

Testimony Opposing the Montgomery County Plastic Bag Ban

I am Dr. Margery Smelkinson, an infectious disease scientist and resident of Montgomery County. Thank you for the opportunity to testify regarding proposed Bill 24-24 to ban single-use plastic bags in Montgomery County. While I understand the intent behind this legislation—to reduce litter and environmental waste—I believe the proposed policy will have unintended consequences that could outweigh its benefits. I urge the Council to reconsider the bill and explore alternative solutions that better balance public health, environmental impact, and economic feasibility.

Public Health Risks

Research suggests that banning single-use plastic bags leads to significant public health risks. A 2012 study¹ found that jurisdictions implementing plastic bag bans experienced increases in foodborne illnesses. For example, following San Francisco's 2007 ban, emergency room visits and deaths related to foodborne illnesses rose compared to other counties without such bans. Similar trends were observed in other parts of California after bans were implemented. Based on rates seen in San Francisco, a plastic bag ban here could lead to an additional one hundred to three hundred hospitalizations due to E. coli each year.

Reusable bags, a primary alternative to single-use plastic bags, are often contaminated with bacteria from raw meat, fish, and produce. A 2010 study² discovered bacterial contamination in most reusable bags, with 12% carrying E. coli. The costs of these food poisoning incidents must be weighed against the benefits of reduced litter and environmental harm. While regular washing of reusable bags could mitigate these risks, studies³ show that only about 3% of people wash their reusable bags regularly. This widespread lack of maintenance poses a significant health risk to our community.

Environmental Trade-Offs

The environmental impact of reusable bags is not as straightforward as it may seem. Producing a reusable bag requires substantially more resources than a single-use plastic bag. For instance, a cloth bag must be used thousands of times to offset the environmental impact of its production, including higher water and energy usage⁴. Additionally, washing reusable bags—a

¹ Klick, Jonathan and Wright, Joshua D., Grocery Bag Bans and Foodborne Illness (November 2, 2012). U of Penn, Inst for Law & Econ Research Paper No. 13-2, Available at SSRN:

<https://ssrn.com/abstract=2196481> or <http://dx.doi.org/10.2139/ssrn.2196481>

² Williams, D. L., Gerba, C. P., Maxwell, S., & Sinclair, R. G. (2010). Assessment of the potential for cross-contamination of food products by reusable shopping bags. University of Arizona and Loma Linda University.

³ Li, Y., Hernandez-Viezcas, J. A., Nunez-Lopez, C. A., & Keller, A. A. (2016). Efficacy of treatment of reusable grocery bags with antimicrobial silver to reduce enteric bacteria. *Food Protection Trends*, 36(6), 431-439.

⁴ Nunez, S., & Bailey, M. (2020). **Life cycle assessment of reusable and single-use plastic bags in California**. R

necessary step to prevent bacterial contamination—consumes water, soap, and energy, further increasing their environmental footprint.

Single-use plastic bags, on the other hand, have the lowest overall environmental impact when reused, even just once, for purposes like lining trash bins or disposing of pet waste. A 2011 UK study⁵ found that single-use plastic bags outperformed alternatives like paper or cotton bags in terms of environmental impact. Additionally, paper bags, which would remain available under the bill for a \$0.10 tax, are more expensive, bulkier, and less durable, making them a less practical alternative for many residents.

Ineffectiveness of Bag Bans

Evidence suggests that bag bans do not consistently lead to lasting behavioral change. For instance, a Los Angeles Times report⁶ in 2023 noted that after a disposable plastic bag ban, many residents began accumulating large numbers of reusable bags, often using them only a few times before discarding them. This practice undermines the intended environmental benefits of the policy.

An Alternative Solution

If litter reduction is a primary goal, increasing the existing bag tax, if collected and utilized properly, may be a more effective approach than a ban. A tax provides flexibility for residents to use disposable bags when necessary, particularly for raw meats and other foods prone to contamination, while still discouraging overuse. If implemented properly, revenue collected from an increased tax could fund local environmental initiatives, amplifying its positive impact.

Conclusion

While reducing litter and protecting our environment are noble goals, the proposed plastic bag ban carries significant risks to public health and may not achieve the desired environmental benefits. I urge the Council to carefully weigh the trade-offs and consider alternative measures, such as increasing the bag tax, that can better address these challenges. Let us strive for policies that protect our county's natural beauty without compromising the health and well-being of our residents.

Thank you for considering my testimony.

⁵ Environment Agency. (2011). Life cycle assessment of supermarket carrier bags: A review of the bags available in 2006. Bristol, UK: Environment Agency.

⁶www.latimes.com/environment/story/2023-08-24/how-many-people-take-reusable-bags-to-grocery-store-california