

# Arsenic in Chicken: Using Arsenic in Poultry Production Increases Americans' Cancer Risk



## Introduction

When most Americans think of arsenic, they think of rat poison and cigarettes. Many may not realize that arsenic-based drugs, known as “arsenicals,” are approved by the Food and Drug Administration (FDA) for use in chickens, turkeys, and pigs. Arsenicals are added to animals’ feed to make them grow faster with less feed, and to make their meat look more appealing, among other purposes.

Research by the Johns Hopkins Center for a Livable Future (CLF) has shown that feeding arsenicals to chickens leads to the accumulation of the inorganic form of arsenic—a known human carcinogen—in chicken breast meat. Using arsenicals increases Americans’ risk of cancer and other diseases. Despite these concerns, the FDA has refused to protect public health by withdrawing the drugs’ approvals. It is time for the agency to take meaningful action to end arsenical use.

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## Key Points

- There are four arsenical active ingredients and 115 arsenical products approved by the FDA for use as feed and drinking water additives in chickens, turkeys, and/or pigs. (Perhaps the most commonly known arsenical ingredient is roxarsone.)
- More than 1.5 million pounds of arsenicals were sold in 2010, the most recent year for which data are available, making arsenicals the fourth bestselling food-animal antimicrobials of that year.

## Public Health Concerns

- Chronic exposure to inorganic arsenic causes lung, bladder, and skin cancers and has been linked to cardiovascular disease, diabetes, cognitive deficits, and adverse pregnancy outcomes.
- Using arsenicals to produce poultry increases Americans' exposure to inorganic arsenic via food, and it releases arsenic into rural communities when poultry waste is used as fertilizer.
- A recent CLF study found that arsenical use triples the concentration of inorganic arsenic in chicken breast meat compared to the breast meat of chickens raised without arsenicals.

## Policy Options

The FDA should withdraw arsenical approvals. In 2011, when roxarsone was linked to increased inorganic arsenic in food, Pfizer voluntarily suspended the sale of roxarsone products. But the approvals remain in place, and the products may be returned to the market at anytime. Products containing nitarosone, another arsenical ingredient, remain on the market.

There is strong evidence of public health risk regarding arsenicals. Not only should the FDA withdraw approvals for roxarsone and nitarosone, but it should withdraw approvals for two other arsenical ingredients—arsanilic acid and carbarsone—also approved as feed additives.

## Action

- Call on the FDA to protect public health by withdrawing its approvals of arsenical products.
- Support legislation that would permanently ban arsenical drug use by requiring the FDA to withdraw its approvals of all arsenical products.



## Who We Are

Based within the Bloomberg School of Public Health, The Johns Hopkins Center for a Livable Future (CLF) is an academic center that conducts and promotes research and communicates information about the complex inter-relationships among food production, diet, environment and human health.

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