

New Study Finds Toxic Chemicals in Plastic Gloves Used at McDonald's, Burger King, and Wendy's

Harmful plasticizer chemicals in some food service gloves leach into food upon contact, and children and pregnant women are most vulnerable to harmful health effects

July 25, 2019--An alarming new report finds that disposable PVC food-handling gloves used in restaurants nationwide may contain toxic plasticizer chemicals called *ortho*-phthalates (THAL-eights) that leach into the food we eat.

Some gloves from **Wendy's**, **Burger King**, and **McDonald's** were found to contain phthalates, according to the report by the Coalition for Safer Food Processing & Packaging, a national alliance of public health nonprofits. The health advocates were encouraged to find that the **Panera Bread**, **Starbucks** and **Subway** restaurants visited were using safer polyethylene gloves.

The Coalition found that **one out of seven** vinyl (polyvinyl chloride, or PVC) food-handling gloves tested contained toxic phthalates, which research shows migrate into food upon contact. Further, **two-thirds of fast-food restaurants** visited used PVC gloves to handle food.

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- [Full technical report](#)

The Coalition is calling on McDonald's, which dominates the restaurant sector in annual sales, to be a market leader and protect its customers with a public commitment to end all use of vinyl food service gloves—the only way of preventing phthalates in some vinyl gloves from contaminating food.

“Vinyl, or PVC, is widely known as the ‘poison plastic’ because it creates toxic chemical hazards across its lifecycle—from production to use and disposal— including dangerous chemical additives that leach out of the plastic,” **said Mike Belliveau, executive director of the Environmental Health Strategy Center, leading member of the coalition.** “Polyethylene gloves are safer, widely available, and affordable--and where permitted, simply washing hands with soap and water has been proven just as safe as wearing gloves. It's time for restaurants to take off the toxic gloves, and do away with vinyl gloves altogether.”

“We found that even the same brand of vinyl glove is not always free of toxic phthalates. Some samples of the same brand had phthalates, while others didn't. Over two-thirds of the restaurants we visited used vinyl gloves, which means that any of those restaurants could potentially get a box of gloves that contained phthalates,” **said Lauren Olson, Science Campaign Director at the Michigan-based Ecology Center, which led the gloves testing.**

Food is most Americans' primary route of exposure to phthalates, and research has found that dining out and eating fast food is associated with higher phthalate levels in people's bodies. The American Academy of Pediatrics released a policy statement in 2018 calling for U.S. government action to keep these chemicals out of food, and Europe, Japan, and the state of Maine have all banned or restricted phthalates from food contact materials, including food-handling gloves, because of the strong science linking exposure to these chemicals to harmful health effects.

"In my research, I discovered that dining out and eating fast food is linked to higher exposure to phthalates," **said Dr. Ami Zota, ScD, MS, of the Milken Institute School of Public Health at George Washington University.** "My research has also found that African-American and Latino communities may be particularly vulnerable to phthalate exposures from processed and packaged food. We must do better for all children and families, and eliminate sources of phthalates, such as vinyl food-handling gloves, that could contaminate food."

"Phthalate exposure threatens children's health, with impacts to male genital development and links to cardiovascular disease and obesity," **said Dr. Leonardo Trasande, MD, MPP, lead author of the 2018 AAP policy statement.** "These harmful chemicals certainly don't belong in foodservice gloves, where they can contaminate the food that children and families eat."

PVC is a hard plastic that requires plasticizers, like phthalates, in order to be made flexible enough for use as gloves, and these chemicals comprise a full third of a PVC glove, on average. **Plasticizers are not chemically bound to the glove and are contaminating our food**, as the Coalition's 2017 [study](#) on phthalates in dairy products confirmed. The production and disposal of vinyl also uses or releases numerous other highly hazardous chemicals including chlorine gas, ethylene dichloride, vinyl chloride, dioxins, mercury, asbestos, and PFAS.

The phthalates discovered in foodservice gloves were DINP and DIDP (both of which require a warning label under California's Proposition 65), DPHP, which is currently unregulated, and DEHP, a known hormone-disrupting chemical which is subjected to the most bans globally. DINP, DIDP, and DPHP all show harmful health effects similar to DEHP. This is the first time that DPHP has been documented to be used in food-handling gloves.

The report also found that six out of seven vinyl gloves contained DEHT, or DOTP, a plasticizer chemical intended to replace *ortho*-phthalates. New research suggests DOTP may be a hormone-disrupting chemical, and human exposure is widespread and increasing. Like all plasticizers, DOTP is also not chemically bound to the glove and can leach into food, which is a major source of exposure to this chemical. For these reasons, the Coalition does not recommend DOTP as a replacement for *ortho*-phthalates.

Because polyethylene does not require any plasticizer chemicals, it is a safer alternative to vinyl.

For the report, researchers at the Ecology Center tested 60 vinyl gloves from 31 distributors that import into the U.S. most of the food-handling vinyl gloves for use in restaurants and processing. An additional 12 vinyl gloves were obtained by restaurant supply stores to test gloves that might end up touching an Americans' food. Twelve organizations obtained an additional 63 gloves (of a variety of materials) from 56 locations of 15 popular fast-food restaurants in 14 states.

These same restaurants received poor grades for their chemical safety policies and practices on the November 2018 [Retailer Report Card](#) by the [Mind the Store](#) campaign, and in June 2018 health advocates sent these brands letters requesting that they take public action to keep phthalates out of food-contact materials, including gloves.

In total, 123 food-handling gloves, including 101 vinyl gloves, were tested, making this the largest study of phthalates in foodservice gloves ever undertaken.

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[The Coalition for Safer Food Processing & Packaging](#) is a national coalition of nonprofit organizations concerned about human health, food safety, and social justice who are working together to persuade major food manufacturers to identify and eliminate phthalates and other chemicals of high concern from the American food supply.

The Coalition includes the [Environmental Health Strategy Center](#), [Ecology Center](#), [Healthy Babies Bright Futures](#), [Safer Chemicals Healthy Families](#), [WE ACT](#), [Toxic-Free Future](#), [Center for Food Safety](#), the [Learning Disabilities Association of America](#), and others.