

## What we **DO** know.

The cosmetics industry is one of the largest and most profitable of all industries, spending more on advertising than any other trade. According to Business Wire it can readily afford its advertising budget; as the Global Cosmetic Market yielded **\$460 billion** in 2014 and estimates a **6.4%** increase by 2020, totaling **\$675 billion**. The average person applies approximately **200** chemicals to their skin, hair and nails daily. As beauty therapists, serving in various capacities we are in the trenches working with cosmetic products daily; increasing our exposure.

**studies show**” and “**dermatologist tested**” and other trusted statements, rarely do we know if the dermatologist involved in the study was on the payroll of the cosmetic company. Most of these trusted studies are not even done on humans; they are performed in a glass tube.

According to the **Food and Drug Administration / FDA**, it does not have the legal authority to approve cosmetics before they go on the market however; they do approve color additives, except coal tar hair dyes. To ensure the public’s safety, the **FDA** states that cosmetics must not be “**adulterated**” or “**misbranded**”, they must be safe for consumers when following the directions on the label, or used in a customary or expected way. Further, cosmetics must be properly labelled and the manufacturer has the legal responsibility for the safety and the labeling of their product.

The **Cosmetic Ingredient Review Board (CIRB)** is the regulating body that oversees cosmetic safety and only **10%** of cosmetic ingredients have been analyzed by **CIRB** for health impacts. This leaves an overwhelming **90%** untested. As for the **FDA**, in **68** years it has only banned **9** personal products.

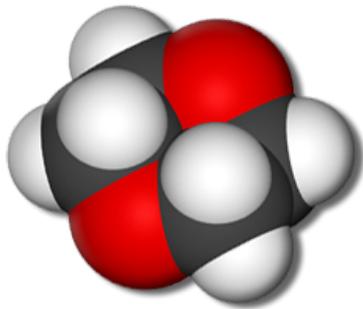
## What we may **NOT** know.

When we stumble upon the phrases: “**our**

# So what are we exposing ourselves to?

**Environmental Working Group**; a nonprofit organization, released a study in regards to thousands of the bestselling beauty products- Listed are some of their findings:

- **50%** of products contain synthetic penetration enhancers that increase the ability of toxic cosmetic chemicals to enter the blood stream.
- More than **70** of the popular hair dye products contain ingredients derived from Coal Tar, a known carcinogen (bladder cancer & lymphoma) **(Zhang et al.2008.)**
- Cosmetic companies have accused the informative media as alarmist yet, disease causing plastic components called phthalates are being found in urine. **(Adibi et al. 2008)**



**WARNING WARNING!!**  
**1, 4- DIOXANE**  
**A SECRET KILLER**



## A Secret Killer 1, 4- Dioxane

- Found primarily in products that create suds (**shampoo, liquid soaps**) and hair relaxers, this deadly petrochemical is easily absorbed through the lungs, skin and gastrointestinal tract. ([http:// www.safecosmetics.org/faqs/mvf\\_dioxane.cfm](http://www.safecosmetics.org/faqs/mvf_dioxane.cfm))
- Test performed show indisputably that **1, 4-Dioxane** causes cancerous tumor-promoting activity **(Stickney et al. 2003).**

- In fact, the Integrated Risk Information System, a U.S. federal regulatory agency, considers **1, 4-Dioxane** to be comparable to pesticide (EPA 1992, 2000).

This human pesticide is even more dangerous within the treatment room as many therapist use warm water, a penetration enhancer, during their treatments! Particularly vulnerable are pregnant women, infants and teenagers.



WHY you will never find 1, 4-DIOXANE on an ingredient list:  
**SNEAKY SNEAKY!**

**1, 4 - Dioxane** is formed during a procedure used by formulating companies to give mildness to harsh detergent-like ingredients. This procedure uses a toxic chemical called ethylene oxide. Ethylene oxide makes **1, 4-Dioxane** as a byproduct, during the chemical conversion of harsh- to- mild. Because **1,4-Dioxane** is not a primary ingredient physically used for the above mentioned process, the U.S. Department of Agriculture does not require **1,4-Dioxane** to be listed as an ingredient on product labels. (EPA)

HOW TO AVOID 1, 4 - DIOXANE

The **FDA** does not require this deadly ingredient to be listed as an ingredient, due to its production during manufacturing. If you want to avoid this sneaky chemical the **Organic Consumer Association** suggests that you look for cosmetics that are certified under the **USDA** National Organic Program.

## PHALATES / DON'T RECYCLE

We are surrounded by **phthalates** (*pronounced THAL-ates*): PVC pipes, automobiles, earphones, phone cords, cooking and eating utensils, toys, shower curtains, water bottles, perfumes, hairspray, fingernail polish, body washes, fragrances and fragrant lotions! **EVERYWHERE!!!**

Though some media focus has praised phthalates for making our lives easier. Medical data proves that phthalates, especially when combined and exposure is constant, are toxic! Phthalates are proven to majorly disrupt reproductive functions in both women and men and may compromise the endocrine system.. Some specific medical conditions are as follows: polycystic ovarian syndrome, infertility and breast and testicular cancer (**Hauser 2006**).

A study completed at the University of Puerto Rico, linked the use of phthalates in beauty products to early puberty in girls (**Colo'n et al 2000**) (**Gabriel et al 2008**).

Most vulnerable to this menace are pregnant women and breastfeeding women. Some doctors recommend that pregnant women avoid new cars for the first trimester of pregnancy because of the toxic brew emitted from the hot dashboard and seats! (**Gabriel et al. 2008, 18**)

## HOW TO RECOGNIZE PHALATES

**di-n-butyl phthalate** - DBP- commonly found in nail polish

**di (2-ethylhexyl) phthalate**- commonly found in perfumes

### **How to Avoid Phthalates**

- Read all labels and choose products without DBP. Beware of all and any products that list fragrance as an ingredient. Some nail products indicate “phthalate free”.

## **SPREAD THE WORD!!!**

As cosmetic industry professionals; it is not only our responsibility to protect ourselves but; action is needed from us in order to protect our clients. In the recent, past many bills have been put forth in congress to ensure that beauty practice and health practice may begin living in sync with one another. Several professional and not for profit coalitions exists whose sole focus is to educate professionals as well as the public on the toxic nature of chemicals used and available. Listed below are some online resources for extending your awareness of creating and promoting a healthful beauty practice.

## **SUMMARY**

As beauty professionals; when deciding to embark in this wonderful and exciting career, the potential to be exposed to harmful chemicals would be greater than the average person. We now know some things to look for in an effort of avoidance when reading labels. By spreading the word to your clients about these hidden dangers your services will be valued even greater.

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