What Consumers Should Know About Hair Smoothing Products and Formaldehyde

Some hair smoothing or straightening products contain or release formaldehyde (a chemical), which can be harmful. When such products are heated, formaldehyde gas is released into the air and can cause serious irritation of your eyes, nose, and lungs.

How is Formaldehyde Harmful?

Breathing in formaldehyde gas can be harmful and cause immediate reactions ranging from irritation of the eyes and throat to coughing, wheezing, or chest pain to chronic or long-term problems such as more frequent headaches, asthma, skin irritation, and possibly cancer. It is also a sensitizing agent that can cause allergic reactions upon repeated exposure. Of note, the International Agency for Research on Cancer has classified formaldehyde as a human carcinogen.

If You Are Thinking About Using Hair Smoothing Products:

1. Read the label. The U.S. Food and Drug Administration (FDA) discourages consumers from buying or using hair smoothing products containing formaldehyde or related ingredients for home use. If you are buying a hair smoothing product on a retail basis, such as at a store or online, the product is required to include a list of the ingredients. If a product doesn’t include a list of ingredients, the FDA recommends that you do not buy or use the product.

2. Ask your salon professional. Ask your salon professionals if they know whether the product that they are planning to apply contains formaldehyde-related ingredients. If they aren’t sure, you may not want to use the product, especially if you have had a reaction in the past. You could also ask to see if there is an ingredient list available for the product. However, products that are marketed only to licensed salon professionals may not have a list of ingredients. The law only requires products marketed on a retail basis to consumers (e.g., for purchase in stores or online) to include a list of ingredients on the product packaging. Products for use by licensed salon professionals are required to include directions for safe use and warning statements. You could ask if your salon professional has a Safety Data Sheet (SDS) for the product that you can see. The Occupational Safety and Health Administration (OSHA) requires products with hazardous ingredients to have a SDS (formerly a Material Safety Data Sheet), which communicates information on the hazards associated with those products.
3. Report bad reactions. If you experience a bad reaction to a hair smoothing product, stop using the product and report your symptoms to your health care provider. You can also report your symptoms to the FDA in either of these ways:

- Contact the Consumer Complaint Coordinator in your area. Locate one here: [http://www.fda.gov/Safety/ReportaProblem/ConsumerComplaintCoordinators](http://www.fda.gov/Safety/ReportaProblem/ConsumerComplaintCoordinators)
- Contact MedWatch by phone (1-800-FDA-1088) or online by filing a voluntary report at [http://www.fda.gov/medwatch](http://www.fda.gov/medwatch)

Salon workers also can file complaints about unsafe workplaces with OSHA, as stated in OSHA’s [Hazard Alert](http://www.fda.gov/medwatch).

**FDA Focus Groups**

From 2016 to 2017, the FDA conducted a series of focus groups with salon owners, stylists, salon customers, and retail consumers to determine their perceptions of hair smoothing products. The questions focused on potential hazards associated with use of these products and the participants’ reactions to different types of warning labels.

Findings indicated that salon owners and stylists try to be well-informed about hair smoothing products by taking the training that product manufacturers may provide and learning about short-term and long-term risks from using these products. Salon customers were less knowledgeable about possible risks: some reported they did not receive any information on the risks before stylists applied these products, while others reported side effects during treatment.

**OSHA’s Role**

The FDA does not have authority over how hair salons operate or over the practice of cosmetology. Workplace safety in general, including air quality issues, is regulated by OSHA. Hair salons are expected to follow federal law, including OSHA’s regulations, and state law where the business operates, which may specify safety practices such as assuring proper ventilation.

OSHA issued a [Hazard Alert](http://www.fda.gov/medwatch) to hair salon owners and workers about the possibility of breathing in formaldehyde when working with hair smoothing products. OSHA has set limits on the maximum airborne concentration of formaldehyde for both short and long-term workplace exposure. As a result, OSHA recommends proper ventilation and air flow to limit salon worker exposure to formaldehyde. OSHA has posted a [Formaldehyde Fact Sheet](http://www.fda.gov/medwatch) with this information.