

# **Instructor's Guide for the PowerPoint Presentation**

***“What’s in Our Water?”***

***And what can we do about it?”***

***~Pharmaceuticals and Personal Care Products~  
(PPCPs)***

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## **Instructor's Guide for the PowerPoint Presentation**

### ***“What’s in Our Water? And what can we do about it?”***

#### ***~Pharmaceuticals and Personal Care Products~***

The “What’s in Our Water? And what can we do about it?” PowerPoint Presentation is a component of “The Water We Drink” Small Community Outreach Campaign. This campaign is a project of the Rural Community Assistance Partnership and the National Environmental Services Center and funded by the U.S. Department of Health and Human Services, Office of Community Services. This PowerPoint Presentation, along with all products developed for this campaign, are available to use in educating small system water and wastewater board members, small community decision makers, and others about maintaining safe, sustainable, and secure water supplies.

An introduction to the outreach campaign is provided below, followed by information about using the “What’s in Our Water?” PowerPoint Presentation.

#### **“The Water We Drink” Small Community Outreach Campaign**

Most members of the public have little awareness about the water they drink, where it comes from, what’s in the water, and how they impact its quality. Most water consumers often don’t understand how water is treated and delivered to their taps—let alone the critical challenges that currently face our water sources and systems.

“The Water We Drink” Small Community Outreach Campaign is an effort by the Rural Community Assistance Partnership and the National Environmental Services Center, funded by the U.S. Department of Health and Human Services, to increase public awareness, along with small system board members’ and decision makers’ awareness, about crucial water issues. These issues, which were identified through interviews with these audiences and assistance providers in 2007, include aging infrastructure, lack of planning, retiring operator workforce, natural disasters, local vandalism, groundwater overpumping, source water contamination, climate change, and terrorism.

This outreach campaign has built on that research by developing, for national, state, and local audiences, a marketing plan and informational tools about addressing these topics. Newsletter articles, brochures, and fact sheets will be disseminated, and conference presentations will be made to national organizations such as the National Association of Towns and Townships, the National League of Cities, the National Association of Counties, as well as selected state affiliates.

"The Water We Drink" project strives to be the first national effort to target small community water board members and decision makers through a concerted and systematic outreach campaign to raise awareness and provide information about maintaining a safe, sustainable, and secure water supply.

The first phase of the outreach campaign focuses on the source water contamination issue of pharmaceuticals and personal care products (PPCPs), partially in response to the highly publicized March 10, 2008 Associated Press article "Prescription drugs found in drinking water across U.S." Resources developed include a brochure and fact sheet identifying information about PPCPs and steps for keeping them out of the water, an article that is available for distribution and/or printing in publications that reach small community water/wastewater boards and decision makers, the PowerPoint Presentation "What's in Our Water? And what can we do about it?" and others, described below.

### **Purpose and Use of the PPCP PowerPoint Presentation**

The "What's in Our Water? And what can we do about it?" PowerPoint Presentation is designed for use at conferences, meetings, trainings, or other events, to educate small community water board members, decision makers, and/or the general public about pharmaceuticals and personal care products in our waterways. The accompanying PPCP brochure, fact sheet and article express similar messages and support the information provided in the PowerPoint Presentation.

All of the PPCP materials are designed to provide basic information about PPCPs in the water—how PPCPs get into the water, the amount of PPCP use, what is known about their effects, steps people can take to make more informed use and purchasing decisions, and proper disposal practices. The key message the PowerPoint relays is that making better decisions about using, purchasing, and disposing of PPCPs is a step every person can take today to help protect water supplies.

The PowerPoint Presentation takes approximately 15-20 minutes to present. Presenter notes, which include supporting facts and details, are provided in the "notes pages" view. This Instructor's Guide also identifies:

- the main objectives of the PPCP PowerPoint Presentation,
- recommendations for further reading that can provide additional information to help enhance the presentation or the instructor's background knowledge,
- suggested learning activities and handouts.

## **Objectives for the What's in Our Water? And what can we do about it?" PowerPoint Presentation**

The PowerPoint Presentation explains, in very basic terms:

1. How water is drawn from surface and groundwater for human use, treated, then returned to the waterways to be used again.
2. The types of pharmaceutical and personal care products (PPCPs) that are showing up in waterways, the amount of PPCPs people use, and how PPCPs get into the water.
3. The status of scientific understanding about PPCPs and their effect on human and aquatic health, and aquatic habitats (full impact is unknown but under study).
4. How wastewater treatments works, and that regulations do not currently require the removal of PPCPs from the water.
5. Recommendations for disposing prescription drugs: (1) use take-back programs or community collection sites, (2) don't flush unless instructions indicate doing so, and instead, (3) seal in a container and dispose in the garbage.
6. Recommendations for purchasing, using, and disposing personal care products: reduce use, buy in bulk, choose natural and biodegradable ingredients, use unscented products, avoid antibiotic ingredients, avoid flushing unused portions down the toilet and instead seal in a container and throw in the garbage.
7. The importance for individuals to make the right choices to protect water supplies today and in the future.

### **Sample Activities and Handouts**

1. Demonstrate how to use the Environmental Working Group's *Skin Deep* Web site, and allow audience members to suggest products for analysis. (This requires Internet access.)  
Web address: <http://www.cosmeticsdatabase.com>  
  
*Skin Deep* is a searchable consumer safety database that evaluates the safety of ingredients in 29,000 personal care products. User can enter product name and obtain results identifying product ingredients, concerns about those ingredients, and a hazard score and data gap rating indicating what is known about the safety of an ingredient, and how complete the available science is behind the safety score.
2. Use the "Checklist: Use of PPCPs" included in this guide—either paper copies or projected as part of the PowerPoint Presentation—and ask audience members to identify the PPCPs they use. Discuss the importance of taking a personal inventory and being

aware of PPCP use, reducing use, making better purchasing decisions, and properly disposing of products.

3. Handout one or more of the following items available from “The Water We Drink” Web site (<http://www.nesc.wvu.edu/waterwedrink/>) or from links indicated below:

- “Do you know what’s in the Water?” PPCP fact sheet or brochure
- federal guidelines identifying the *Proper Disposal of Prescription Drugs* published by the Office of National Drug Control Policy, available at [http://www.whitehousedrugpolicy.gov/publications/pdf/prescrip\\_disposal.pdf](http://www.whitehousedrugpolicy.gov/publications/pdf/prescrip_disposal.pdf)
- U.S. Environmental Protection Agency’s mini-poster “Origins and Fate of PPCPs in the Environment” available at <http://www.epa.gov/ppcp/pdf/drawing.pdf>
- RCAP Safe Drinking Water Trust *eBulletin* article: “This is your Water . . . on Drugs?” (April 23, 2008 issue) available at: [http://www.watertrust.org/feature\\_article.asp?nID=103](http://www.watertrust.org/feature_article.asp?nID=103)

### Check List: Use of Pharmaceuticals and Personal Care Products (PPCPs)

PPCPs	Daily Use	Periodic Use	PPCPs	Daily Use	Periodic Use
<b>Pharmaceuticals</b>			<b><i>Make-Up</i></b>		
Prescription Drugs			Blush		
Over-the-Counter Drugs			Bronze/Highlight		
			Brow Liner		
<b>Personal Care Products</b>			Concealer		
<b><i>Skin Care</i></b>			Glitter		
Soap/Skin Cleansers			Eye Liner		
Deodorant			Eye Shadow		
Lotion			Foundation		
Medications			Lip Gloss		
Feminine Care			Lip Liner		
Hair Removal			Lip Stick		
Lip Balm			Mascara		
Sunscreen			Powder		
Suncare					
			<b><i>Fragrance</i></b>		
<b><i>Hair Care</i></b>			For Men		
Shampoo			For Women		
Hair Conditioner			Body Spray		
Styling Gel					
Styling Mousse			<b><i>Nail Care</i></b>		
Hair Spray			Cuticle Creams		
Scalp Treatment			Nail Glue		
Hair Color			Nail Polish		
Hair Loss Products			Nail Treatment		
Relaxer			Polish Remover		
<b><i>Oral Care</i></b>			<b><i>Baby Care</i></b>		
Toothpaste			Baby Powder		
Whitening			Baby Oil		
Mouthwash			Bubble Bath		
Denture Cleanser			Cradle Cap Treatment		
			Diaper Cream		
<b><i>Eye Care</i></b>			Lotion		
Contact Cleaner			Shampoo		
Contact Saline			Soap		
Contact Drops			Sunscreen		
Eye Drops			Teething Care		
Eye Make-Up Remover			Wipes		

Adapted from Environmental Working Group Website: <http://www.cosmeticsdatabase.com>

## Resources for More Information about PPCPs

***U.S. Environmental Protection Agency Web site on Pharmaceuticals and Personal Care Products***, basic information and answers to frequently asked questions: <http://www.epa.gov/ppcp>

***Prescription drugs found in drinking water across U.S.***, an article researched and written by the Associated Press (published 3/10/08, updated 9/12/08):  
[http://www.usatoday.com/news/nation/2008-03-10-drugs-tap-water\\_N.htm](http://www.usatoday.com/news/nation/2008-03-10-drugs-tap-water_N.htm)

***Proper Disposal of Prescription Drugs, Office of National Drug Control Policy***, federal guidelines on disposing prescription drugs (February 2007):  
[http://www.whitehousedrugpolicy.gov/publications/pdf/prescrip\\_disposal.pdf](http://www.whitehousedrugpolicy.gov/publications/pdf/prescrip_disposal.pdf)

***U.S. Environmental Protection Agency mini-poster “Origins and Fate of PPCPs in the Environment”*** (February 2001, updated March 2006) available at  
<http://www.epa.gov/ppcp/pdf/drawing.pdf>

***This Is Your Water...On Drugs***, feature article about PPCPs in RCAP’s Safe Drinking Water Trust *eBulletin* (April 23, 2008 issue): [http://www.watertrust.org/feature\\_article.asp?nID=103](http://www.watertrust.org/feature_article.asp?nID=103)

***Pharmaceuticals and Personal Care Products: An Overview***, article in National Environmental Services Center’s (NESC’s) *Pipeline* newsletter (Winter 2007):  
[http://www.nesc.wvu.edu/pdf/WW/publications/pipline/pl\\_wi07.pdf](http://www.nesc.wvu.edu/pdf/WW/publications/pipline/pl_wi07.pdf)

***Endocrine Disruptors: What are they doing to you?***, feature article in NESC’s *On Tap* magazine (Winter 2003):  
[http://www.nesc.wvu.edu/pdf/dw/publications/ontap/magazine/OT\\_WI03.pdf](http://www.nesc.wvu.edu/pdf/dw/publications/ontap/magazine/OT_WI03.pdf)

***Our Stolen Future: Are we threatening our fertility, intelligence, and survival? A scientific detective story*** (1997), a book by Theo Colborn, Dianne Dumanoski, and John Peterson Myers. Considered to be the groundbreaking book tracing birth defects, sexual abnormalities, and reproductive failure in wildlife to the synthetic chemicals that mimic natural hormones, upsetting normal reproductive and development processes. Published by PLUME, a division of Penguin Books. For a summary of the book, see <http://www.ourstolenfuture.org/Basics/bookbasics.htm>

***Our Stolen Future Web site***, tracks recent developments, identifies scientific resources on endocrine disruption, and provides information about government and industry managing chemicals in the environment: <http://www.ourstolenfuture.org>

***Statement of Jane Houlihan on Cosmetics Safety***, Environmental Working Group (May 2008). Discussion draft of the Food and Drug Administration “Globalization Act” legislation: Device and Cosmetic Safety, before the Subcommittee on Health of the Committee on Energy and Commerce, United States House of Representatives.  
<http://www.ewg.org/node/26545>

***Skin Deep Web site***, the Environmental Working Group’s searchable consumer safety database that evaluates the safety of ingredients in 29,000 personal care products. User can enter product

name and obtain results identifying product ingredients, concerns about those ingredients, and a hazard score and data gap rating indicating what is known about the safety of an ingredient, and how complete the available science is behind the safety score.

<http://www.cosmeticsdatabase.com>

***Congressional Hearing Statements and Remarks--Pharmaceuticals in the Nation's Water: Assessing Potential Risks and Actions to Address the Issue***, before the U.S. Senate Committee on Environmental and Public Works Subcommittee on Transportation Safety, Infrastructure Security and Water Quality (April 15, 2008):

[http://epw.senate.gov/public/index.cfm?FuseAction=Hearings.Hearing&Hearing\\_ID=30641a14-802a-23ad-4b51-a10dd439793f](http://epw.senate.gov/public/index.cfm?FuseAction=Hearings.Hearing&Hearing_ID=30641a14-802a-23ad-4b51-a10dd439793f)

***Congressional Hearing Statements and Remarks—Emerging Contaminants in U.S. Waters***, U.S. House of Representatives Transportation and Infrastructure Committee, Subcommittee on Water and the Environment (September 18, 2008):

<http://transportation.house.gov/hearings/hearingDetail.aspx?NewsID=742>

***Our Daily Meds: How the Pharmaceutical Companies Transformed Themselves into Slick Marketing Machines and Hooked the Nation on Prescription Drugs*** (2008). Book by Melody Petersen, published by Sarah Chrichton Books, Farrar, Straus and Giroux, New York, NY.

***Big Green Purse: Use Your Spending Power to Create a Cleaner, Greener World*** (2008). Book by Diane MacEachern, published by the Penguin Group, New York, NY.

***What's Coming From Your Tap?*** by Anjali Athavaley, The Wall Street Journal (August 19, 2008): <http://online.wsj.com/article/SB121910526011851511.html>

***Endocrine Disruptors, Pharmaceuticals, and Personal Care Products in Drinking Water***, American Water Works Association Research Foundation (Jan/Feb 2007, v. 17, no. 1): (subscribers only): <http://www.awwarf.org/newsAndEvents/publications/DWRArchive.aspx>

***U.S. Geological Survey "Emerging Contaminants in the Environment Investigation" bibliography***, Toxic Substances Hydrology Program. Bibliography of USGS reports that support findings on emerging contaminants and pharmaceuticals in the environment, available at <http://toxics.usgs.gov/bib/bib-Emerging.html>

***AP IMPACT: Tons of drugs dumped into wastewater***, Associated Press article by Jeff Donn, Martha Mendoza, Justin Pritchard (published September 14, 2008), available at <http://www.msnbc.msn.com/id/26706059/>

***California warns people not to flush pharmaceuticals***, Associated Press article (published September 26, 2008) about California-USEPA statewide event "No Drugs Down the Drain Week" starting October 2, 2008, available at <http://abcnews.go.com/US/wireStory?id=5890631>