SUPERBUGS COULD KILL 2,000 TO 9,000 NEW YORKERS NEXT YEAR; NEW ANTIBIOTIC-RESISTANCE CONTROL ACT WILL REDUCE RISK

(Albany, N.Y.) – New York State could see more than 164,000 serious illnesses and 2,000 to 9,000 deaths in the next year, from what experts call a slow-moving pandemic of antibiotic-resistant "superbug" infections, according to an estimate released today by a coalition of consumer, health, and food safety groups. The groups applauded the recent introduction of legislation to combat the growing threat of antibiotic-resistant infections. The bill, introduced by State Senator Brian Kavanagh (D-Manhattan and Brooklyn) and Assemblymember Linda Rosenthal (D-Manhattan), titled the “Antibiotic-Resistance Control Act” (S.8847/A.10097) mandates improved antibiotic stewardship in medicine and animal agriculture to prevent the spread of superbugs.

Senator Kavanagh and Assemblymember Rosenthal indicate that their bill will be the first in the nation to take the comprehensive "One Health" approach recommended by the U.S. Centers for Disease Control (CDC). Senator Kavanagh, Chair of the Committee on Housing, Construction and Community Development, stated, “This approach means we can address both human and animal antibiotic use together, instead of piecemeal, to control resistance.”

“The threat to New Yorkers from antibiotic-resistant superbugs is real,” said Assemblymember Linda B. Rosenthal, Chair of the Committee on Social Services. “If COVID taught us anything, it’s that the United States must be much better prepared to handle the next threat to public health. My bill with State Senator Brian Kavanagh will ensure that New York is doing its part to address these superbugs by reducing our overuse of medically important antibiotics. And, the bill will also help improve the conditions under which animals are kept for food-producing purposes; they are often prophylactically given antibiotics to stop the spread of preventable disease caused by their poor conditions. Instead, animals will be raised under conditions that minimize the need for medically important antibiotics, including the use of vaccines, providing healthy diets, maintaining sanitary houses, and other good husbandry practices.”
Based on national estimates by the CDC and researchers at the University of Washington, we can conservatively predict that between 2,000 and 9,000 New Yorkers will die in the next year from superbug infections – MRSA, urinary tract infections, salmonella and other infections against which antibiotics no longer work. At least 164,000 New Yorkers can expect to become seriously ill, said Blair Horner, Executive Director of the New York Public Interest Research Group (NYPIRG). "We need action now." NYPIRG, Consumer Reports (CR), the Center for Food Safety (CFS), and more than 25 other consumer, public health, animal welfare, and environmental groups support the bill.

Saul Hymes, MD, Albany Medical Center, stated, "As a pediatric infectious disease physician, it has been horrifying to have to watch some of my patients die of resistant infections, powerless to stop them because we had no more antibiotics to offer. We need to slow the emergence of these fatal superbugs. This bill, if passed, will help ensure the judicious use of antibiotics in both animals and people, which we must do so that no child ever has to suffer that awful fate."

Lance B. Price, Ph.D., Founder, Antibiotic Resistance Action Center, George Washington University, said, "Two thirds of antibiotics sold in the US are given to food animals. In my research I have seen how antibiotic-resistant superbugs emerge when these drugs are used regularly in animals, and how these superbugs pass from animals to people. We need to implement the One Health approach to reducing both human and animal antibiotic use embodied in this legislation."

Urging Quick Action
"We call this the Squash Superbugs bill, and we urgently need action," stated Jean Halloran, a CFS Policy Advisor. Recent studies found superbugs globally are already killing 1.2 million annually and could kill 10 million annually by 2050 if nothing is done. "That would exceed current deaths from COVID."

"The projected rates of illness and death are unacceptable," stated Chuck Bell, Programs Director at Consumer Reports, in Yonkers. "This is an urgent problem. We urge the NY Senate and Assembly to pass the Squash Superbugs bill quickly, to get ahead of the superbug pandemic before it is too late."

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May 2, 2022

Re: Take Action to Protect New Yorkers from Antibiotic-Resistant “Superbugs”

Dear Governor Hochul, Senate Majority Leader Stewart-Cousins, Assembly Speaker Heastie, Senate Minority Leader Ortt, and Assembly Minority Leader Barclay:

We urge you to address the growing threat to public health from emergent strains of antibiotic-resistant bacteria, with a global death toll predicted to far surpass that ultimately caused by the COVID-19 virus if measures to curb it are not taken now. Antibiotic-resistant bacteria (aka “superbugs”) are bacteria that are immune to life-saving antibiotics. The troubling rise in antibiotic resistance is fueled by the overuse and misuse of antibiotics in medical and agricultural settings, and is robbing the world of its most important tools for fighting against infectious disease.

With the COVID-19 pandemic raging on, and the medical profession continuing to grapple with implementation of antibiotic stewardship programs and the education of both doctors and patients as to appropriate antibiotic use, we, the undersigned organizations, urge you to take the comprehensive “One Health” approach to antibiotic resistance advocated by the World Health Organization and the Centers for Disease Control (CDC). The One Health approach includes both curbing medical overuse and addressing the other main cause of antibiotic resistance – the misuse and overuse of medically important antibiotics in animal agriculture. We ask your support for bill S.8847 (Kavanagh)/A.10079 (L. Rosenthal), which will create an Office of Antibiotic Resistance Control in the Department of Health and prohibit the use of medically important antibiotics in food-producing animals except for treatment of sick animals and for certain medical procedures.

The growth of antibiotic resistant superbugs has been aptly described as a slow-motion pandemic. The CDC currently estimates that antibiotic-resistant bacteria are responsible for at least 2.8 million infections in the U.S. and at least 35,000 deaths annually, though experts believe the actual numbers are much higher. A U.K. government-sponsored study predicted 10 million deaths per year worldwide by 2050 – more than from cancer – if immediate action is not taken.

Controlling resistance requires both strong antibiotic stewardship measures in medicine and reducing antibiotic use in animals. In the U.S., approximately 65 percent of medically important antibiotics, i.e., those that are important for human medicine, are also sold for use in food animals – cattle, pigs, turkeys, chickens – typically raised in large-scale industrialized operations, but on smaller farms, too. Surprisingly, most of the animals getting antibiotics aren’t actually sick. Instead, antibiotics are routinely administered to the animals at subtherapeutic levels daily, mixed into their food and/or water, so that they can survive often unsanitary, overcrowded living conditions and unnatural diets. Moreover, despite increasing awareness of the antibiotic-resistance crisis, recent FDA reports show the sale of medically important antibiotics for use in food-producing animals has increased since 2017, despite certain limits imposed by FDA starting that year.

Blanket, routine use of antibiotics on entire populations of animals creates the perfect conditions for the evolution of bacteria that are resistant to those same antibiotics. While antibiotic resistance is a naturally occurring phenomenon, the speed of its evolution is pushed into hyperdrive when bacteria are repeatedly exposed to antibiotics. The antibiotics kill off the bacteria that don’t have resistance, but the bacteria that already have a mutation or gene that makes them resistant will survive, multiply, spread, and ultimately threaten people.
Antibiotic-resistant superbugs travel easily from farms to people. They can be carried by air, water, farm workers, and on meat and produce. This is a significant problem for public health. CDC estimates that approximately 661,000 Americans get sick each year by eating food contaminated with antibiotic-resistant bacteria and that 24% of all antibiotic-resistant infections come from food and animals. Superbugs can spread easily between people in hospitals and nursing homes, but also via direct contact, poor hygiene, sharing of personal items, and failure to wash cooking utensils. Antibiotic-resistant bacteria can also transfer their resistance to other bacteria, e.g., those in the human gut, making gut bacteria resistant to medically important antibiotics, too.

The World Health Organization, the United Nations General Assembly, the CDC, the New York State Department of Health, and many other public health organizations have identified antibiotic-resistant infections as a grave threat to human health. The COVID-19 pandemic, during which desperate doctors around the globe liberally dispensed broad-spectrum antibiotics under the assumption that sick COVID-19 patients were highly susceptible to secondary bacterial infections, has exacerbated the problem. While it turned out that only a small fraction of COVID-19 patients got secondary bacterial infections, experts believe this widespread use of broad-spectrum antibiotics has likely spurred the development of more antibiotic-resistant bacteria. Unchecked, the growing threat of antibiotic resistance will lead to a world where strep throat, tuberculosis, childbirth, UTIs, tooth infections, skin scrapes, and routine surgery will once again come with a high mortality rate, as they did before the discovery of antibiotics 100 years ago.

Given these high stakes – and the lack of effective regulation at the federal level – it’s up to states to help save antibiotics for those who need them now and in the future and mitigate another looming public health crisis. We’ve already seen what federal government inaction in the face of a pandemic leads to. New York took an important step last year when it passed a law requiring every hospital and nursing home to establish an antibiotic stewardship program. California and Maryland recently passed laws restricting the routine use of antibiotics in farm animals. The European Union banned all routine use of antibiotics on farms, including prophylactic group treatments, as of February 2022. New York should lead the U.S. in fighting against antibiotic resistance by establishing an Office of Antibiotic Resistance Control in the Department of Health to oversee development and implementation of a comprehensive One Health approach to the problem, monitoring antibiotic stewardship in medical settings and limiting the use of antibiotics in food-producing animals to treatment of sick animals, (e.g., dairy cows with mastitis), control of the outbreak of disease from a contagious animal(s), or in relation to certain medical procedures (e.g., surgery, castration).

Keep medically important antibiotics working for those who need them. Pass S.8847 (Kavanagh)/A.10079 (L. Rosenthal).

Sincerely,

Carrie Balkan, Executive Director, American Grassfed Association
Cathy Liss, President, Animal Welfare Institute
Laura Rogers, Managing Director, Antibiotic Resistance Action Center, George Washington University
Jay Feldman, Executive Director, Beyond Pesticides
Maisie Ganzler, Chief Strategy & Brand Officer, Bon Appétit Management Co.
Jaydee Hanson, Policy Director, Center for Food Safety
Mary Smith, Church Women United in New York State
Bobbi Wilding, MS, Executive Director, Clean and Healthy New York
Michael Hansen, PhD, Senior Scientist, Consumer Reports
Peter Lehner, Managing Attorney, Sustainable Food & Farming, Earthjustice
Andrew deCoriolis, Executive Director, Farm Forward
Alex Beauchamp, Northeast Region Director, Food & Water Watch
Steven Roach, Safe and Healthy Food Program Director, Food Animal Concerns Trust
Diana Wright, Owner, FoodScraps 360
Danika Oriol-Morway, Executive Director, FOUR PAWS USA
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Gail R. Hansen, DVM, MPH, Hansen Consulting LLC
Mimi Brody, Director, Federal Affairs, Humane Society Legislative Fund
Brian Shapiro, Senior State Director, New York, Humane Society of the United States
Eileen Jefferson, DVM, New York State Representative, Humane Society Veterinary Medical Association
Bob Martin, Director, Food System Policy Program, The Johns Hopkins Center for a Livable Future
Jeanine Thomas, Founder, MRSA Survivors Network
David Wallinga, Senior Health Officer, Natural Resources Defense Council
Blair Horner, Executive Director, New York Public Interest Research Group (NYPIRG)
Christian John Lillis, Executive Director, Peggy Lillis Foundation
Neal Barnard, MD, President, Physicians Committee for Responsible Medicine
Roger Downs, Conservation Director, Sierra Club Atlantic Chapter
Daniel Lipson, Co-Chair, SUNY New Paltz Environmental Task Force
Daniel E. Estrin, Esq., General Counsel & Advocacy Director, Waterkeeper Alliance
Squash Superbugs Bill (S.8847/A.10097)

Why NYS Needs Antibiotic-Resistance Control
As the COVID-19 pandemic subsides, another public health crisis looms. Antibiotics, one of the medical miracles of the last century, are rapidly losing their effectiveness due to overuse and misuse in medicine and agriculture. Antibiotic-resistant “superbugs” (bacteria) and the infections they cause are on the rise. To combat this slow-motion epidemic, we must take action now to preserve antibiotics for ourselves and future generations.

Deaths from Superbugs Are Growing
According to the US Centers for Disease Control and Prevention (CDC), 2.8 million Americans develop antibiotic-resistant superbug infections each year, ranging from ear infections to tuberculosis, and at least 35,000 people die from them.¹ Researchers at the Washington University School of Medicine estimate the number of deaths to be significantly higher—more than 150,000 annually.²

People are exposed to superbugs in hospitals, on sports equipment, in locker rooms, working with livestock, in food, and by contact with other infected individuals. CDC estimates that 24 percent of superbug infections come from what we eat.³

The problem is expected to get much worse. A UK government-sponsored study estimated that by 2050, 10 million people globally will die each year of antibiotic-resistant infections, more than currently die of cancer.⁴ A recent study in the peer-reviewed medical journal Lancet found that global deaths from resistant infections already exceed 1.2 million annually, more than the annual toll from AIDS or malaria.⁵

The Root of the Problem
The more we use antibiotics, the more bacteria become immune to them. Thus, experts ranging from those at the World Health Organization (WHO) to the American Medical Association agree that we must reduce antibiotic use in both medicine and agriculture.⁶

Some progress has been made in reducing medical use, though problems remain in patient education about appropriate antibiotic use, physician overprescribing, and lack of rigorous antibiotic stewardship program implementation. Some superbugs are particularly hard to eradicate. A study published by the Infectious Disease Society of America found hospital rates of MRSA (methicillin-resistant Staphylococcus aureus) infections, after declining for several years, increased from 2016 to 2019.⁷

As for reducing agricultural use, according to US Food and Drug Administration data, progress has stalled. About two thirds of all medically important antibiotics—such as penicillin and tetracycline—are sold for use in food animals, mostly to prevent disease in large-scale and unsanitary factory farming conditions.⁸ Sales actually increased 8 percent between 2017 and 2020. While almost all chickens are now raised without medically important antibiotics, antibiotics sales for turkey, cattle, and swine production are still going up.⁹

The widespread use of antibiotics in food animals’ food and water increases the odds that antibiotic-resistant superbugs will proliferate in their gut, and contaminate meat and poultry during slaughtering and processing. A

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² https://www.cambridge.org/core/journals/infection-control-and-hospital-epidemiology/article/reestimating-annual-deaths-due-to-multidrugresistant-organism-infections/C9B09A78F7FCA1EAA922AF4506F3FF7C
⁵ https://www.thelancet.com/journals/lancet/article/PIIS0140-6736(21)02724-0/fulltext?sec1
⁷ https://academic.oup.com/ofid/article/9/1/ofab585/6433074
Consumer Reports test of ground turkey found that an overwhelming 83% of conventionally raised samples contained resistant bacteria. Superbugs can spread further when animal manure is used as a crop fertilizer or if waste storage tanks rupture or overflow, contaminating lettuce, spinach, and other produce. CDC says that 661,000 people a year get food poisoning from antibiotic-resistant strains of salmonella and campylobacter.

People who work with food animals are at special risk. Slaughterhouse workers are 5 times more likely than the average person to carry MRSA. Poultry workers are 6 times, cattle workers 11 times, and swine workers 15 times more likely to test positive for MRSA. Even veterinarians are 7 times more likely than the average person to harbor this widespread superbug. MRSA most often causes skin infections, but can also cause lung or bloodstream infections and can result in sepsis or death.

Solving the Problem

WHO and CDC both recommend taking a “One Health” approach to combating antibiotic resistance, such that the disparate government agencies overseeing health care, farming, worker safety, and the practice of human and animal medicine are unified in their strategies. Antibiotic stewardship must be effectively implemented in hospitals and nursing homes and their use in food animals must be minimized.

The US Federal Task Force for Combating Antibiotic-Resistant Bacteria established goals in its National Action Plan 2020-2025 of reducing health care-associated antibiotic-resistant infections by 20 percent and community-acquired antibiotic-resistant infections by 10 percent by 2025. The European Union has set a goal of reducing use of medically important antibiotics in food animals by 50 percent by 2030.

The World Health Organization in November 2017 called on all food producers to stop using medically important antibiotics in food-producing animals for prevention of infectious diseases that have not been clinically diagnosed. State lawmakers in California and Maryland have placed restrictions on routine antibiotic use in food-producing animals for disease prevention, as has the European Union.

How to Combat Superbugs in New York State

In 2018, the NYS Antimicrobial Resistance Prevention and Control Task Force released the Stop Antibiotic Resistance Roadmap, detailing the severity of the problem and recommending solutions for New York’s healthcare, veterinary, and agriculture communities. The New York State Department of Health, in its Communicable Disease Prevention Agenda 2019-2024, established Antibiotic Resistance and Healthcare-Associated Infections as one of five major focus areas. Under a law passed last year, New York required hospitals and nursing homes to have antibiotic stewardship programs. Some New York dairy farmers have significantly reduced their antibiotic use using new techniques developed by Cornell University.

The severity of the problem, however, demands a comprehensive attack. Superbugs are causing many urinary tract, skin, and blood infections, some of which are proving fatal. Experts warn of a much darker future in which superficial cuts become deadly, and hip replacements, organ transplants, and C-sections become near-impossible due to high mortality from untreatable post-surgical infections. New York State should establish a consistent and coordinated response led by the Department of Health to control the incidence and spread of antibiotic resistance that includes aggressive implementation of antibiotic stewardship in hospitals and nursing homes and puts an end to routine antibiotic use in food animals for disease prevention. New York State should pass S.8847 (Kavanagh)/A.10097 (L. Rosenthal), making it a leader in addressing the superbug epidemic before it’s too late.

13 https://www.who.int/news/item/01-12-2021-tripartite-and-unep-support-ohлеп-s-definition-of-one-health
14 https://www.cdc.gov/onehealth/basics/index.html
ANTIBIOTIC RESISTANCE
from the farm to the table

RESISTANCE
Animals can carry harmful bacteria in their intestines

When antibiotics are given to animals...

Antibiotics kill most bacteria
But resistant bacteria can survive and multiply

SPREAD
Resistant bacteria can spread to...

animal products
produce through contaminated water or soil
prepared food through contaminated surfaces
the environment when animals poop

EXPOSURE
People can get sick with resistant infections from...

contaminated food
contaminated environment

IMPACT
Some resistant infections cause...

mild illness
severe illness and may lead to death

About 1 in 5 resistant infections are caused by germs from food and animals.

Source: Antibiotic Resistant Threats in the United States, 2013

Learn more about antibiotic resistance and food safety at www.cdc.gov/foodsafety/antibiotic-resistance.html
Learn more about protecting you and your family from resistant infections at www.cdc.gov/drugresistance/protecting_yourself_family.html