NIH GREEN ZONE NEWSLETTER

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The Increasing Trend of Styrofoam Bans

In recent years, there has been an increase in the number and severity of bans on expanded polystyrene, commonly referred to as EPS or Styrofoam. The products most frequently made from this material are food service products, such as clamshell containers, bowls, plates, trays, egg cartons and cups.[1] There have also been bans on polystyrene loose fill packaging (i.e. packing peanuts).[1] These materials are being prohibited due to the threat they pose to the environment.

Plastic products, like polystyrene, do not decompose. Instead, they photo-degrade into smaller and smaller pieces of plastic, called microplastics.[2] Since plastics like polystyrene due not decompose, their constituent chemicals remain in the environment.[2] This makes plastic pollution problematic for many reasons. Animals often mistake small pieces of plastic for food and ingest them, which can cause physical harm or lead to bioaccumulation of plastics within the organism and throughout the food chain.[2] Microplastics have also been shown to adsorb pollutants from the environment and leech them into living organisms after ingestion.[2] The effects of this exposure on animal or human health are still uncertain.[2] However, reducing plastic pollution is a strategy many city and county governments are turning towards as a preventative measure.

Polystyrene, and specifically Styrofoam, presents a unique challenge for recycling due to its lightweight and bulky nature.[3] Large volumes of Styrofoam weigh very little and result in only small amounts of recyclable material.[3] Additionally, the size of the Styrofoam makes it difficult to collect and transport the material to recycling facilities.[3] For this reason, many recycling facilities have opted not to recycle polystyrene and Styrofoam.

With limited options for recycling, counties and cities around the country have turned to bans as a way to reduce the amount of Styrofoam waste.[4] These bans typically prohibit the use and sale of Styrofoam products, with increasing fines dealt to offenders.[4] Montgomery County, where the Bethesda campus is located, issued a ban on Styrofoam products and polystyrene loose-fill packaging in 2016.[5] Similar bans are also in effect in nearby Anne Arundel County, Prince George's County, Baltimore City and the District of Columbia.[6] Now, Maryland is attempting a statewide ban of Styrofoam.[6] This bill has been passed by both houses of the state legislature, but requires the signature of Governor Larry Hogan to become official.[7] This would be the first statewide ban in the United States.

Even as Styrofoam and polystyrene bans increase, it is important to note that these items can still be purchased and shipped from areas where bans are not in effect. This means we will likely still encounter Styrofoam on a daily basis for the foreseeable future. Since recycling is likely not an option, reuse is the most environmentally-friendly way to deal with polystyrene waste. Many companies, like The UPS Store, are creating drop-off locations at their facilities for Styrofoam products, which will allow them to be reused. In fact, NIH staff can participate in similar Styrofoam take-back programs at the NIH in Buildings 35, 37, 10 (B2 loading dock) and 50 on the Bethesda campus. Please contact the Division of Environmental Protection if you would like more information. Keep programs like these in mind whenever you receive Styrofoam products!

TAKE ACTION

Polystyrene Product Alternatives

As mentioned above, polystyrene products are being banned more and more. While these products will still be encountered for the foreseeable future, it is important to identify some alternatives we can use to replace polystyrene. Read inside for more detail.

LEARN MORE

EVENT

Join the NIH for Bike to Work Day

The NIH will again participate in the Washington D.C. area Bike to Work Day event, which will occur on Friday, May 17. A pit stop will be located on-campus in front of Building 1, in addition to many others in the area. Full details are available inside.

LEARN MORE

NEMS TRAINING

Did you know? Although polystyrene can be recycled, it frequently is not for a variety of reasons, such as the issues with transporting such a large and lightweight material. However, some NIH locations offer Styrofoam Take-Back programs to help mitigate Styrofoam waste. To learn more about waste management at the NIH, please visit the NEMS Training webpage to view a short (20 minute) NIH environmental awareness training video.