



Massachusetts College *of* Pharmacy *and* Health Sciences

# Ethics and Overcleansing: Is Industry Responsible for the Emergence of Superbugs?

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# The Science

## Generally Accepted

- Anti-microbial soaps are not more effective than traditional products in realistic household practice. (Aiello, et al. 2007)
- Anti-microbial soaps do not target disease germs over desirable flora.



# The Science

## Contested Claims

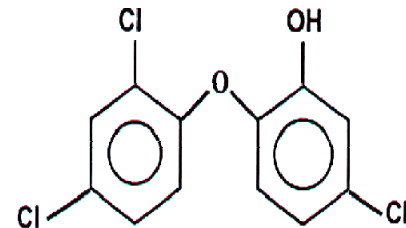
- Antibacterial hand soaps directly contribute to the prevalence of resistant micro-organisms.  
***Be concerned!*** (Schweizer 2001)
- Data are inconclusive or misleading.  
***No cause for concern!*** (Favero 2002)
- Data are inconclusive or absent.  
***Be concerned!*** (AMA Council on Scientific Affairs, 2000)



# The Usual Suspect: Triclosan

## Triclosan Facts

- Reacts with water to form chloroform
- Produces residue (unlike alcohol)
- Targets a specific enzyme in bacteria
- Bacteria have been found with mutations that resist triclosan's antibacterial mechanism.





# Anti-microbial Products

- Hand soaps
- Dish liquids
- Antiperspirants
- Toothpastes
- Fabrics
- Plastics





# Demand & Supply

Superbugs are on the increase? I need to buy/supply antibacterial soap to protect against them!

A type of “prisoner’s dilemma” arises—it’s in my interest for everyone **else** to stop using these products.



# Limitation & Assumptions

## Limitation

- Wash-off products (e.g. hand soaps) containing triclosan



# Limitation & Assumptions

## Assumptions

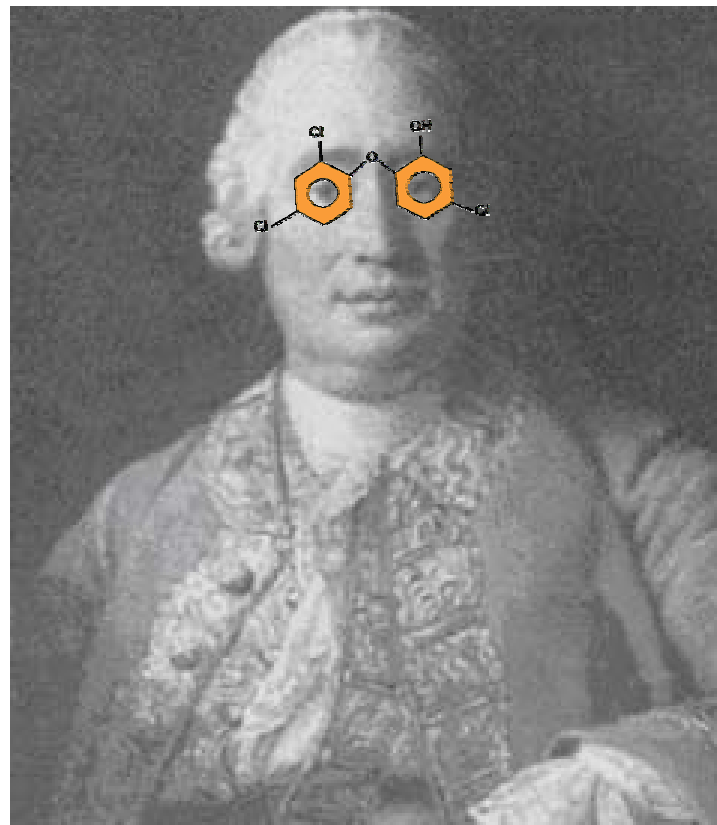
- Antimicrobials contribute to the emergence of resistant bacteria (“superbugs”).
- Antimicrobial wash-off products are not required for adequate personal hygiene in developed countries.





# A Philosopher's Perspective

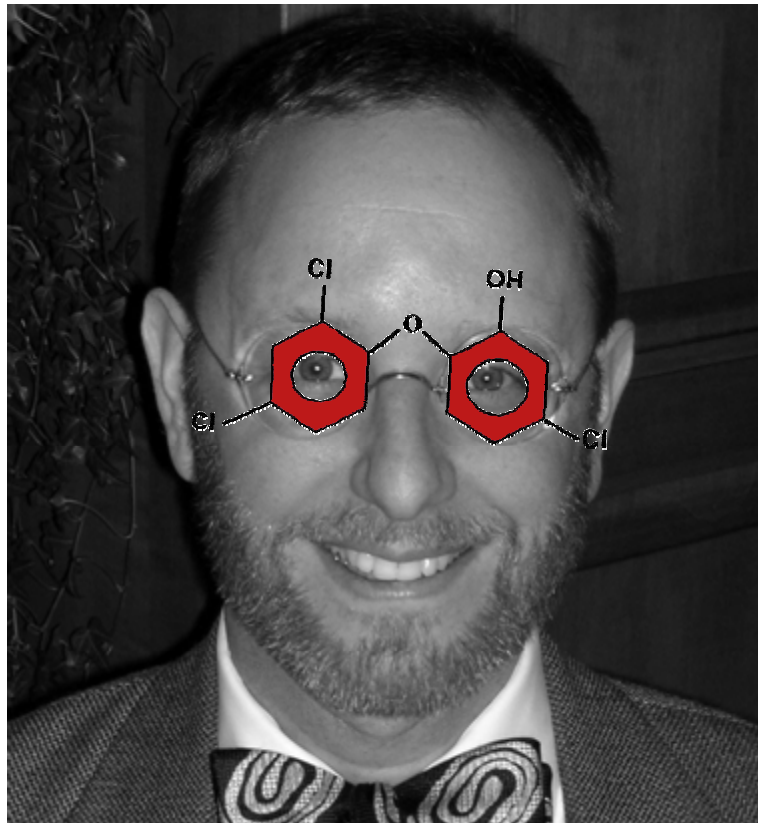
(Historical)





# A Philosopher's Perspective

(Contemporary)





# Who Invited the Philosopher?

## Tools of Philosophy

- Analysis of terms and issues
- Application of time-tested theories
- Formulation and evaluation of reasons supporting positions



# Relevant Values

## Aesthetics and Ethics

*Aesthetic values do not justify what is ethically impermissible.*



# Ethical Issues

## Rights, Responsibilities, Blame

Who (if anyone) is to blame for any ill effects of antimicrobial products?



# Ethical Issues

## Rights, Responsibilities, Blame

Do consumers have a responsibility to avoid using antimicrobial products?



# Ethical Issues

## Rights, Responsibilities, Blame

Is it morally wrong to market antimicrobial products to consumers?



# Ethical Issues

## Rights, Responsibilities, Blame

Should antimicrobial products be controlled more strictly?





# Two Approaches

***Ethics of individual responsibility***

***Communitarian ethics***



# Ethics of Responsibility

## Along the lines of product liability law

(But watch out! Ethics and law are not the same!)

Legal concepts:

- Negligence
- Strict liability
- Implied warranties



# Ethics of Responsibility

## Negligence

Breach of duty to use reasonable care in design or manufacture

Deontology



# Ethics of Responsibility

## Strict Liability

Consequences count, not intentions  
(no *mens rea* requirement)

### Consequentialism

The Food, Drug and Cosmetic Act  
imposes strict liability.



# Ethics of Responsibility

## Implied Warranties

Merchantability: The product is fit for the ordinary purposes of that type of product, meets industry standards, etc.

Fitness: Applies when a product is sold for a specific intended purpose.

*Applies to those who regularly deal  
in the type of product.*



# Communitarian Ethics

## Public Health Ethics

- In this approach, we avoid blaming individual components of the community
- Goals include behavior and attitude changes (through PSAs, e.g.)
- Paternalistic restrictions may be imposed



# Communitarian Ethics

"[I]n the communitarian language and categories of public health, fixing blame is not the main point. We regulate the steel or coal industry because market competition undervalues collective goods like a clean environment or workers' safety. Using social organization to secure collective goods like public health, not preventing harms to others, is the proper rationale for health and safety regulations imposed on the steel or coal industry, or the alcohol and cigarette industry. . . ." (Beauchamp, "Community: The Neglected Tradition of Public Health," p. 67)



# Antibacterials and Cigarettes

## Commonalities

- Outside of standard regulatory categories
- Effects can damage those other than individual user
- Initial demand is driven primarily by aesthetics





# Antibacterials and Cigarettes

The cigarette industry:

- ignored or hid data on risks.

*Not a recommended strategy.*

- suggested that responsibility belongs to individual consumers, not tobacco companies.



# Antibacterials and Cigarettes

In response, **both** an ethics of responsibility and public health approaches were taken by the courts and government.



# Which approach?

The communitarian approach allows corporations and industry groups to:

- take charge
  - change attitudes and practices
  - be the good guys
  - lead consumers to new products
- ...if they get there before government does.*



# Which approach?

Assume that the other guy is going to hold individuals responsible.



# Which approach?

Ignorance is no excuse  
when the data exist.



# Which approach?

Industry has a responsibility to be pro-active in seeking safety data.

*You want to be the one  
who finds out first  
and does something about it.*



# Which approach?

The ethics of responsibility  
will be immediately appropriate  
should we learn of definitive data  
showing risk.



# The Moral of the Story

Even if the communitarian approach is more appropriate, prepare to face judgment based on an ethics of individual responsibility.