721/>; and James W. Pennebaker, *Opening up: The healing power of expressing emotions*, GUILFORD PRESS (1997), <https://psycnet.apa.org/record/1997-05130-000>.)

suppression has been linked to a “higher likelihood of clinically significant somatic, depressive, and anxiety symptoms.”⁶⁹

Slaughterhouse workers likely suppress their emotions to cope due to a combination of slaughterhouse work factors, like the stressful environment that slaughtering creates.⁷⁰ A significant portion of this stress comes from the exceptionally high rates of injury among the workers.⁷¹ Slaughter facilities boast nonfatal injury rates of up to twenty out of every hundred workers, making slaughterhouse work the most dangerous profession in the United States.⁷² Part of the danger mainly comes from workplace hazards such as repetitive motions and heavy lifting.⁷³ A significant portion of stress comes from other, unpredictable dangers that are inherent to slaughterhouse work.⁷⁴ Employees interact with live, frightened, and dangerous animals that must be contained and controlled.⁷⁵

The workers in the most danger are called “stickers.”⁷⁶ Stickers are those who slit the animals’ throats, so they bleed out.⁷⁷ Ideally, all non-poultry livestock must be stunned before being bled out, but this aspirational goal is not always achieved.⁷⁸ The process of stunning is a precise science, and foremen often adjust the settings on knockers and electric shock guns for each animal in order to protect the quality of the meat.⁷⁹ Line speeds are often excessively fast,

⁶⁹ Andrew J. Petkus, *Thought suppression is associated with psychological distress in homebound older adults*, DEPRESSION AND ANXIETY (Mar., 2012), <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4069281/pdf/nihms587846.pdf>.

⁷⁰ Lebowhl, *supra* note 2.

⁷¹ *Id.*

⁷² *Id.* (citing Michael S. Worrall, *Meatpacking Safety: Is OSHA Enforcement Adequate?*, DRAKE JOURNAL OF AGRICULTURAL LAW (2005), <https://aglawjournal.wp.drake.edu/wp-content/uploads/sites/66/2016/09/agVol09No2-Worrall.pdf>.)

⁷³ *Id.*

⁷⁴ *Id.*

⁷⁵ *Id.*

⁷⁶ *Id.*

⁷⁷ *Id.*

⁷⁸ *Id.*

⁷⁹ *Id.*

leading to conscious, active animals often flying down the conveyor line towards stickers.⁸⁰ The stickers then face the danger of being struck by the large, terrified animals while holding sharp knives.⁸¹ These knives, when combined with the kicking animals, put stickers at great risk of injuries.⁸² The stress and danger these workers face often leave them vulnerable to serious psychological distress.⁸³

Unclean Hands: An Analysis of Slaughterhouse Worker Mental Trauma and the Resulting Spillover Effects

A. Serious Psychological Distress

Serious psychological distress (SPD) encompasses mental health problems severe enough to cause “moderate-to-serious impairment in social, occupational, or school functioning and to require treatment.”⁸⁴ Adults with SPD were more likely to have “chronic obstructive pulmonary disease, heart disease, and diabetes” than adults without SPD.⁸⁵

Several factors could lead to unnecessarily high levels of SPD among slaughterhouse workers. One study published by the Boston University School of Public Health studied the incidence of serious psychological distress amongst meatpacking workers.⁸⁶ The study found a

⁸⁰ *Id.*

⁸¹ *Id.*

⁸² *Id.* (citing Gail A. Eisnitz, *Slaughterhouse: The Shocking Story of Greed, Neglect, and Inhumane Treatment Inside the U.S. Meat Industry* (Amherst, NY: Prometheus Books, 1997); Nancy Cleeland, *Need for Speed Has Workers Seething*, LOS ANGELES TIMES (2002), <http://articles.latimes.com/2002/jun/19/business/fi-speedup19>.)

⁸³ Slade, *supra* note 3, at 1.

⁸⁴ Judith F. Weissman et al., *Serious psychological distress among adults: United States*, US DEPARTMENT OF HEALTH AND HUMAN SERVICES, CENTERS FOR DISEASE CONTROL AND PREVENTION, NATIONAL CENTER FOR HEALTH STATISTICS (2015) <https://www.cdc.gov/nchs/products/databriefs/db203.htm> (citing Laura A. Pratt et al., *Characteristics of adults with serious psychological distress as measured by the K6 scale, United States*, CENTERS FOR DISEASE CONTROL AND PREVENTION (Mar. 30, 2007), <https://stacks.cdc.gov/view/cdc/6840>.)

⁸⁵ Weissman, *supra* note 82.

⁸⁶ Jessica H. Leibler, *Prevalence of serious psychological distress among slaughterhouse workers at a United States beef packing plant*, WORK (Jun, 2017), <https://content.iospress.com/download/work/wor2543?id=work%2Fwor2543>.

4.4% incidence of SPD for meatpacking workers compared to a prevalence of 3.6% for the general U.S. population.⁸⁷ While this isn't a statistically significant difference, the results should still raise some alarm given the small sample size of 137 volunteer participants of about 2,000 meatpacking workers from a single beef slaughter and processing facility in Nebraska.⁸⁸ If nothing else, the results suggest that more research should be conducted to study slaughterhouse workers' mental health.

The Boston University study examined occupational injuries and the work area but could not identify specific occupation factors substantially associated with serious psychological distress.⁸⁹ The researchers hypothesized that because slaughterhouse workers generally experience high rates of injury, they internalized injuries as a normal part of the job, thus diminishing any feelings of distress related to occupational injury.⁹⁰ Additionally, there is a national trend towards reduced self-reported distress,⁹¹ likely because of the large volume of immigrant workers and workplace culture of suppressing emotion.

The speed at which workers must operate, which can be as quick as 360 heads per hour in U.S. beef packing plants, has been identified as a cause of anxiety among workers.⁹² The single greatest factor contributing to worker injuries is the speed at which the animals are killed and processed. As one slaughterhouse line worker stated: "The line is so fast there is no time to

⁸⁷ *Id.* at 107.

⁸⁸ *Id.*

⁸⁹ *Id.* at 108.

⁹⁰ *Id.*

⁹¹ *Id.*

⁹² Leibler, *supra* note 84.

sharpen the knife. The knife gets dull and you have to cut harder. That's when it really starts to hurt, and that's when you cut yourself."⁹³

The "profit margins per chicken or per cut of meat are meager, often a few pennies a pound, so competitive advantage rests on squeezing out the highest volume of production in the shortest possible time."⁹⁴ Slaughterhouse workers often receive top-down pressure from their supervisors to maintain the break-neck speed of the slaughter line. One slaughterhouse worker described her experience that "From the time you enter, you're told that if the plant stops [ten] minutes, the company will lose I don't know how many millions of dollars."⁹⁵ Companies are given much freedom in their operational choices, which usually jeopardize worker safety for production speed.⁹⁶ There is currently no federal regulation from the U.S. Department of Agriculture (USDA) nor Occupational Safety and Health Administration (OSHA) to regulate line speeds to increase worker safety specifically.⁹⁷ Rather than regulate line speeds for worker safety, line speed is limited only by federal sanitation laws from the USDA to protect the quality of the meat.⁹⁸

The combination of long hours and repetitive motion directly leads to an increased risk of injury.⁹⁹ The workers suffer chronic pains in their hands, wrists, arms, shoulders, and back, "sometimes performing the same motion 30,000 times a shift."¹⁰⁰ Repetitive stress injuries are unavoidable under the frantic pace that most facilities choose to operate. According to an OSHA

⁹³ *Blood, Sweat and Fear: Workers' Rights in U.S. Meat and Poultry Plants*, (Dec., 2003), <http://www.hrw.org/reports/2005/usa0105/>.

⁹⁴ *Id.*

⁹⁵ *Id.*

⁹⁶ *Id.*

⁹⁷ *Id.*

⁹⁸ *Id.*

⁹⁹ *Safety in the Meat and Poultry Industry, while Improving, Could Be Further Strengthened*, UNITED STATES GOVERNMENT ACCOUNTABILITY OFFICE (Jan., 2005), <https://www.gao.gov/assets/gao-05-96.pdf>.

¹⁰⁰ *Blood, Sweat and Fear*, *supra* note 91.

report in 2000, “one out of every seven poultry workers was injured on the job”, which was more than double the average for all private industries.¹⁰¹ From that same report, poultry workers were found to be “14 times more likely to suffer debilitating injuries stemming from repetitive trauma.”¹⁰² Working and standing for an eight-hour shift in this type of environment, wielding sharp tools to slaughter or process meat, is physically and mentally exhausting.¹⁰³ The situation gets far more dangerous when workers are required to work mandatory overtime. According to a Smithfield slaughterhouse worker: “The last hour of a regular shift is hard. You’re tired and it’s hard to concentrate. Then they tell you to work two hours overtime. That’s when it gets downright dangerous.”¹⁰⁴ Other hazards slaughterhouse workers may face include: “exposure to high noise levels, dangerous equipment, slippery floors, musculoskeletal disorders,” and hazardous biological agents and chemicals.¹⁰⁵

B. Perpetration-Induced Traumatic Stress

A combination of these difficult working conditions and the repetitive trauma of routinely killing animals contributes to psychological disorders, specifically a type of post-traumatic stress disorder called perpetration-induced traumatic stress (PITS).¹⁰⁶ PITS encompasses symptoms of drug and alcohol abuse, panic, depression, paranoia, dissociation, anxiety, and depression stemming from the act of killing.¹⁰⁷ Unlike the more well-known PTSD in which sufferers have

¹⁰¹ *Id.*

¹⁰² *Id.*

¹⁰³ Safety in the Meat and Poultry Industry, *supra* note 97.

¹⁰⁴ Blood, Sweat and Fear, *supra* note 91.

¹⁰⁵ *Meatpacking*, UNITED STATES DEPARTMENT OF LABOR, <https://www.osha.gov/meatpacking>.

¹⁰⁶ Lebwohl, *supra* note 2 (citing Jennifer Dillard, *A Slaughterhouse Nightmare: Psychological Harm Suffered by Slaughterhouse Employees and the Possibility of Redress through Legal Reform*, 15 *Geo. J. on Poverty L. & Pol'y*, 391, 398 (2008)).

¹⁰⁷ Anna Dorovskikh, *Killing for a living: Psychological and physiological effects of alienation of food production on slaughterhouse workers*, UNIVERSITY OF COLORADO, BOULDER UNDERGRADUATE HONORS THESES (2015), <https://core.ac.uk/reader/54847380>.

been victims in a traumatic situation, sufferers of PITS are the “causal participant” in a traumatic situation.¹⁰⁸ The stress from PITS is a manifestation of guilt for being the direct reason for another being’s trauma.¹⁰⁹ The guilt causes symptoms similar to those of individuals who are “recipients of trauma: substance abuse, anxiety issues, depression, and dissociation from reality.”¹¹⁰ Unfortunately, very few studies of this psychological phenomenon among slaughterhouse workers have been conducted.¹¹¹ Without resorting to formal study, however, it is still possible to see that the symptoms of PITS, like alcoholism, comport with slaughterhouse workers’ testimonies about their experiences.¹¹² As one worker explained, “a lot of guys at Morrell [a major slaughterhouse] just drink and drug their problems away.”¹¹³

D. Alcohol Abuse

Alcoholism is a condition in which an “individual becomes dependent on alcohol.”¹¹⁴ Alcohol dependence interferes with the individual’s day-to-day activities along with their personal and professional life.¹¹⁵ The fifth edition of the Diagnostic and Statistical Manual (DSM-V) has refined the definition of alcoholism as alcohol use disorder.¹¹⁶ Alcohol use disorder (AUD) is a medical condition characterized by an “impaired ability to stop or control alcohol use despite adverse social, occupational, or health consequences.”¹¹⁷ It encompasses the

¹⁰⁸ Lebwohl, *supra* note 2 (citing Rachel MacNair, *Perpetration-Induced Traumatic Stress: The Psychological Consequences of Killing*, GREENWOOD PUBLISHING GROUP (2002)).

¹⁰⁹ *Id.*

¹¹⁰ *Id.* (citing Jennifer Dillard, *A Slaughterhouse Nightmare: Psychological Harm Suffered by Slaughterhouse Employees and the Possibility of Redress through Legal Reform*, 15 *Geo. J. on Poverty L. & Pol’y*, 391, 398 (2008)).

¹¹¹ *Id.*

¹¹² *Id.*

¹¹³ *Id.*

¹¹⁴ *Effect of Alcoholism*, ST. JOHN’S NATIONAL ACADEMY OF HEALTH SCIENCES, https://sjri.res.in/admin/images/resources_uploads/Effect%20of%20Alcoholism.pdf.

¹¹⁵ *Id.*

¹¹⁶ Lenora KM, *Alcohol use disorder: Criteria, symptoms, treatment DSM-5 303.90 (F10.20)*, THRIVEWORKS, <https://thriveworks.com/blog/alcohol-use-disorder/>.

¹¹⁷ *Understanding Alcohol Use Disorder*, NATIONAL INSTITUTE ON ALCOHOL ABUSE AND ALCOHOLISM (2020), <https://www.niaaa.nih.gov/publications/brochures-and-fact-sheets/understanding-alcohol-use-disorder>.

conditions like alcohol abuse, alcohol dependence, alcohol addiction, and the colloquial term, alcoholism.¹¹⁸ AUD can be mild, moderate, or severe, with the level of severity determined by the number of criteria a person meets.¹¹⁹ Mental health conditions and a history of trauma are significant risk factors for developing AUD.¹²⁰ A wide range of “psychiatric conditions—including depression and post-traumatic stress disorder—are comorbid with AUD and are associated with an increased risk of AUD.”¹²¹

Alcoholism has harmful effects on one’s overall physical health.¹²² Organs such as the brain, liver, heart, kidneys, and stomach are most affected.¹²³ One’s mental health is also at risk. Heavy alcohol use directly affects brain function and brain chemistry in ways known to be involved in the development of many common mental disorders such as mood and anxiety disorders.¹²⁴ Alcohol’s disinhibiting properties may also “impair judgment and unleash aggressive, antisocial behaviors that may mimic certain externalizing disorders, such as antisocial personality disorder.”¹²⁵

Slaughterhouse workers were found to have increased alcohol consumption during weekdays and weekends compared to other occupations.¹²⁶ Alcohol is very common amongst

¹¹⁸ *Id.*

¹¹⁹ *Id.*

¹²⁰ *Id.*

¹²¹ *Id.*

¹²² Effect of Alcoholism, *supra* note 112.

¹²³ *Id.*

¹²⁴ Ramesh Shivani, M.D., et al., *Alcoholism and Psychiatric Disorders*, ALCOHOL RESEARCH & HEALTH (2002), <https://pubs.niaaa.nih.gov/publications/arh26-2/90-98.htm> (citing George F. Koob, *Neurobiology of addiction. Toward the development of new therapies*, ANNALS OF THE NEW YORK ACADEMY OF SCIENCES (Jan. 25, 2006)).

¹²⁵ *Id.* (citing F. Gerard Moeller et al., *Antisocial personality disorder and alcohol-induced aggression*, ALCOHOLISM: CLINICAL AND EXPERIMENTAL RESEARCH (Dec., 1998), <https://onlinelibrary.wiley.com/doi/pdf/10.1111/j.1530-0277.1998.tb05896.x>.)

¹²⁶ Benjamin E. Baran et al., *Routinized killing of animals: Going beyond dirty work and prestige to understand the well-being of slaughterhouse workers*, ORGANIZATION (Apr. 21, 2016), at pg. 362.

slaughter employees as a coping mechanism for the stress of their work.¹²⁷ A former hog-sticker echoed this fact; stating, “[a] lot of the slaughterhouse hog killers have problems with alcohol. They have to drink, they have no other way of dealing with killing live, kicking animals all day long.”¹²⁸ One study proposed a link between slaughterhouse violence and alcoholism.¹²⁹ Researchers found that empathy to pain tends to happen “even when the pain is being experienced by others who are different than oneself.”¹³⁰ The researchers posited that animal suffering triggers an empathetic response in slaughterhouse workers, which over time “manifest themselves in strain and attempts to distance oneself from the pain.”¹³¹ Alcohol then becomes a coping mechanism to deal with the empathetic suffering and disassociate from the daily pain.

E. Domestic Violence and Crime

The mental and emotional pain these workers experience often manifests in aggression, and the coping mechanisms to deal with the daily violence harm other people and even entire communities. One study investigated the impact of having a slaughterhouse in a community on local crime rates.¹³² The researchers used other industries for comparison with “nearly identical predictors of changes in crime (namely worker demographics, potential to create social disorganization, and effect on unemployment in the surrounding areas),” and still found that slaughterhouses had the greatest effect on crime.¹³³ The presence of slaughterhouses not only increased overall crime, “but, disturbingly, disproportionate increases in violent crime and sexual

¹²⁷ Dorovskikh, *supra* note 105 (citing Jennifer Dillard, *A Slaughterhouse Nightmare: Psychological Harm Suffered by Slaughterhouse Employees and the Possibility of Redress through Legal Reform*, 15 *Geo. J. on Poverty L. & Pol’y*, 391, 398 (2008)).

¹²⁸ *Id.* (citing *Id.* at pg. 397).

¹²⁹ Baran, *supra* note 124.

¹³⁰ *Id.*

¹³¹ *Id.*

¹³² Lebwohl, *supra* note 2.

¹³³ *Id.*

crime.”¹³⁴ The authors of the crime study described this outflow of violence and crime as a “‘spillover’ in the psyches of the slaughterhouse workers.”¹³⁵ This aggression being directed at another person is clearly on display in one worker’s testimony: “‘I’ve had ideas of hanging my foreman upside down on the line and sticking him. I remember going into the office and telling the personnel man I have no problem pulling the trigger on a person—if you get in my face I’ll blow you away.’”¹³⁶ The routine killing of animals may serve to desensitize workers to further violence aimed at humans.¹³⁷

This desensitization may also be explained “through the mechanism of ‘doubling,’ in which individuals are compelled to create dual selves, one good, one bad.”¹³⁸ Creating and maintaining a morally good persona while having another self that can mechanically end lives for hours each day serves as another source of psychological stress for workers.¹³⁹ This creates the risk that their pathologically un-empathetic work selves will invade their lives and communities outside of work.¹⁴⁰ When the “bad” self rears its head, slaughterhouse workers have been known to “end up abusing their spouses because they can’t get rid of the feelings” or “leave work with [an] attitude and ... go down to the bar to forget.”¹⁴¹ These stories echo those of

¹³⁴ *Id.* (citing Amy J. Fitzgerald, *Slaughterhouses and Increased Crime Rates: An Empirical Analysis of the Spillover From ‘The Jungle’ Into the Surrounding Community*, ORGANIZATION & ENVIRONMENT (Jun. 2, 2009), https://journals.sagepub.com/doi/pdf/10.1177/1086026609338164?casa_token=RNN1ldMekdwAAAAA:fWSFripH0xMAS-Dwqtl8Sl63c5CoO4oMWgrHpWjz_nXoOK1vOqR1HxBeh4uvM4hHWGITVPnggGhb).

¹³⁵ *Id.*

¹³⁶ *Id.* (citing Gail A. Eisnitz, *Slaughterhouse: The Shocking Story of Greed, Neglect, and Inhumane Treatment Inside the U.S. Meat Industry* (Amherst, NY: Prometheus Books, 1997)).

¹³⁷ *Id.*

¹³⁸ *Id.* (citing Jennifer Dillard, *A Slaughterhouse Nightmare: Psychological Harm Suffered by Slaughterhouse Employees and the Possibility of Redress through Legal Reform*, 15 *Geo. J. on Poverty L. & Pol’y*, 391, 398 (2008)).

¹³⁹ *Id.*

¹⁴⁰ *Id.*

¹⁴¹ *Id.* (citing Gail A. Eisnitz, *Slaughterhouse: The Shocking Story of Greed, Neglect, and Inhumane Treatment Inside the U.S. Meat Industry* (Amherst, NY: Prometheus Books, 1997)).

combat veterans,¹⁴² who are some of the only professionals that engage in violence on a level comparable to slaughterhouse workers.

F. Comparison Between Slaughterhouse Workers and Other Professions

These slaughterhouse workers are putting their physical well-being and, in some cases, their lives on the line to do their job, similarly to active duty military. In 2016, it was reported that on average, “one Tyson employee a month is injured by equipment and loses a finger or limb.”¹⁴³ In addition, from 2011 to 2015, seventy-three workers were fatally injured.¹⁴⁴ The similarities between slaughterhouse work and military service in terms of violence and risk of injury would lead one to believe that they create similar levels of psychological trauma.

Slaughterhouse workers fare far worse psychologically than other professions with a similar level of unpleasantness but no violence. A 2016 study compared the mental health of slaughterhouse workers to other “dirty jobs,” or jobs of similar levels of prestige and “dirtiness,” i.e., janitors and home care workers.¹⁴⁵ The study concluded that slaughterhouse workers have lower levels of psychological well-being compared to other dirty jobs.¹⁴⁶

One study found that veterans were slightly more likely to have SPD than their nonveteran counterparts (14% vs. 12%).¹⁴⁷ When compared to the earlier mentioned 2017 study, which found a 4.4% incidence of SPD among meatpacking workers compared to a 3.6%

¹⁴² *Id.*

¹⁴³ Sarah Von Alt, *Slaughterhouse Workers Have PTSD From Killing Animals. Here's Why That Matters...*, MERCY FOR ANIMALS (May 10, 2017), <https://mercyforanimals.org/blog/slaughterhouse-workers-have-ptsd-from-killing/>.

¹⁴⁴ *How safe are the workers who process our food?*, U.S. BUREAU OF LABOR STATISTICS (Jul., 2017), <https://www.bls.gov/opub/mlr/2017/article/how-safe-are-the-workers-who-process-our-food.htm> (citing *Injuries, Illnesses, and Fatalities*, U.S. BUREAU OF LABOR STATISTICS, <https://www.bls.gov/iif/oshcfoi1.htm>).

¹⁴⁵ Slade, *supra* note 3, at 1.

¹⁴⁶ *Id.*

¹⁴⁷ Andrew Golub et al., *Unmet need for treatment of substance use disorders and serious psychological distress among veterans: A nationwide analysis using the NSDUH*, MILITARY MEDICINE (Jan. 1, 2013).

incidence among the general U.S. population,¹⁴⁸ it's clear that both populations of workers are negatively affected by their professions. The difference is that veterans' mental health is much more heavily researched, and studies surrounding veterans' mental health have larger sample sizes. For example, the veteran's study mentioned above included over 100,000 participants, while the slaughterhouse worker study included only 144. Because of the larger body of available research and greater media attention, veterans can recognize potential issues and seek treatment.

G. Merits of Automated Slaughter as a Potential Solution to Slaughterhouse Workers' Declining Mental Health

One potential solution may be to remove the human element out of slaughterhouse work through automation. Aside from the fact that this option will simply put slaughterhouse workers out of work, this isn't a practical solution because the cutting and deboning of meat requires too much dexterity and spatial awareness for most standard machines.¹⁴⁹ Carcasses are soft, easily deformable when pressure is applied making them difficult for machines to grasp and maneuver.¹⁵⁰ A slaughterhouse would need state-of-the-art robotic systems to account for these moldable carcasses with sensors, which is only financially feasible for the upper echelon of slaughterhouses.¹⁵¹ It's not practical to put the burden of improving working conditions entirely on the slaughterhouses. The best solution is thus one that involves societal change.

¹⁴⁸ Leibler, *supra* note 84.

¹⁴⁹ Ian de Medeiros Esper and Alex Mason, *Robotisation and intelligent systems in abattoirs*, TRENDS IN FOOD SCIENCE & TECHNOLOGY (Feb., 2021), <https://reader.elsevier.com/reader/sd/pii/S0924224420306798?token=5984C731FB904DDD8A42E4F7204FB1A322F421DB347584FC12560DFF6BD3B7255EC071617CE15D80F64B0A6D3B5D5C48&originRegion=us-east-1&originCreation=20211120060553>.

¹⁵⁰ *Id.*

¹⁵¹ *Id.*

H. Greener Pastures: Solution to End Slaughterhouse Suffering

First and foremost, there must be a push for more research on slaughterhouse worker mental health. More published research will likely draw more media attention, showing slaughterhouse workers that their profession is likely damaging their overall well-being. In the short term, legislation should be passed to regulate and reduce line speeds for worker safety and increase the number of OSHA inspectors in slaughterhouses to enforce these regulations.

In the long-term, the solution is to reduce consumer demand for meat and the financial viability of meat production. A two-prong solution combining consumer market influence with government economic policy would likely achieve both parts of the solution. The first prong involves disincentivizing the production and consumption of animal products by transferring federal meat industry subsidies. Currently, the U.S. government spends up to \$38 billion each year to subsidize the meat and dairy industries, with less than one percent of that sum allocated to aiding the production of fruits and vegetables.¹⁵² The large subsidies allow meat prices to remain relatively low even though meat production is a costly and inefficient process.¹⁵³ One calculation found that, without subsidies, hamburger meat would cost \$35 a pound, with the current cost of ground beef being \$4-5 per pound.¹⁵⁴ These meat and dairy subsidies will be transferred to plant agriculture to increase plant-based food production. Although no country has attempted this subsidy transfer, a 2021 United Nations report called for a subsidy-shifting

¹⁵² Christina Sewell, *Removing the Meat Subsidy: Our Cognitive Dissonance Around Animal Agriculture*, JOURNAL OF INTERNATIONAL AFFAIRS (Feb. 11, 2020), <https://jia.sipa.columbia.edu/removing-meat-subsidy-our-cognitive-dissonance-around-animal-agriculture>.

¹⁵³ *Id.*

¹⁵⁴ Aviva Shen, *Why We Should Stop Obsessing Over How Expensive The World's First Test-Tube Hamburger Is*, THINK PROGRESS, <https://archive.thinkprogress.org/why-we-should-stop-obsessing-over-how-expensive-the-worlds-first-test-tube-hamburger-is-c4e7011f52f4/#:~:text=One%20calculation%20found%20that%2C%20without,the%20meat%20industry's%20status%20quo>.

scheme by “[r]epurposing agricultural support to shift our agri-food systems in a greener, more sustainable direction -- including by rewarding good practices such as sustainable farming and climate-smart approaches.”¹⁵⁵ Additionally, the federal government can offer tax credits for businesses selling vegan products.

The second prong will introduce consumers to a vegan lifestyle through a national public education campaign. The campaign will use traditional media such as television and new media like social media and YouTube to distribute educational advertisements explaining and advocating veganism. Veganism is a way of living that “seeks to exclude, as far as possible and practicable, all forms of exploitation of and cruelty to, animals for food, clothing and any other purpose.”¹⁵⁶ A culture of veganism would substantially reduce the demand for animal meat and animal products and eventually reduce the need for slaughterhouse workers. Veganism, not lacto-ovo vegetarianism, is the best solution for reducing and ultimately eliminating animal slaughter. A lacto-ovo vegetarian diet, by definition, includes animal products, including milk and eggs, which require animal slaughter.¹⁵⁷ Roosters are required for breeding laying hens (chickens for egg production, not meat production); since only unfertilized eggs are produced for consumption, a continual breeding stock is necessary.¹⁵⁸ In egg production, male chicks are considered useless.¹⁵⁹ They are therefore killed almost immediately after hatching.¹⁶⁰ When hens can no longer produce eggs, which happens after two to three years, they are slaughtered; the

¹⁵⁵ UN report calls for repurposing of USD 470 billion of agricultural support that distorts prices, environment and social goals, UN ENVIRONMENTAL PROGRAMME (Sept. 14, 2021), <https://www.unep.org/news-and-stories/press-release/un-report-calls-repurposing-usd-470-billion-agricultural-support>.

¹⁵⁶ Andrew Gough, *The disturbing link between slaughterhouse workers and PTSD*, SURGE (Jan. 24, 2021), <https://www.surgeactivism.org/articles/slaughterhouse-workers-and-ptsd>.

¹⁵⁷ Lizzie Streit, *Do Vegetarians Eat Eggs?*, HEALTHLINE (May 20, 2020), <https://www.healthline.com/nutrition/do-vegetarians-eat-eggs>.

¹⁵⁸ *Factory Farm to Table: The Truth Behind Cheap Meat, Eggs, and Dairy*, THE HUMANE LEAGUE (Aug. 3, 2020), <https://thehumaneleague.org/article/factory-farm-to-table-the-truth-behind-cheap-meat-eggs-and-dairy>.

¹⁵⁹ *Id.*

¹⁶⁰ *Id.*

lives of these hens are shortened out of their eight-year lifespan.¹⁶¹ Dairy cows are slaughtered for similar reasons in milk production.¹⁶²

Even without all these incentives for going vegan, “the number of U.S. consumers identifying as vegan grew from 1% to 6% between 2014 and 2017, a 600% increase.¹⁶³ This is evidence that it is realistic that more people will make the transition given these incentives. If society shifts to a plant-based lifestyle, slaughterhouse workers will no longer be forced to slaughter animals and can find work in the much less violent and stressful plant agriculture.

Conclusion

As exploitative and detrimental as the meat industry is, it only exists because of the demand for animal-based products. The best thing people can do is adopt a vegan lifestyle that excludes, as much as practicable, any and all animal products, including food, clothing, and cosmetics. You’re at a the Memorial Day cookout, and the grill is fired up, but it’s cooking veggie skewers, and plant-based hotdogs and burgers. You’re honoring not only the veterans who have served this country, but also respecting the slaughterhouse workers by refusing to support the system that harms and exploits them. This time I bet you’ll enjoy the food just as much, if not more. By changing our habits, we can break this cycle of exploitation and suffering of both animals and human beings.¹⁶⁴

¹⁶¹ Julie R. Thomson, *Here’s What Farms Do To Hens Who Are Too Old To Lay Eggs*, HUFFPOST (May 14, 2018), https://www.huffpost.com/entry/egg-laying-hens_n_59c3c93fe4b0c90504fc04a1.

¹⁶² Factory Farm to Table, *supra* note 157.

¹⁶³ Janet Forgive, *The Growing Acceptance Of Veganism*, FORBES (Nov. 2, 2018), <https://www.forbes.com/sites/janetforgive/2018/11/02/picturing-a-kindler-gentler-world-vegan-month/?sh=70ce393d2f2b>.

¹⁶⁴ *Slaughterhouse Workers*, *supra* note 16.

