

# Persistent Contribution of Substance Abuse to Excess Mortality Among Persons with AIDS in New York City, 1999 - 2003

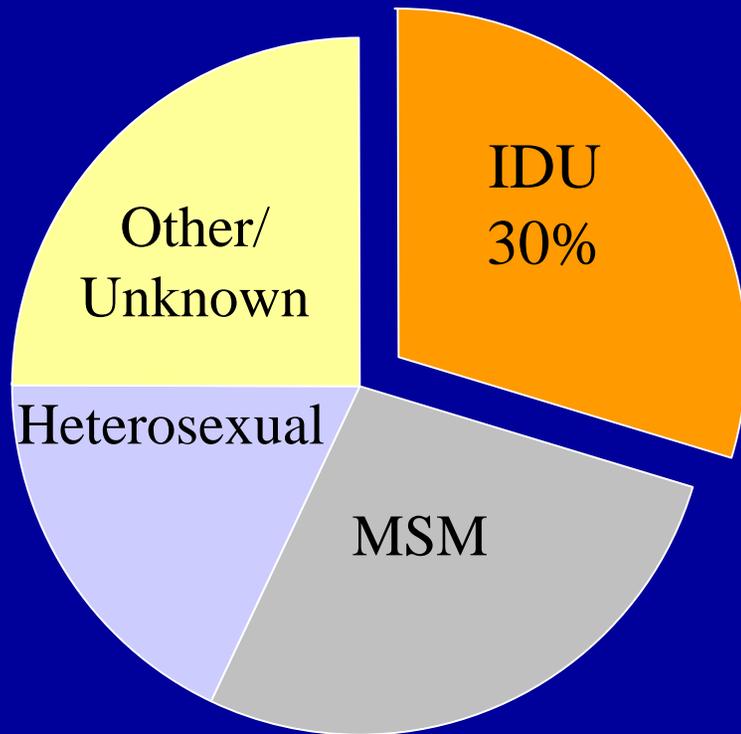
Pfeiffer MR, Hanna DB, Begier EM, Sepkowitz KA, Torian LV, Sackoff JE

New York City  
Department of Health and Mental Hygiene

XVI International AIDS Conference  
Toronto, Canada

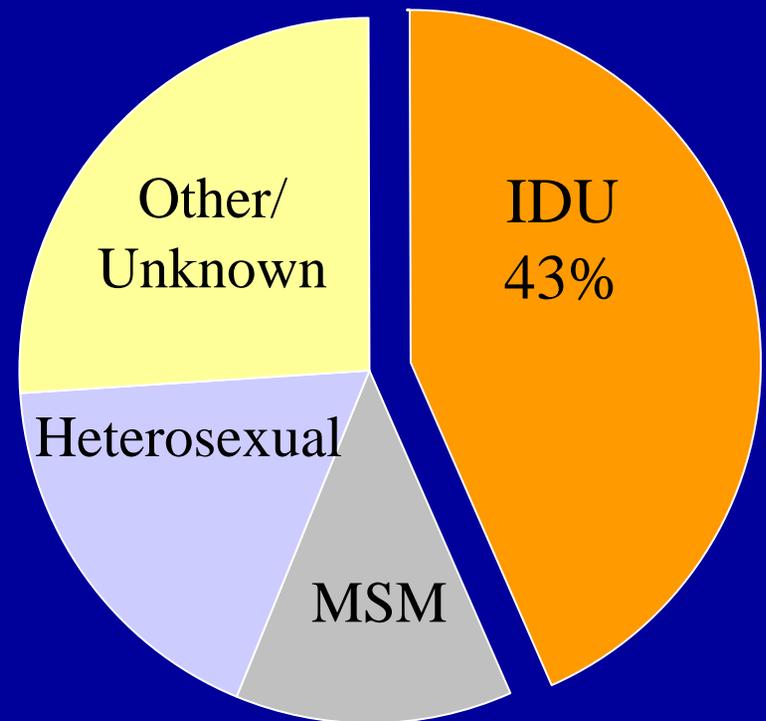
# IDU in New York City Have Disproportionate Mortality

People living with AIDS, 2004



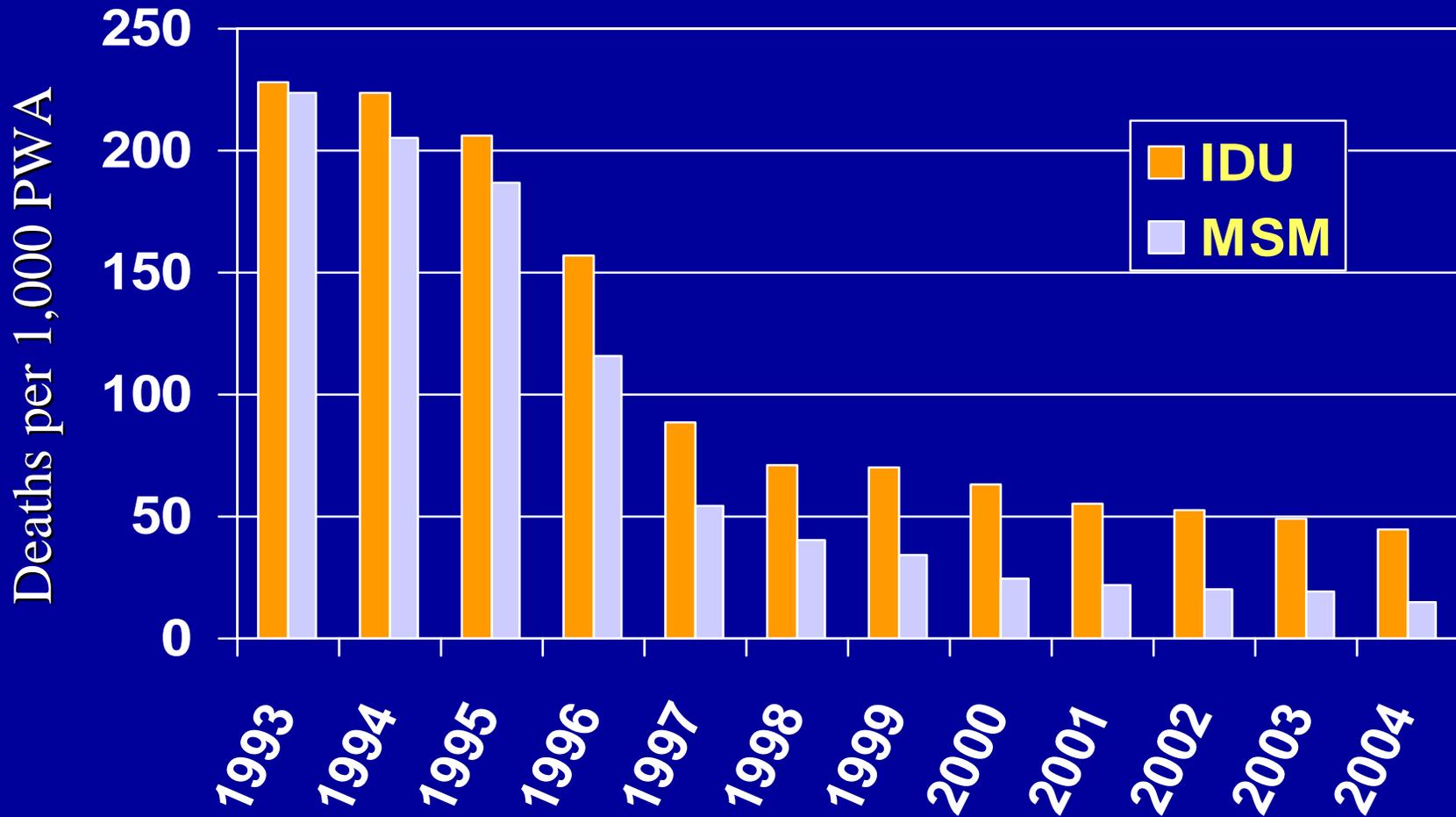
N = 61,310

Deaths among PWA, 2004



N = 1,977

# IDU in New York City Have Disproportionate Mortality



# Objectives

Identify contributing causes of death among IDU to determine reasons for excess mortality

Identify areas amenable to intervention

# Methods

- Population: Deaths 1999 – 2003 among adult NYC residents with AIDS
- Outcome: Contributing (multiple) causes of death from death certificates, coded by NCHS using ICD-10 classification

# Methods

- Data Sources:
  - Population-based HIV/AIDS registry system (provider and laboratory reports, chart reviews)
  - NYC Vital Statistics Registry (vital status and causes of death)
- Analysis:
  - Calculated overall proportions, trends in causes
  - Compared contributing causes in IDU to MSM

# Contributing Causes

- Drug Abuse:
  - Accidental poisonings, i.e., overdose
  - Drug dependence
  - Does not include alcohol-related conditions
- Liver Disease:
  - Hepatitis (any), hepatic fibrosis, hepatic failure
  - *Hepatitis C*
- Pneumonia
- Septicemia/Shock
- Heart Disease

# Characteristics of PWA who Died, 1999 – 2003

	IDU (n = 5,328)	MSM (n = 1,548)
Age, years (median)*	46	44
Male (%)	69	100
Race (%)*		
Black	50	39
Hispanic	38	24
White/Other	12	36

\*P < 0.0001

# Characteristics of PWA who Died, 1999 – 2003

	IDU (n = 5,328)	MSM (n = 1,548)
Year of diagnosis (%)*		
Pre-HAART (before 1996)	42	43
Early HAART (1996 – 1998)	33	28
Late HAART (1999 – 2003)	25	30
Neighborhood (%)*		
Poverty	69	47

\*P < 0.0001

# Most Prevalent Causes of Death Among IDU

Contributing Cause*	IDU (n = 5,328)			MSM (n = 1,548)		
	N	%	Rank	N	%	Rank
Drug Abuse	1,146	22	1	64	4	7
Liver Disease	872	16	2	117	8	5
<i>Hepatitis C</i>	<i>526</i>	<i>10</i>	<i>--</i>	<i>42</i>	<i>3</i>	<i>--</i>

\*Categories are not mutually exclusive

# Most Prevalent Causes of Death Among IDU

Contributing Cause*	IDU (n = 5,328)			MSM (n = 1,548)		
	N	%	Rank	N	%	Rank
Drug Abuse	1,146	22	1	64	4	7
Liver Disease	872	16	2	117	8	5
<i>Hepatitis C</i>	<i>526</i>	<i>10</i>	<i>--</i>	<i>42</i>	<i>3</i>	<i>--</i>

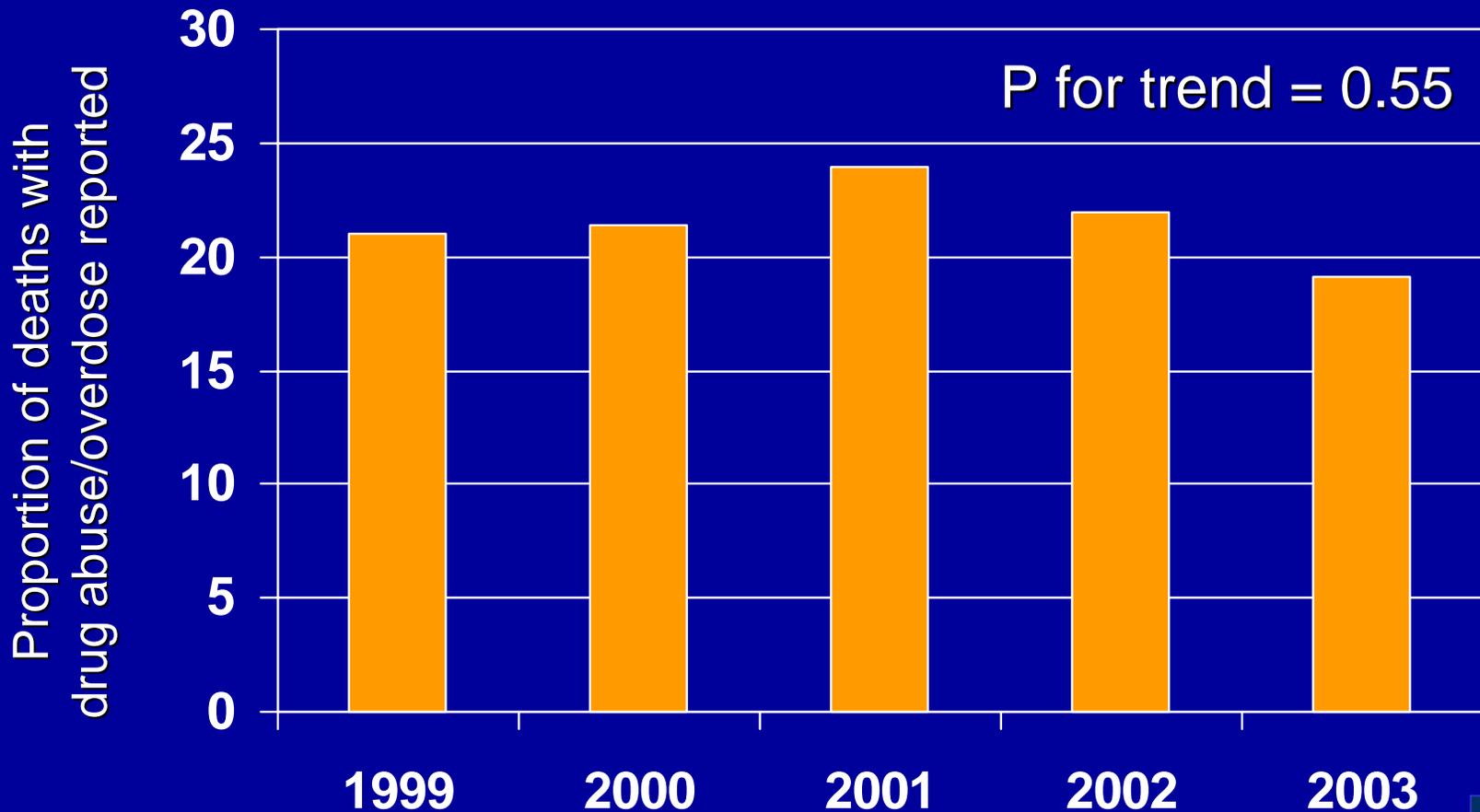
\*Categories are not mutually exclusive

# Most Prevalent Causes of Death Among IDU

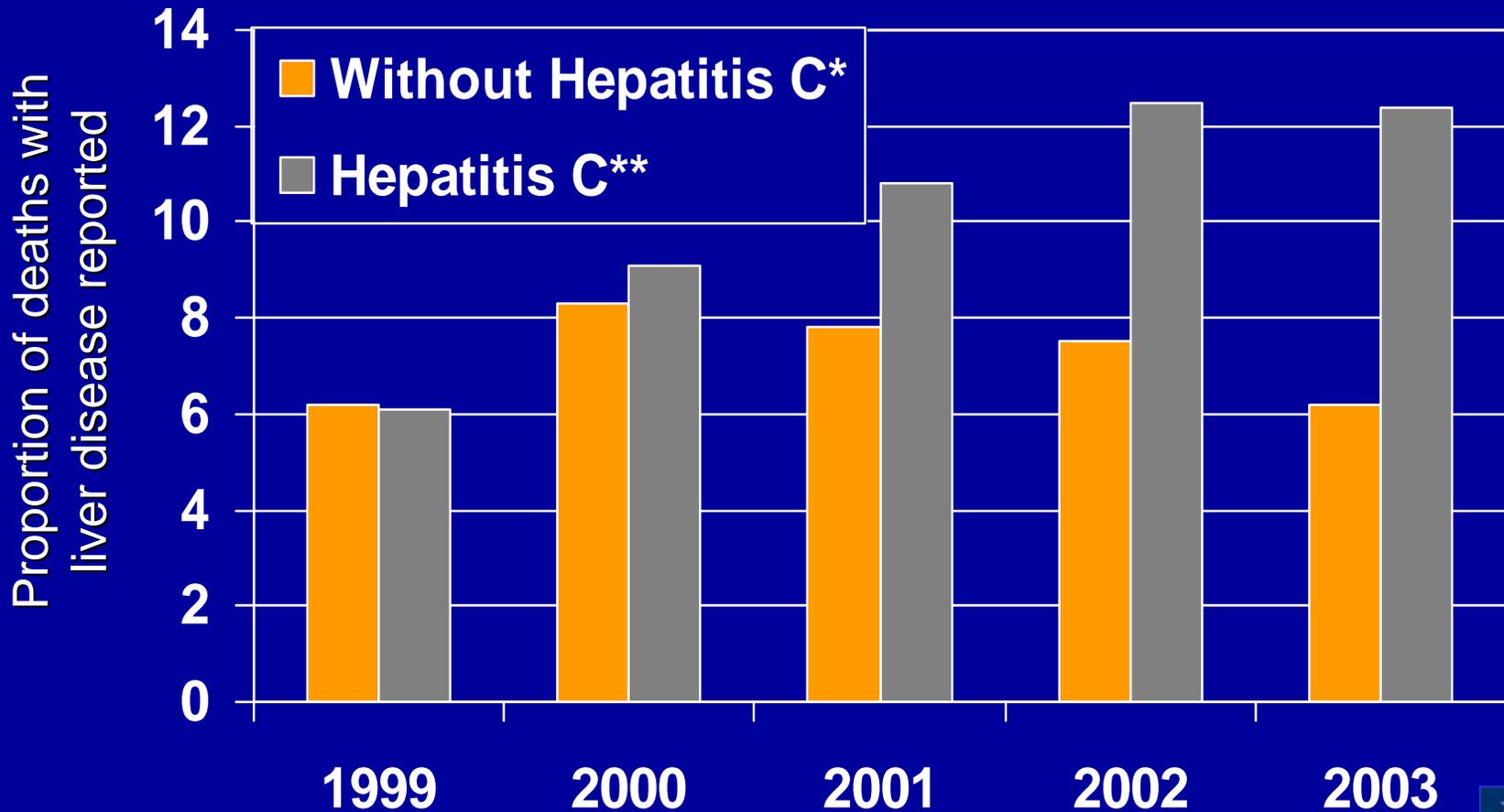
Contributing Cause*	IDU (n = 5,328)			MSM (n = 1,548)		
	N	%	Rank	N	%	Rank
Drug Abuse	1,146	22	1	64	4	7
Liver Disease	872	16	2	117	8	5
<i>Hepatitis C</i>	526	10	--	42	3	--

\*Categories are not mutually exclusive

# Deaths Among IDU with Drug Abuse/Overdose Reported

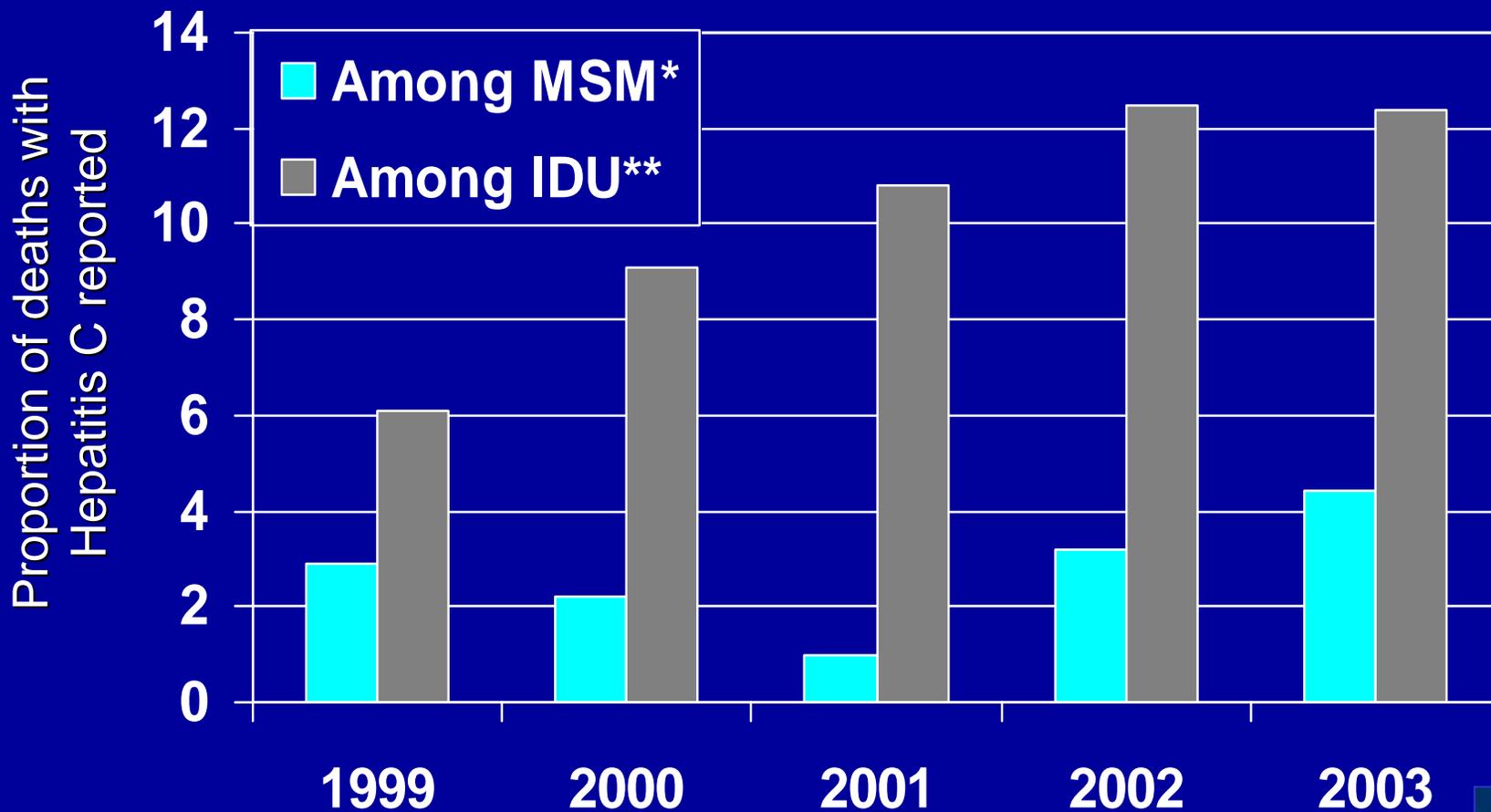


# Deaths Among IDU with Liver Disease Reported



\*P for trend = 0.99 \*\*P for trend < 0.0001

# Deaths Among IDU and MSM with Hepatitis C Reported



\*P for trend = 0.23 \*\*P for trend < 0.0001

# Prevalent Causes of Death Among IDU and MSM

Contributing Cause*	IDU (n = 5,328)			MSM (n = 1,548)		
	N	%	Rank	N	%	Rank
Pneumonia	834	16	3	208	13	1
Septicemia/ Shock	782	15	4	173	11	2
Heart Disease	512	10	5	152	10	3

\*Categories are not mutually exclusive

# Summary

Drug abuse/overdose and Hepatitis C  
contribute substantially to excess deaths  
among IDU

# Limitations

- Death certificate causes of death
- Distinguishing acute overdose vs. cumulative effects
- Increased prevalence: longer survival vs. more reporting

# Implications

- Addressing preventable mortality in New York City:
  - Overdose prevention, including naloxone
  - Harm reduction engagement, including treatment and risk reduction
  - Sterile syringe access, including needle exchange programs
  - Hepatitis C diagnosis and treatment

# Acknowledgements

Field Surveillance and Data Support Units  
of the HIV Epidemiology Program,  
NYC DOHMH  
especially Sonny Ly and Walter Smith

Bureau of Vital Statistics, NYC DOHMH