## EWG'S GUIDE TO REDUCING DISINFECTION BYPRODUCTS IN POOLS

### DISINFECTION BYPRODUCTS

Swimming pool disinfection is essential to preventing illnesses of the skin, like rashes, and diarrhea caused by bacteria, viruses, and other parasites in the water. But when pool chlorine and other disinfectants react with contaminants in the water, they form harmful byproducts.

It's crucial that swimming pool water be free of pathogens. But it's equally important to lower the amount of disinfection byproducts formed in the pool. These unintended chemical pollutants increase the risk of cancer and may damage developing fetuses.

## POOLS ARE VULNERABLE TO ALL OF THE BIOLOGICAL AND CHEMICAL CONTAMINANTS SWIMMERS BRING WITH THEM:



## **EXPOSURE TO DISINFECTION BYPRODUCTS**

In one study of 23 indoor pools, researchers reported that haloacetic acids, just one type of disinfection byproducts, were found at an average concentration of 1,541 parts per billion - more than 25 times the level the Environmental Protection Agency allows in drinking water.

At this level, accidentally swallowing a third of a cup of pool water - what a child ingests in just an hour and a half - would exceed the maximum daily legal dose established by the EPA for drinking water.

## REDUCING DISINFECTION BYPRODUCT LEVELS AND AVOIDING EXPOSURE

The major source of disinfection byproducts in pool water - "human input" - is also part of the solution. In an experimental study published in 2014, disinfection byproduct formation was reduced by more than two-thirds when swimmers used the bathroom and showered for just one minute before they got in the pool.

#### WHAT YOU CAN DO

## то wash

away loose hair,
dirt, oils and
other
contaminants,
shower or rinse
with water for 60
seconds before
entering the pool
the first time.

Get out of the pool to go to the bathroom.

Don't pee in the pool!

Remind kids to get out every couple of hours for a bathroom break. This is a great time to reapply sunscreen.

Don't
spit or
swallow pool
water. Keep your
mouth closed to
prevent
accidental
ingestion.

# Keep pets out of the pool.

They bring in more contaminants than people do.

When pools are not in use, use covers to keep out leaves, grass and other debris.

Rinse dirt and sand off

pool floats and toys before bringing them in the pool. Don't eat or drink in the pool.

## **DON'T FORGET**

Reapply sunscreen after rinsing and swimming to protect your skin from the sun.

Don't boycott your neighborhood swimming pool. Swimming is great exercise that offers lifelong benefits.



