

TOXICS IN YOUR LIFE



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HIGH
DEOD



BLEACH

Healthy Homes, Clean Waters

Many products contain toxic chemicals.

- Air Fresheners
- **Antibacterials**
- Arts & Crafts
- Automobile Chemicals
- **Cleaning & Laundry Products**
- Flame Retardant Items
- **Fluorescent Lights & Thermostats (Hg)**
- **Health & Beauty Products**
- Lawn Care Chemicals
- Paints & Thinners
- Pesticides & Insect Repellents
- Pet Care Products



Why does it matter?

- 110,000+ new chemicals since WWII.⁽¹⁾
- Manufacturers safety test their own products.
- Synthetic chemicals = petroleum-based & persistent.
- Newborns tested averaged 28 toxic chemicals.⁽²⁾
- Adults carry dozens, plus ≥ 13 pesticides.⁽³⁾
- 90%+ of cancers are caused by the environment.⁽⁴⁾
- Indoor air is often 3-5x worse than outside air.⁽⁵⁾
- 884 toxic chemicals in personal care products. ⁽⁶⁾
- Same companies sell safer equivalents in Europe.⁽¹³⁾



Fluorescent Bulbs (Mercury)

Action Steps

- Store safely to avoid breakage
- In Case of Breakage:
 - Evacuate room.
 - Ventilate for at least 15 minutes.
 - Use gloves, cardboard, damp paper-towels & tape to clean up. **DO NOT VACUUM**, which contaminates the vacuum & air.
 - Place in sealed container, label **MERCURY** & dispose of as hazardous waste.



Personal Care Products (PCP)

Cosmetics
Contact Care
Depilatories
Eye Care
Eye Treatment
Facial Cleanser
Foundation
Hair Dyes
Hair Growth
Moisturizer
Nail Treatments
Nail Polish
Perfumes
Shampoo
Sunscreen
Tanning Oil

- **Self-regulated since 1938; FDA only classifies,(6) cannot recall.(9)**
- ***Organic* not defined/regulated.(6)**
- **7 known toxins are banned, but many more are allowed. (6)**
- **Triclosan, anti-bacterial, banned in EU; EPA lists as a *most hazardous pesticide* (6) & is now in toothpaste.**
- **Toxic manufacturing byproducts are not required on labels.(10)**
- **Skin absorbs many chemicals.**

PCP: AVOID The Following:

- Acrylamide
- 4-Amino 2-Hydroxytoluene
- Benzyl violet 4B
- Coal Tar
- 5-Diamine
- Dibutyl Phthalate
- Disperse Violet I
- Ethylacrylate
- Ethylene Oxide
- Formaldehyde
- HC Red No.3
- I-Naphthol
- Lead acetate
- M-aminophenol
- M-Phenyldediamine
- Mercury
- N,N-BIS (2-Hydroxyethyl)-p-Phenyldediamine Sulfate
- N-Phenyl-p-phenyldediamine
- O-aminophenol
- P-aminophenol
- P-Phenyledeiamin
- Petroleum Distillates
- Phenyl Methyl Pyrazolone
- Progesterone
- Selenium Sulfide
- Toluene
- Toluene-2

Toxics can have both
Acute and *Chronic* effects



Acute = Severe and Immediate

Chronic = Recurring, Long Lasting

Acute Health Effects

- Eye, Nose, Throat Irritation
- Nausea, Vomiting
- Stomach Ache, Diarrhea
- Skin Irritation, Rash
- Dizziness, Tremors, Muscle Weakness
- Headaches
- Blurred Vision
- Excessive Sweating, Fever



Chronic Health Effects



- Birth Defects
- Cancer
- Decreased Fertility
- Hormone Disruption
- Immune System Damage
- Mutation
- Nervous System Damage
- Organ Damage



Routes of Exposure



Breathing



Skin



Mouth



Eyes & Nose

Chemical Dangers & Children

- Immature Immune & Organ Systems
- Eat, Drink & Breathe More Per Pound
- Ground Level Play
- Hand to Mouth Behavior
- Many Years Still Ahead



What does a label tell us?

- Active Ingredients
- Signal Words:

DANGER
POISON
WARNING
CAUTION

- Confirmed Acute Health Effects
- Unregulated, **Feel Good** Words like: *Non-Toxic, Natural, or Safer*



Things labels might **NOT** say

- Any Ingredients
- Fragrances
- Inert Ingredients
- Possible Chronic Health Effects
- Possible Environmental Impacts

Toxics Downstream



- **Landfills**
- **Water ways**
- **Long term environmental impacts**

Toxics in the Trash

At the Landfill, toxics will:

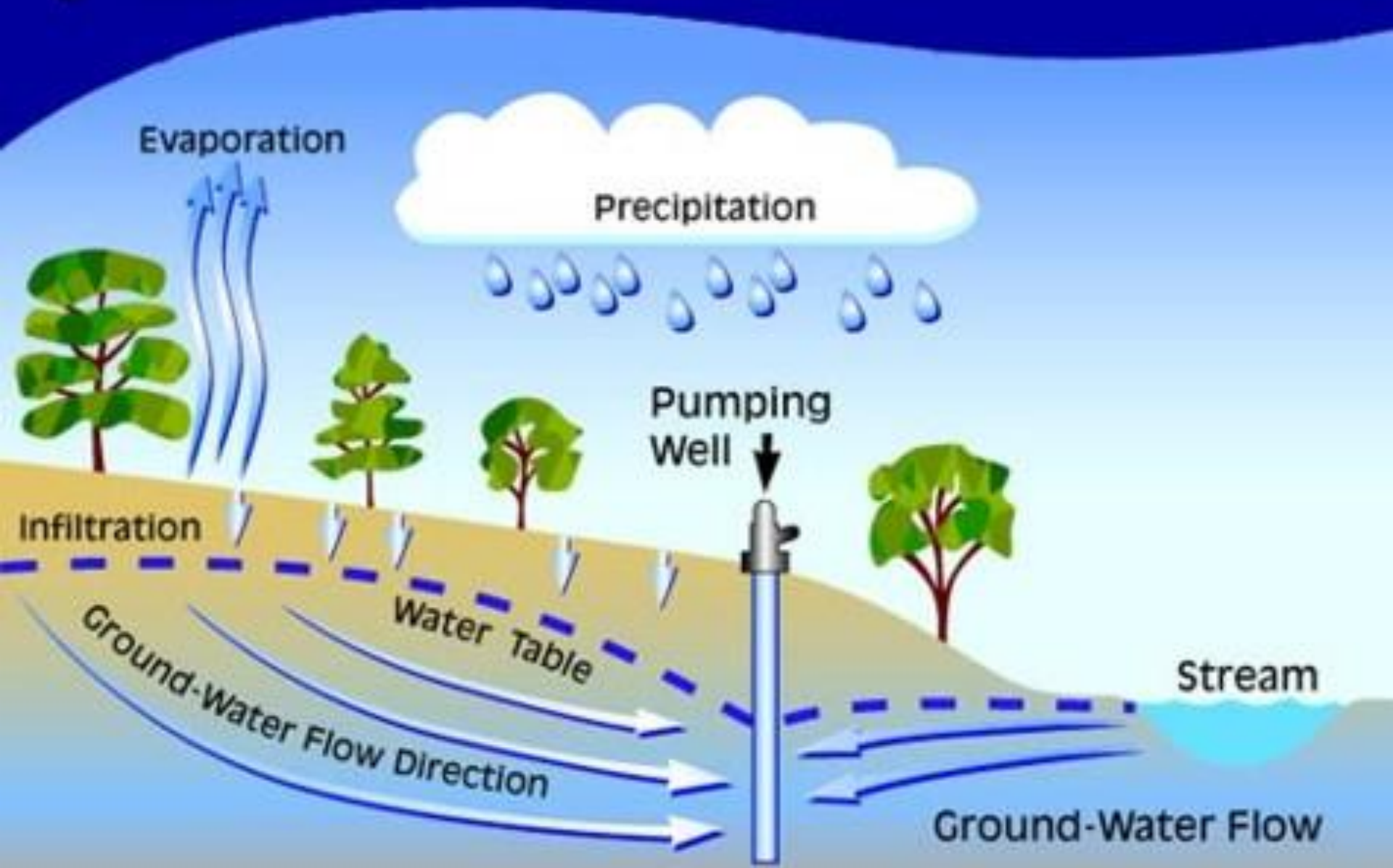
- Leach into Ground H₂O
- Evaporate into the air
- Persist



Dumping, Flushing, and Pouring Toxics Down the Drain

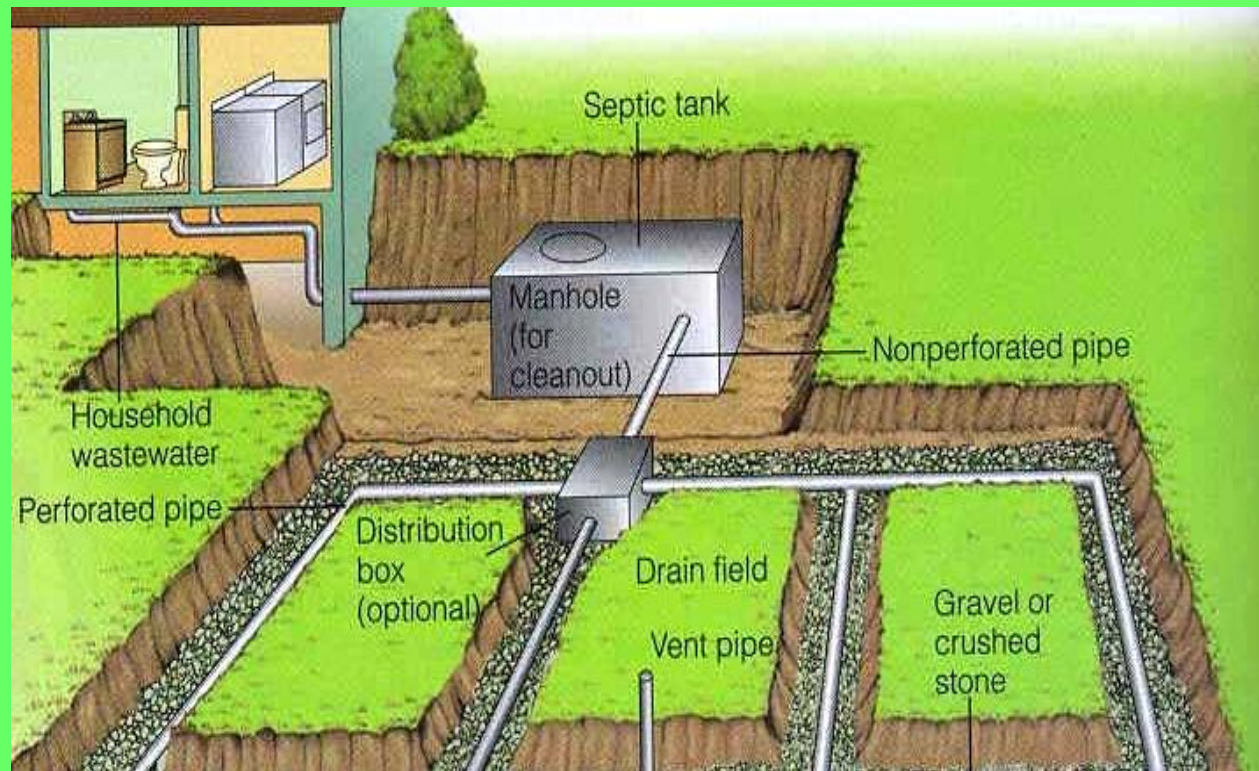
- **Ground Run Off & Filtration**
- **Water Treatment Systems:**
 - Private Septic
 - Municipal Waste Water Treatment

Ground Water



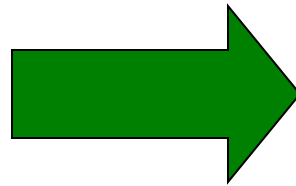
Septic Systems

- Solids settle in the tank
- Bacteria digests organic matter
- Liquid drains from tank through pipes into leach field
- Chemicals may kill bacteria & may NOT break down



So what can we do?

- Dispose of highly toxic products properly
- Use up marginal products
- Buy safer products
- Make your own!



Safer Cleaning Products

- Disclose **ALL** ingredients on label
- No harsh Signal Words on label:
 - **Poison, Danger, Warning, Caution**
- Plant or bio-based ingredients
- pH Neutral (~7)
- Non-aerosol
- No overwhelming chemical odor

References

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7. (US FDA, FDA Authority Over Cosmetics (Office of Cosmetics Fact Sheet, 1995)
8. www.breastcancerfund.org
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Northeast Resource Recovery Association
www.NRRA.net www.schoolrecycling.net