

# 2019 LEGAL EPIDEMIOLOGY SYMPOSIUM

Looking Back and Looking Ahead

SEPTEMBER 13, 2019

 10 YEARS OF LEGAL EPIDEMIOLOGY

# Peering Into Hidden Worlds: The Past and Future of Legal Epidemiology

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MEDICINE

Health Research & Policy

**Stanford** Law School



Portrait of Leeuwenhoek at age 54 by Jan Verkolje (1686)

Sources: The Royal Society; Lane, 370 PHIL. TRANSACTIONS ROYAL SOC. BRIT. 20140344 (2015)

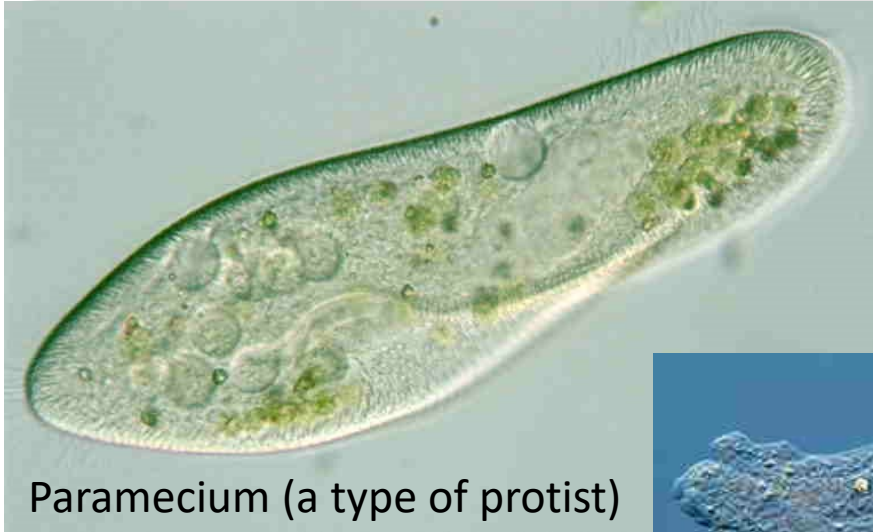
ANTONI VAN LEEUWENHOEK,  
LID VAN DE KONINGHLYKE SOCIETEIT IN LONDON.  
GEBOREN TOT DRECHT. A. 1632.

*Dieer heeft een aardigh Men een wonderli Men en gaem  
Die more worden rest, en heeft Placet in't nuen.  
Doverklinge al haer ghem, en opent all haer Staten.  
Dieer sloop toe die hem soude, i' gelijcke hem of by t'over*

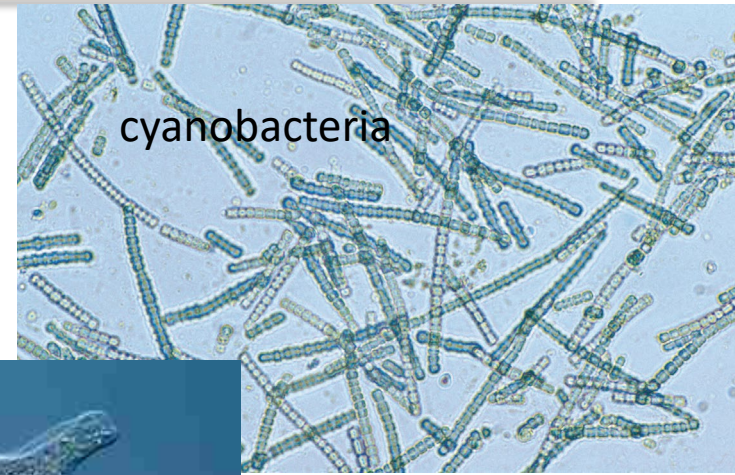
*Syn Glare Douchen en is for een onschon  
Noch kan verscheuen die die dapper Men niet maer  
Dieer sloop toe die hem soude, i' gelijcke hem of by t'over*

*CCXXV. 1686.*

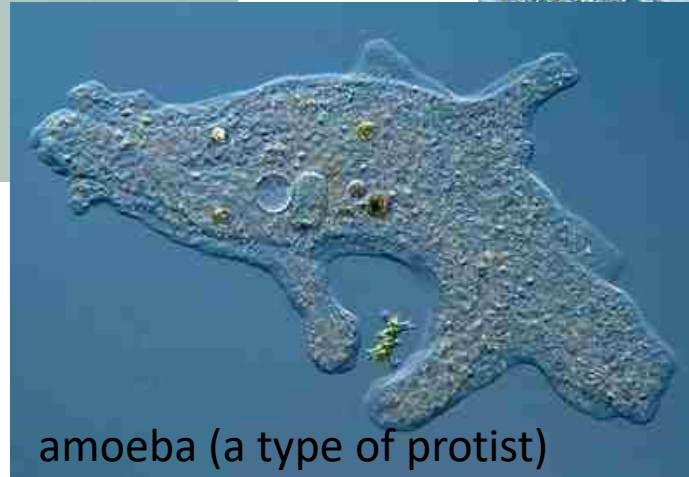
# Van Leeuwenhoek's "Tiny Animals"



Paramecium (a type of protist)



cyanobacteria



amoeba (a type of protist)

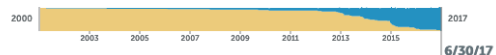


Unintentional drug overdose is a leading cause of preventable death in the United States. Administering naloxone hydrochloride ("naloxone") can reverse an opioid overdose and prevent these unintentional deaths. This dataset focuses on state laws that provide civil or criminal immunity to licensed healthcare providers or lay responders for opioid antagonist administration.

This is a longitudinal dataset displaying laws from January 1, 2001 through July 1, 2017.



## Explore Policy

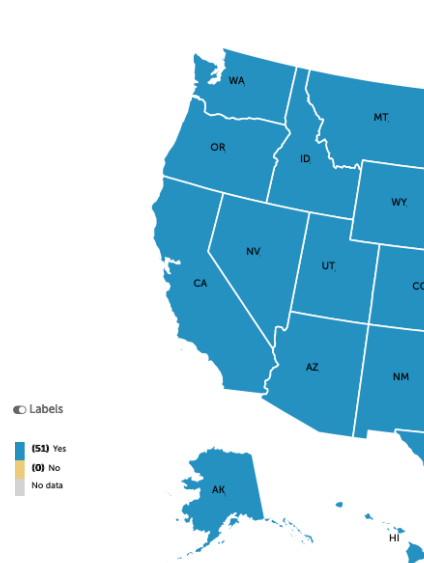


EXPLORE FILTER RESET

- 1. Does the jurisdiction have a naloxone access law? Explore
- 2. Do prescribers have immunity from criminal prosecution for prescribing, dispensing or distributing naloxone to a layperson? Explore
  - 2.1. Is participation in a naloxone administration program required as a condition of immunity? Explore
  - 2.2. Are prescribers required to act with reasonable care? Explore
- 3. Do prescribers have immunity from civil liability for prescribing, dispensing or distributing naloxone to a layperson? Explore
  - 3.1. Is participation in a naloxone administration program required as a condition of immunity? Explore
  - 3.2. Are prescribers required to act with reasonable care? Explore
- 4. Do prescribers have immunity from professional sanctions for prescribing, dispensing, or distributing naloxone to a layperson? Explore
- 5. Do dispensers have immunity from criminal prosecution for prescribing, dispensing or distributing naloxone to a layperson? Explore
  - 5.1. Is participation in a naloxone program required as a condition of immunity? Explore
  - 5.2. Are dispensers required to act with reasonable care? Explore

Profiles Map

6/30/17 Does the jurisdiction have a naloxone access law?



Labels



Questions	
Question 1:	Does the jurisdiction have a naloxone access law?
Question Type:	Categorical - mutually exclusive
Variable Name:	NAAddressOAAYN
Variable Values:	1, 2
Value Label:	1 = Yes
Value Label:	2 = No
Question 2:	Do prescribers have immunity from criminal prosecution for prescribing, dispensing or distributing naloxone to a layperson?
Question Type:	Categorical - mutually exclusive
Variable Name:	NAHealthCrimProYN
Variable Values:	1, 2
Value Label:	1 = Yes
Value Label:	2 = No
Question 3:	Is participation in a naloxone administration program required as a condition of immunity?
Question Type:	Categorical - mutually exclusive
Variable Name:	NANAPimm1YN
Variable Values:	1, 2
Value Label:	1 = Yes
Value Label:	2 = No
Question 4:	Are prescribers required to act with reasonable care?
Question Type:	Categorical - mutually exclusive
Variable Name:	NARCIimm1YN
Variable Values:	1, 2
Value Label:	1 = Yes
Value Label:	2 = No
Question 5:	Do prescribers have immunity from civil liability for prescribing, dispensing or distributing naloxone to a layperson?
Question Type:	Categorical - mutually exclusive
Variable Name:	NAHealthCivLiaYN
Variable Values:	1, 2





Painting by Ernest Boar.

## Public Health and Law Collaboration: The Philadelphia Lead Court Study

Carla Campbell MD, MS, Ed Gracely PhD, Sarah Pan MPH, Curtis Cummings MD, MPH, Peter Palermo MS, and George Gould Esq

[+] Author affiliations, information, and correspondence details

Accepted: September 01, 2012 Published Online: June 05, 2013

**Abstract** **Full Text** **References** **PDF** **PDF Plus**

*Objectives.* We determined whether Philadelphia Lead Court is effective in enforcing remediation in the homes of children with elevated blood lead levels.

*Methods.* We created a deidentified data set for properties with an initial failed home inspection for lead hazards from January 1, 1998, through December 31, 2008, and compared time to compliance within the first year and time to compliance for lead hazard remediation between 1998 and 2002 (precourt period) and between 2003 and 2008 (court period). We evaluated predicted compliance.

*Results.* Within 1 year of the IFHI, 6.6% of the precourt and 76.8% of the court cases achieved compliance ( $P < .001$ ) for the 3764 homes with data. Four years after the IFHI, 18% of the precourt cases achieved compliance in the precourt period compared with 83.1% for the court period ( $P < .001$ ). Hazard analysis found that compliance was 8 times more likely in the court than the precourt period ( $P < .001$ ).

## Local Legal Infrastructure and Population Health

Julia F. Costich JD, PhD, and Dana J. Patton PhD

[+] Author affiliations, information, and correspondence details

Accepted: January 01, 2012 Published Online: September 12, 2012

**Abstract** **Full Text** **References** **PDF** **PDF Plus**

*Objectives.* We explored the association between the legal infrastructure of local public health, as expressed in the exercise of local fiscal and legislative authority, and local population health outcomes.

*Methods.* Our unit of analysis was public health jurisdictions with at least 100 000 residents. The dependent variable was jurisdiction premature mortality rates obtained from the Mobilize Action Toward Community Health (MATCH) database. Our primary independent variables represented local public health's legal infrastructure: home rule status, board of health power, county government structure, and type of public health delivery system. Several control variables were included. We used a regression model to test the relationship between the varieties of local public health legal infrastructure identified and population health status.

*Results.* The analyses suggested that public health legal infrastructure, particularly reformed county government, had a significant effect on population health status as a mediator of social determinants of health.

# Critical Opportunities for Public Health Law: A Call for Action

Michelle M. Mello, JD, PhD, MPhil, Jennifer Wood, PhD, Scott Burris, JD, Alexander C. Wagenaar, PhD, Jennifer K. Ibrahim, PhD, MPH, and Jeffrey W. Swanson, PhD, MA

## Criteria

**Addresses a problem of public health significance**

- Prevalence of the health condition
- Severity of harm
- Distributional effects

**Plausibly amenable to change through law**

- Health problem is causally related to behaviors, conditions, or other determinants that could plausibly be influenced by law

**Plausible legal intervention identified**

- Likely to be effective
- No insurmountable legal barriers
- Political opposition could be overcome in time



## 10 Great Public Health Achievements of the 20<sup>th</sup> Century

Recognition of tobacco use as a health hazard	Decline in deaths from coronary heart disease and stroke
Motor vehicle safety	Safer and healthier foods
Fluoridation of drinking water	Healthier mothers and babies
Control of infectious disease	Family planning
Vaccination	Safer workplaces





Painting by Ernest Boar.



# Looking Ahead

## Big Data

- From econometrics to data science
- Large datasets

## Big Issues

- Social determinants
- Climate change and global law
- Trust in institutions

