The Immigrant Midwives of Lawrence, MA and Their Role in Maternal and Infant Health

Gene Declercq, PhD Boston University School of Public Health

The History & Future of Public Health in Lawrence and Beyond Lawrence, MA April 7, 2018

Maternal and Infant Health Status a Century Apart

1890-1920

- Maternal & Infant Health Status in the U.S. & MA
- Maternal & Infant Health Status in Lawrence
- The Campaign Against Midwives in the U.S. & Massachusetts
- The Immigrant Midwives of Lawrence

1990-present

- The return of midwifery in the U.S.
- Current Maternal and Infant Health Status in Lawrence

If time, bonus material

Maternal & Infant Health Status in the U.S. and Mass., 1890-1920

London 1665: List of diseases and casualties

Plague was the most fatal disease in London in 1665. Bills of Mortality recorded the cause of death of London citizens—the lists contain both familiar and strange diseases and casualties of past times.

Disease or casualty	Deaths
Plague	68,596
Ague and Feaver	5,257
Consumption and Tissick	4,808
Teeth and Worms	2,614
Convulsion and Mother	2,036
Spotted Feaver and Purples	1,929
Aged	1,545
Dropsie and Timpany	1,478
Griping in the Guts	1,288
Chrisomes and Infants	1,258
Surfet	1,251
Flox and Smalpox	655
Childbed	625
Abortive and Stilborne	617
Rickets	557
Rising of the Lights	397
Stopping of the Stomack	332
Impostume	227
Bloudy Flux, Scowring & Flux	185
Collick and Winde	134
Appoplex and Suddenly	116
Canker, and Thrush	111
Jaundies	110
Scurvy	105
Stone and Strangury	98
French Pox	86
Kings Evill	86
Sores, Ulcers, broken and bruised	

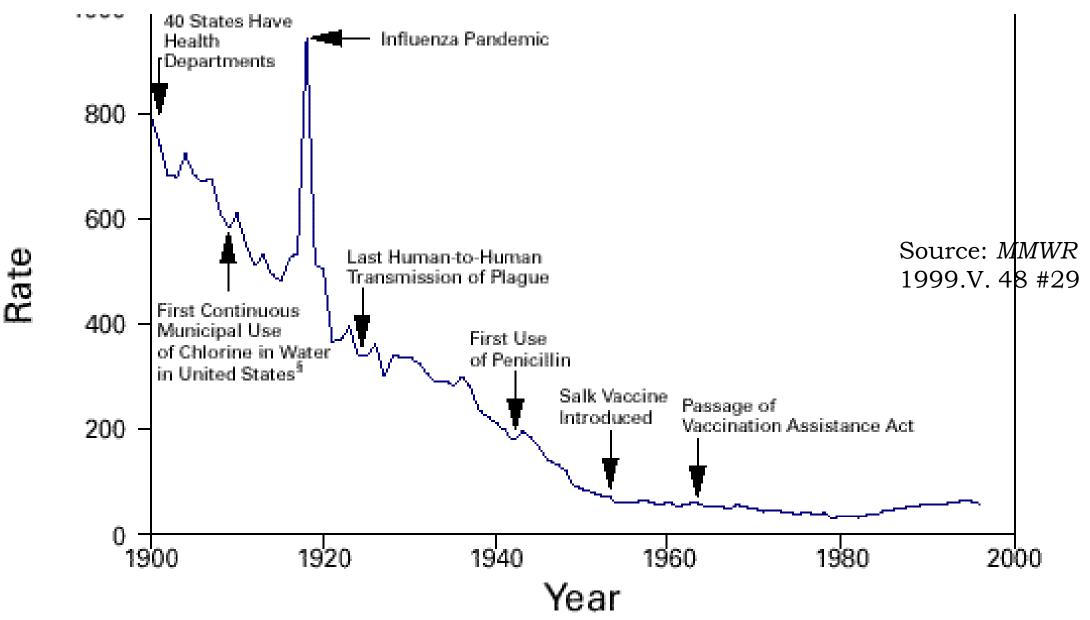
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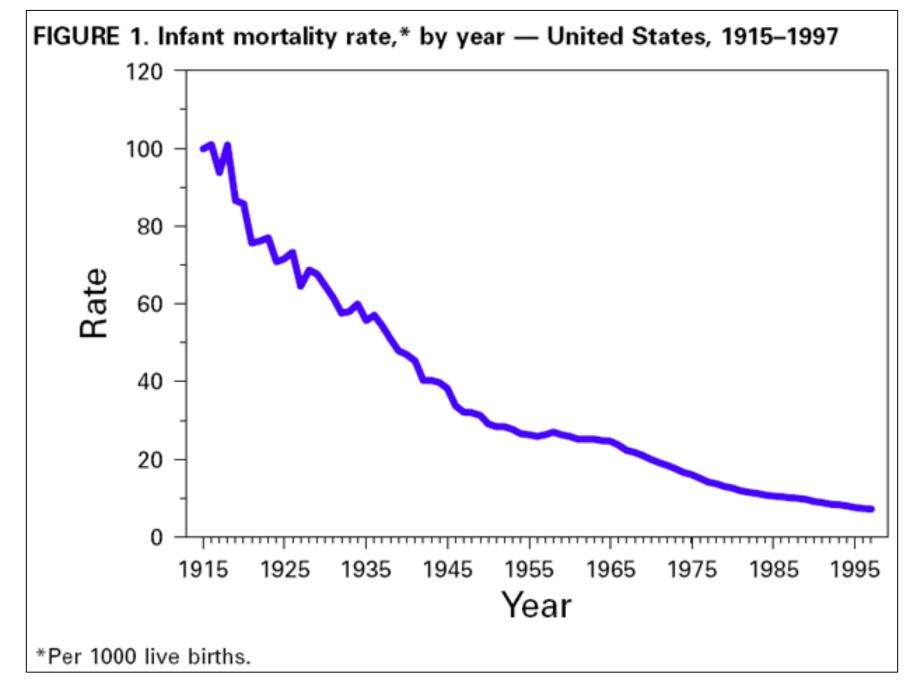
Disease and Cause of Death, London, 1665

Source: A.H. Gale. *Epidemic Diseases* (1959). p151

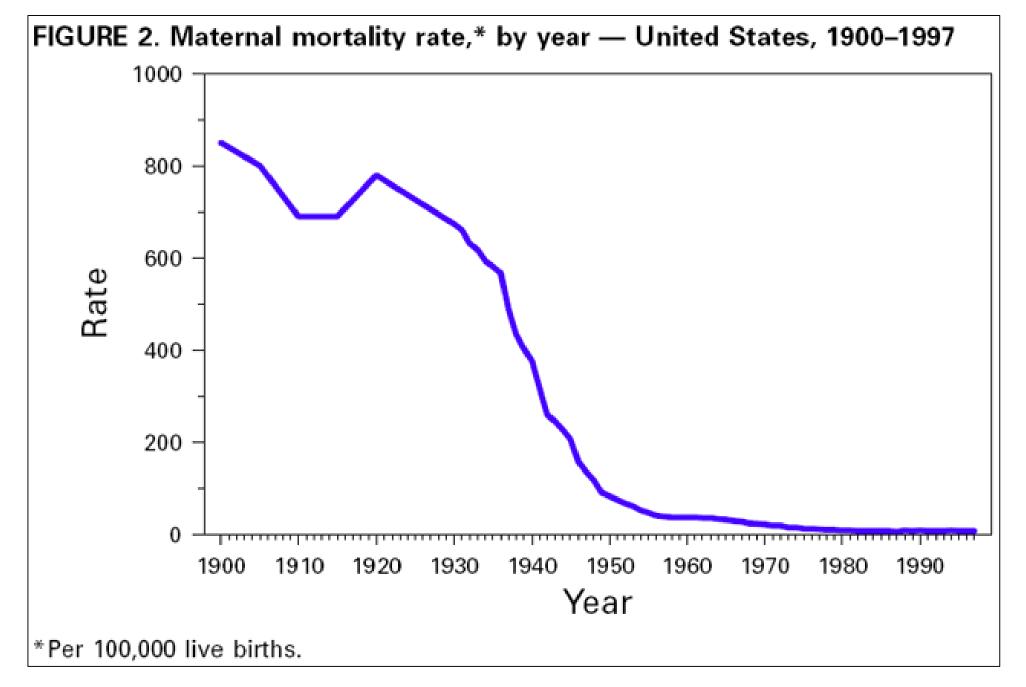
aths	Disease or casualty	Deaths
596	Prowned	50
257	Grief	46
808	Kild by several accidents	46
,614	Overlaid a nd Starved	45
,036	Quinsie	35
,929	Rupture	34
545	Palsie	30
,478	Gout and Sciatica	27
288	Frighted	23
,258	Executed	21
,251	Found dead in streets, fields, &c.	20
655	Livergrowne	20
625	Bleeding	16
617	Plurisie	15
557	Headmouldshot & Mouldfallen	14
397	Lethargy	14
332	Spleen	14
227	Meagrom and Headach	12
185	Bedrid	10
134	Murthered, and Shot	9
116	Burnt and Scalded	8
111	Hangd & made away themselves	7
110	Measles	7
105	Plannet	6
98	Blasted	5
86	Distracted	5
86	Calenture	3
	Leprosie	2

Crude Death Rate (per 100,000) for Infectious Diseases, U.S. 1900-1996



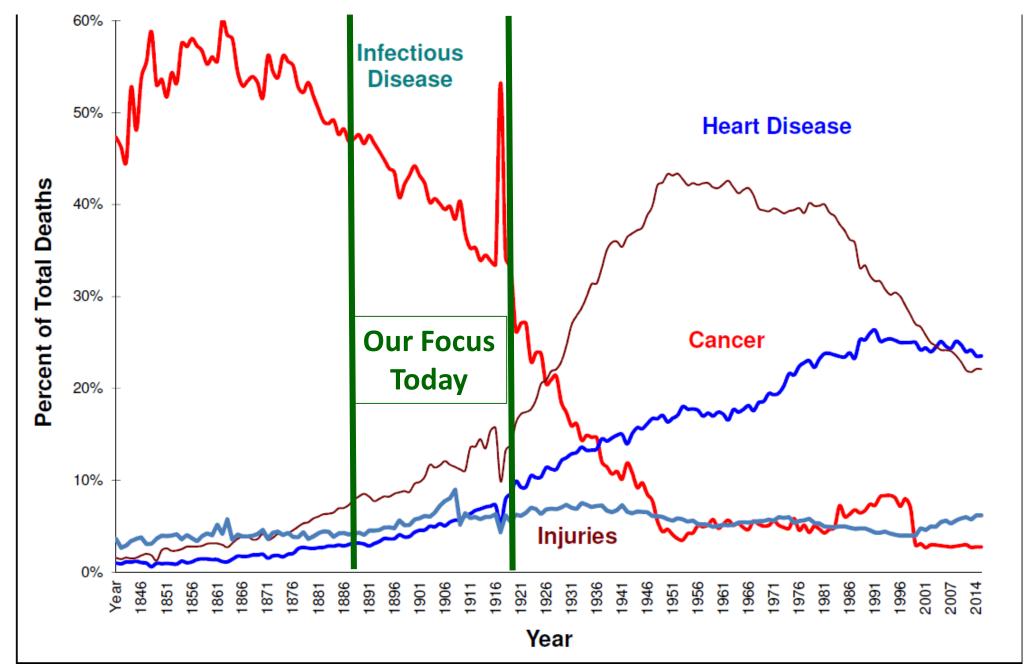


Source. Achievements in Public Health, 1900-1999: Healthier Mothers and Babies. MMWR. 1999. 48.849

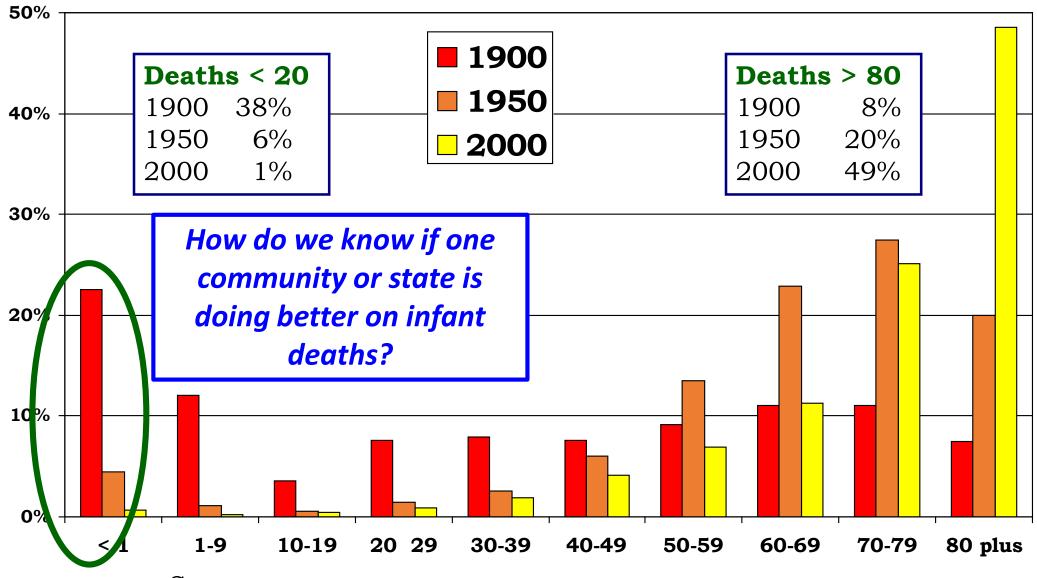


Source. Achievements in Public Health, 1900-1999: Healthier Mothers and Babies. *MMWR*. 1999. 48.849

Causes of Death Massachusetts: 1842-2014



A Century of Deaths in Massachusetts by Age, 1900, 1950, 2000



Sources: Mass. DPH Deaths, Final Data & MassCHIP mortality file

TABLE 26.—INFANT MORTALITY RATES: BIRTH-REGISTRATION STATES AND EACH STATE, 1915–1940

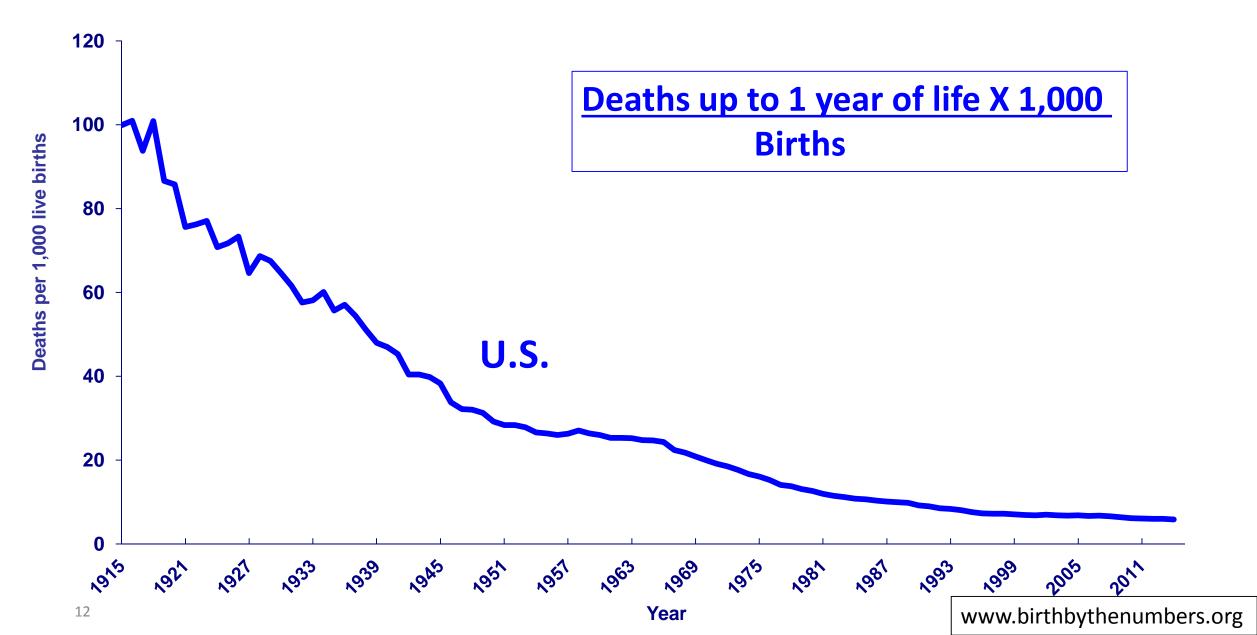
[Exclusive of stillbirths. By place of occurrence. Rates are the number of deaths under 1 year of age per 1,000 live births]

ABEA	1915	1916	1917	1918	1919	1920	1921	1932	1923	1924	1925	1928	1927
Registration States		101.0	93. 8	1009	86.6	85. 8	75.6	76.2	77.1	70.8	71.7	73.3	64, 6
Alabama Arizona												121. 2	64.4 100.1 60.9
Arkansas California			******		70.5	74.4	€6. 5	71.1	73, 0	67.1	63.7	62.7	62.3
Colorado Connecticut Delaware	107.1	101.3	93. 8	107.2	86.3	91.9	73.1 97.6	77.3 100.2	76, 5 104, 0	68.7 95.0	73.3	72.1 03.4	53.8 70.6
Dist. of Columbia	111. 1	106.0	97.4	111.6	85.3	91.0	83. 5	84.9	91.8	76. 0	87.4	85.0	67.0
Florida			-		-					81.8	743	74.8	67.4
Idaho Illinois								76, 1	81.9	71.0	72.5	63.0 69.4	50,0 64,4
Indiana		4	85.8	87.0	79.0	81.8	71.2	67.4	71.0	65. 2 54. 9	67.9 56.0	72.4 53.7	53.8 55.5
Kansas Kentucky				79. 5 93. 3	69.7 81.6	73.1 73.1	62. 5 61. 9	64.8 69.2	62.9 71.6	59.0 64.6	61.7 70.5	65.3 75.5	55.3 61.0
Louisiana							1			ł –	*****		77,4
Maine	ļ	121.0	119_9		105.4	101.6 104.1	88.0 93.6	86.5 94.1	83.5 94.6	80.8 86.2	76.3 90.0	87.1	80.0 81.4
Massachusetts	101.0	100.2	97.9	112.7	88.1	90.9	76.0	81.2	77.8	67.6	73.0	73.1	C4. 6

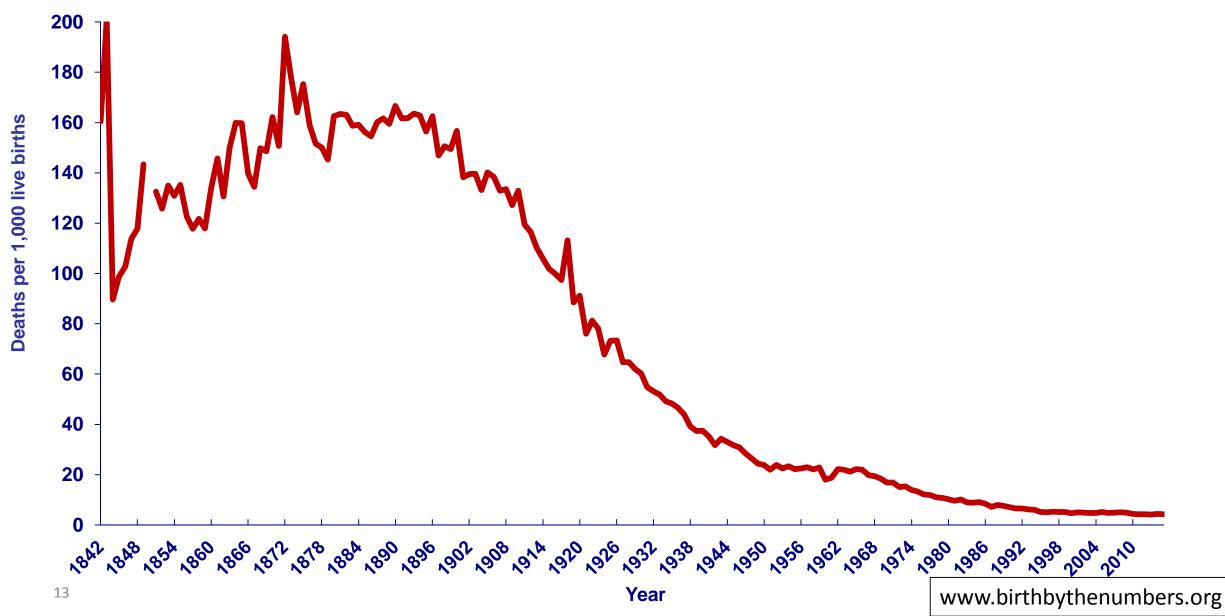
Building up vital statistics data systems which leads to.....

Establishing a Vital Statistics System Date of Birth, October 218 - 191-56 mal \$ez. ___ No 2357 CANVASSER'S RETURN OF A BIRTH Color (if other than white) white Name (if named). 11 mildle ALL NAMES TO BE IN FULL Place of birth, No. Screet Name of Pather. Name of Mother. 41Kossi q **Jate of Birth** Raania Maiden Name of fame of Child Age of Father, Langlass Mother, 28 mg male iaz, Color and If Twis Residence of Parents, No. 11 Mus dl mid tace of Birth Occupation of Father, Mul 31 ull Name of Father Occupation of Mother (if any) Birthplace of Pather. CM Isiden Name of Mother えり Birthplace of Mother, isoldence of Parents at I did personally attend the birth Time of Birth ... (Signature) compation of Father . Provinian. scapation of Methor Fill out with ink. All names to be in full. to urthelace of Father **Urthplace** of Mether Note both a birth certificate **and** annual Attending Physician Dated canvassing of births lignature of person making raturn

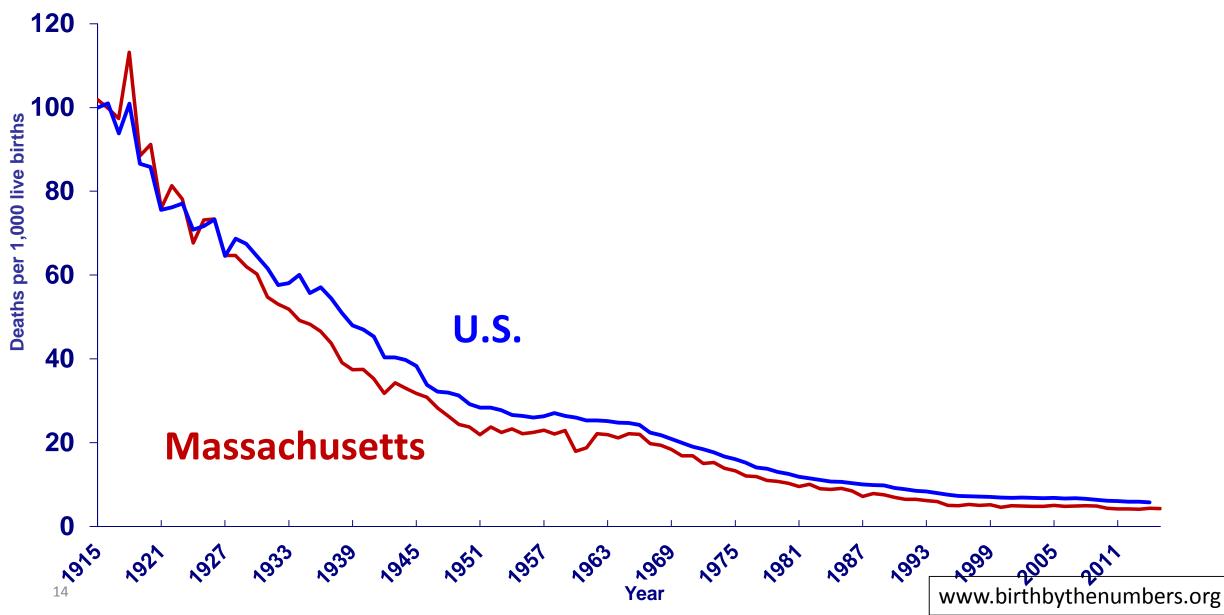
Infant Mortality* Rates U.S.: 1915-2015



Infant Mortality Rate Massachusetts: 1842-2015

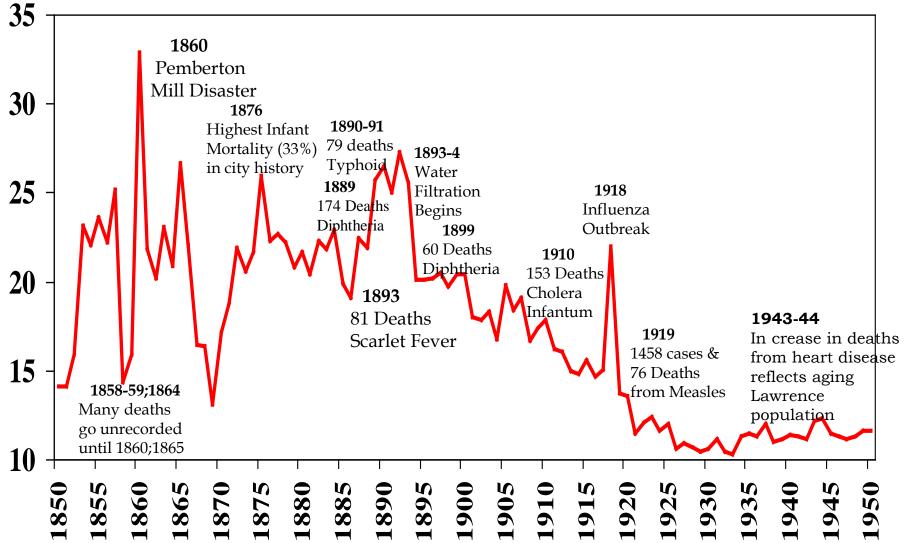


Infant Mortality Rate U.S. & Massachusetts: 1915-2015

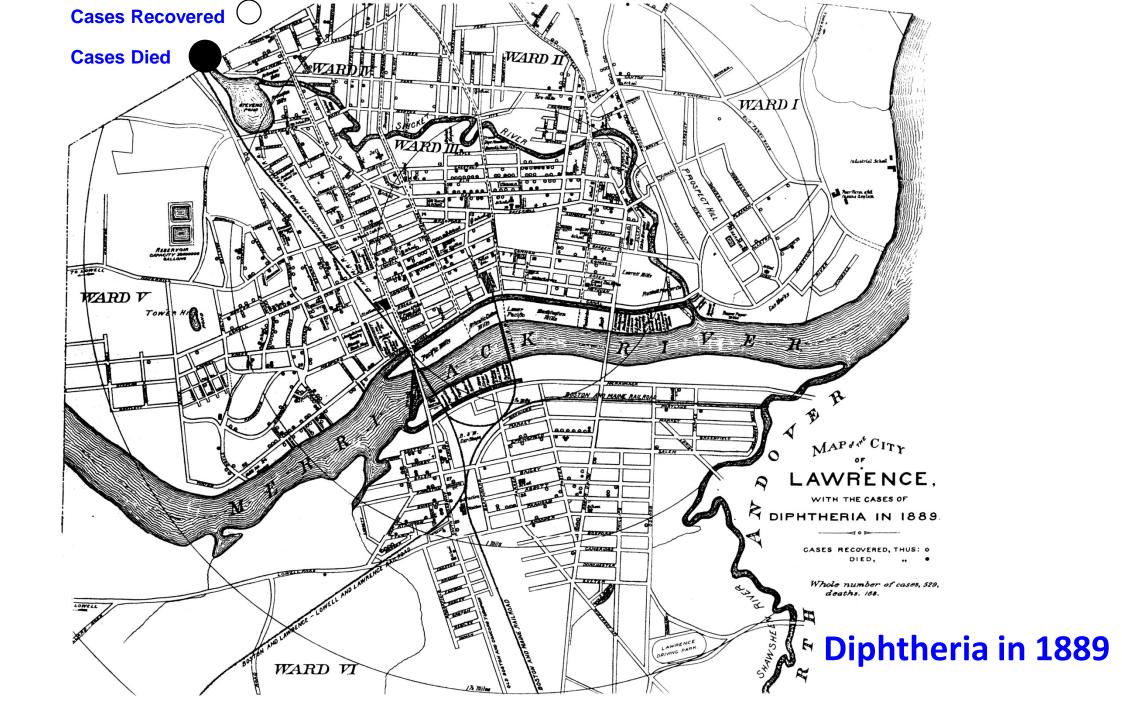


Lawrence maternal and infant health at the turn of the last century

Lawrence Mortality Rate^{*} 1850-1950

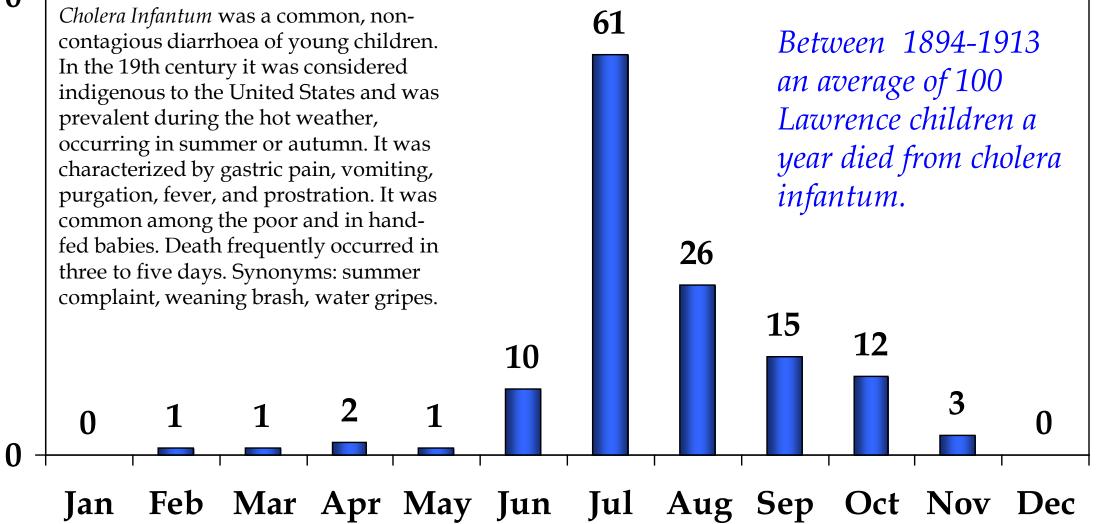


*Deaths per 1,000 population



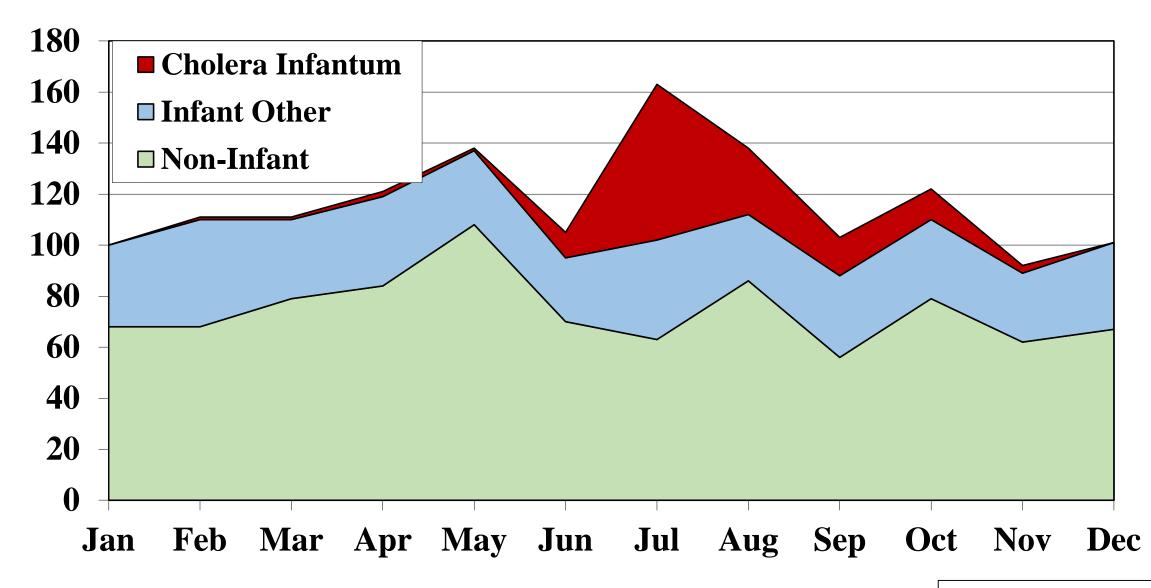
Deaths from Cholera Infantum by Month, Lawrence, MA. 1900

70



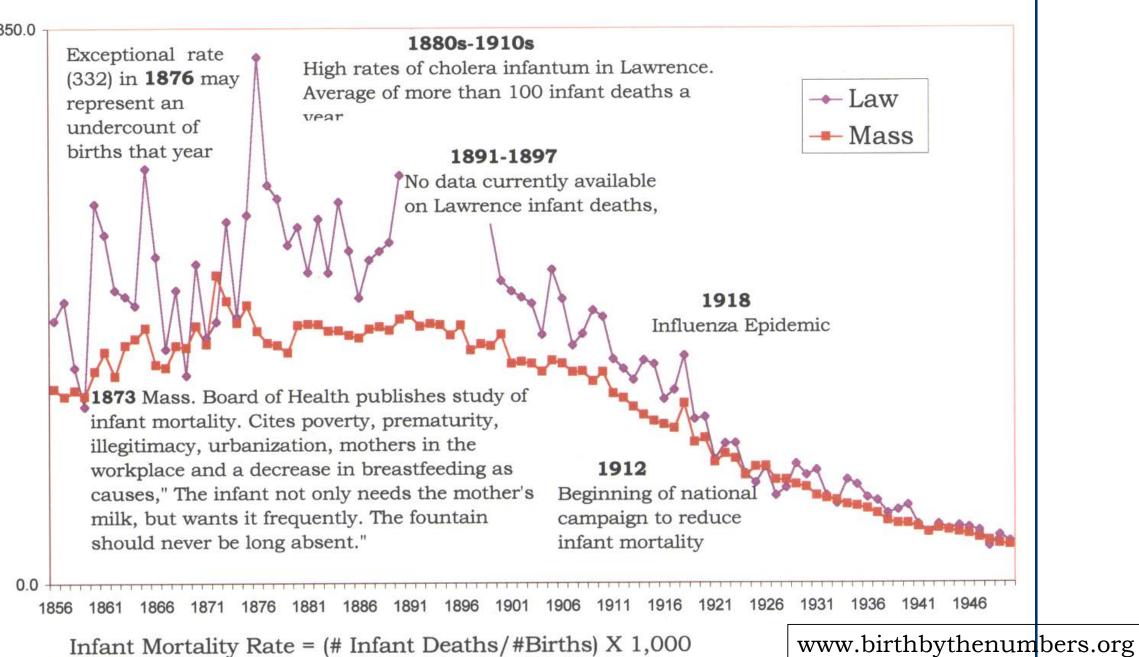
www.birthbythenumbers.org

Total Deaths by Month, Lawrence, Mass. 1900

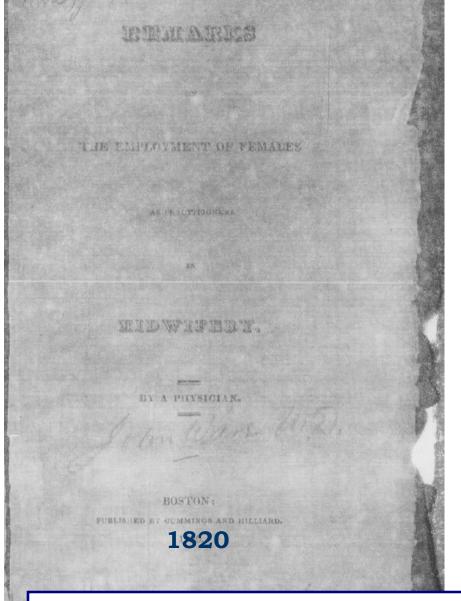


Infant Mortality in Lawrence and Mass., 1856-1950

350.0



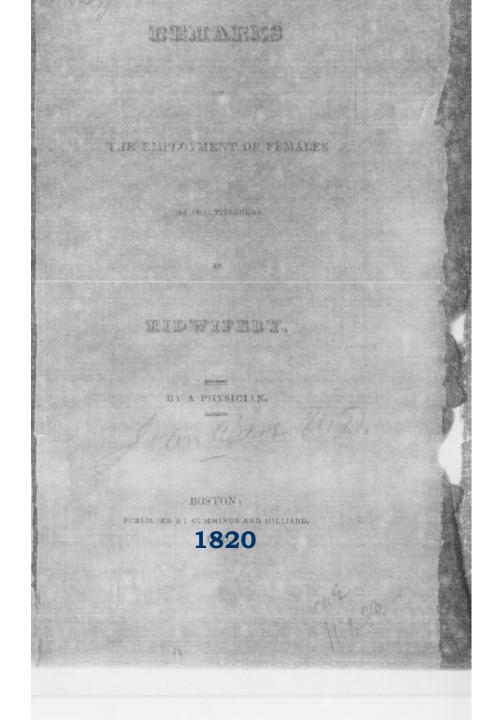
The Campaign Against Midwifery in Massachusetts, 1890-1920



Remarks on the Employment of Females in Midwifery by a Physician John Ware Boston: Cummings & Hilliard 1820

The circumstances, which would render females agreeable and most desirable as attendants in [childbirth] are obvious to everyone, but the objections to their employment are of a nature not so immediately perceived, (p.1)

Janet Alexander arrived in Boston in September, 1819 having been trained in Edinburgh by professor of midwifery Dr. James Hamilton. A year later this report appears.



Remarks on the Employment of Females in Midwifery by a Physician John Ware Boston: Cummings & Hilliard 1820

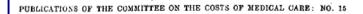
The circumstances, which would render females agreeable and most desirable as attendants in [childbirth] are obvious to everyone, but the objections to their employment are of a nature not so immediately perceived, **except by physicians**... (p.1)

John Ware. Remarks on the Employment of Females in Midwifery

Women are distinguished for their passive fortitude [and] firmness to a much greater degree than men; and this whether they are called to endure suffering themselves or witness it in others...They have not that power of action, or the active power of mind, which is essential to **the practice of** the surgeon. (p. 4) **NOTE: This was 1820**

Midwives as Collateral Damage in "Elevating" Medicine

- Redefining Hospitals Hospitals are redefined in the public mind as places of science & community institutions
- Redefining Birth Birth is seen in the medical <u>and</u> popular press as dangerous
- Creating Obstetrics Articles appear in medical journals and later general media attacking alternative practitioners like "irregular doctors" and midwives



MIDWIVES, CHIROPODISTS, AND OPTOMETRISTS

THEIR PLACE IN MEDICAL CARE

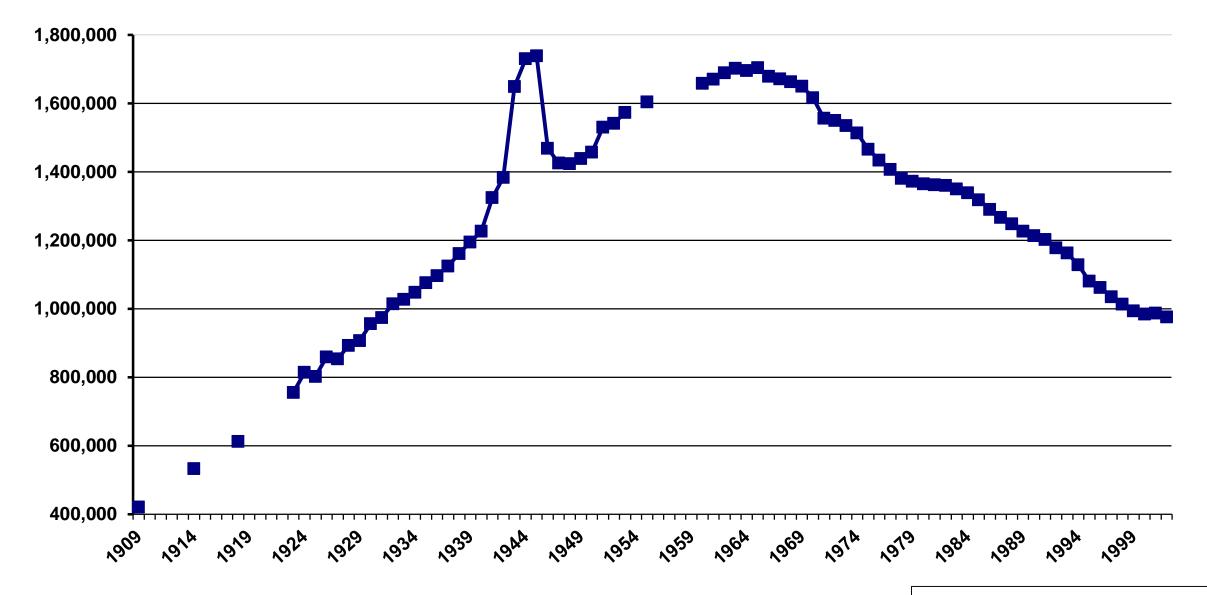
LOUIS S. REED, PH.D.



THE UNIVERSITY OF CHICAGO PRESS CHICAGO LLUNOIS

1932

Number of U.S. Hospital Beds



Scientific Development Twilight Sleep Movement

Key Themes – Redefinition of birth

At the recent meeting of the American Gynecological Society in Philadelphia, the papers read ... were deeply interesting, but they presented the dangers attending ordinary labor as being so numerous and so fearful, that a person unacquainted with the process would have reasonably supposed that but few women could pass through it unharmed. 40 years before Joseph B. DeLee

Hiram Corson, MD. Thoughts on Midwifery. *Medical & Surgical Rep.* 1879. 40:3

Creating Obstetrics (1920)

Midwives Can't be Trained – Any movement which has for its purpose an endeavor to create a new type of midwife is to be deprecated, for it is not conceivable that results will be produced by such move other than to perpetuate an evil which has existed in our midst these many years; midwifery is a remnant of medieval times and is entirely out of harmony with modern prophylactic medicine.

Midwives as Abortionists – "[Laws are poorly enforced]...A man who expectorates on the sidewalk is far more likely to find himself amenable to the law than the professional criminal abortionist."

Rudolph Holmes, MD. Midwife Practice – An Anachronism. Illinois Medical J. 1920. 37: 27.

Redefining Midwifery in the Public's Mind

Articles written by obstetricians for popular magazines and help from an unlikely source – Charles Dickens

Quote from Martin Chuzzlewit:

She was a fat old woman, this Mrs Gamp, with a husky voice and a moist eye, She wore a very rusty black gown, rather the worse for snuff, and a shawl and bonnet to correspond.,.... The face of Mrs Gamp—the nose in particular—was somewhat red and swollen, and it was difficult to enjoy her society without becoming conscious of a smell of spirits. Like most persons who have attained to great eminence in their profession, she took to hers very kindly; insomuch that, setting aside her natural predilections as a woman, she went to a lying-in or a laying-out with equal zest and relish.

Campaign against midwifery

Changing Legal Climate in Mass.

- 1. Birth Registration (1891)
- 2. Laws defining medicine (Mass. 1894 Medical Practice Act)
- 3. Prosecution of "alternatives" (case of Hanna Porn, 1905-1909)
- Campaign against cooperative physicians closes out "irregulars."

THE IMMIGRANT MIDWIVES OF LAWRENCE: THE CONFLICT BETWEEN LAW AND CULTURE IN EARLY TWENTIETH-CENTURY MASSACHUSETTS*

Eugene Declercq and Richard Lacroix

1985

The Nature and Style of Practice of Immigrant Midwives in Early Twentieth Century
Massachusetts
Author(s): Eugene R. Declercq
Source: Journal of Social History, Vol. 19, No. 1 (Autumn, 1985),]
Public Health Then and Now
Published by: Oxford University Press

"I know of no other section of the country which has been more successful in the prohibition (of midwifery) than Massachusetts." J.M. Baldy *Amer J Obstet.* 1916

The Trials of Hanna Porn: The Campaign to Abolish Midwifery in Massachusetts

Eugene R. Declercq, PhD

IDWIFE CHARGED	INED SI25 ON SS., FRIDAY EVENING,
WITH BREAKING LAW	TWO CHARGHANNA PORN IS GIVEN THREE MONTHS
ople Assumed That She Had	
Permit From State Board	Bistriel Gourt Sha is Also Final \$160 On Offer Count. Allos Tomiti Finad \$215
L EACH YEAR FOR BIRTH RETURNS	
	SOTH TAKE LOFEAU TO SUPERIOR SCILL.
GRANTED ANOTHER TRIAL: GRANTED ANOTHER TRIAL: Is Maina Porn's Case Will Com Up for Trial Once More.	EXIMPLE EXIMPLE C. COLLEG
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Campaign included Legal Sanctions

Hanna Porn Cases 1905-1909

Prosecution of alternatives : Commonwealth v Hanna Porn The Trials of Hanna Porn: The Campaign to Abolish Midwifery in Massachusetts

Eugene R. Declercq, PhD

The reason I continued the business, after being told by the court to stop the work, is that I thought the law is unjust.... I never worked only among my own people.¹

Source: Declercq E. The trials of Hanna Porn: The campaign to abolish midwifery in Massachusetts. *American Journal of Public Health* 1994; 84:1022-1028.

Legal Campaign: Commonwealth v Hanna Porn

- Born in Finland, 1860; came to US late 1880s. Attended Chicago
 Midwife Institute
- Graduated in 1896 & began practice in Gardner, MA Feb. 1897
- Attended 648 births until 1908; 2nd most active birth attendant in Gardner with comparatively good outcomes
- Worked in the Finnish (69%) community. 60% chairmakers, 13% laborers; worked alone & charged \$2 -- \$5.

Stillbirth and Neonatal Death Rates by Attendant, Gardner, MA 1897-1908

	Stillbirths	Stillbirths			Total Births	
Attendant	No	%	No.	%	Attended 1897-1908	
Hanna Porn	14	2.2	14	2.2	642	
Gardner Doctors	148	4.3	171	5.0	3,421	

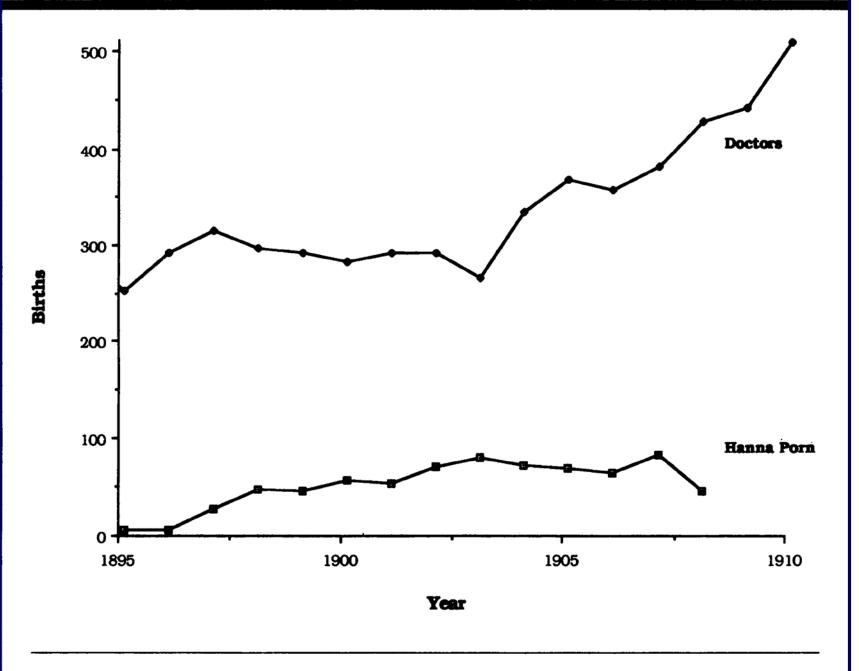


FIGURE 1—Births, by attendant, in Gardner, Mass, 1895 through 1910.

Legal Campaign: Commonwealth v Hanna Porn

Court cases brought against her

- First case: July 27, 1905. Porn wrote to Board May 3, 1905. Board minutes later refer to a discussion of the "midwife problem" Porn loses: \$200 fine
- Basis of prosecution: Medical Registration Act stated no one could practice medicine (which included obstetrics) without being approved by the board of Registration in Medicine
- Appeals to Mass. Supreme Court. Basis of her appeal? She doesn't practice obstetrics she practices midwifery!

COMMONWEALTH OF MASSACHUSETTS.

SUPREME JUDICIAL COURT. LAW SITTING, 1906.

COMMONWEALTH vs. HANNA PORN.

BRIEF FOR THE COMMONWEALTH.

STATEMENT OF THE CASE.

This is a complaint under Revised Laws, Chap. 76, Sect. 8, for practicing medicine without being registered by the Board of Registration in medicine. The defendant offered expert evidence to prove that the practice of midwifery was not the practice of medicine in any of its branches, which evidence was excluded, and the defendant excepted. The Superior Court ruled that the practice of midwifery was the practice of medicine and was in violation of the statute, to which ruling the defendant excepted.

the court suggested that it would be possible for "the Legislature to separate by a line of statutory demarcation the work of the midwife from that of the practitioner of medicine." However, their prevailing interest was with "the maintenance of a high standard of professional qualifications for physicians."

Source: Declercq E. The trials of Hanna Porn. *AJPH*. 1994; 84:1022-1028.

OBCESTER, 88.

Legal Campaign: Commonwealth v Hanna Porn

- Continued to practice. Arrested 12/8/1907. Found guilty, fined \$250. Fine dropped on promise to leave. Didn't
- Four Gardner doctors brought charges and testified against her in this trial
- Sentenced in 1909 for "persistent determination to carry on the work." Given 90 days at hard labor.
- In year following year, same 4 doctors increased births attended by 63%

Commonwealth of Massachusetts. Date of Dirth, December 3/ 1908. Sex, Joorg Color (if other than white), It Suile Name (if named), Place of Birth, No. Name of Father, Name of Mother, Maiden Name of Mother, Residence of Parents, No. Occupation of Father, Lehansmaker Birthplace of Father, Russia Birthplace of Mother, 92 tub Sua (Signature),

The reason I continued the business after being told by the court to stop work is that I thought the law is unjust....I never worked only among my own people.

Hanna Porn at sentencing. 9/1/1909

Legal Campaign: Commonwealth v Hanna Porn

Hanna Porn after the court case

 Porn & other midwives kept practicing through various means

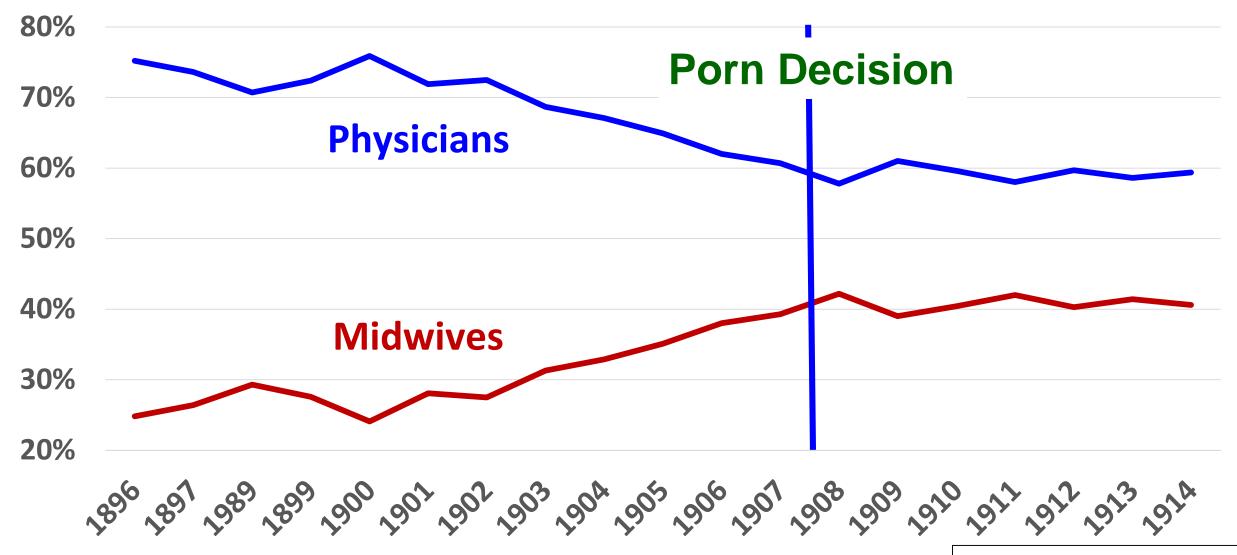
 Died July 8, 1913. Obituary: "strong willed and hard working"

Legal Campaign: Commonwealth v Hanna Porn

Impact of Porn case on midwifery practice in Lawrence, Mass.

- Setting of Lawrence as an "immigrant community" and a home for midwives
- Changes in practice subsequent to Porn
- Nature of a midwife's practice
 - Training and background
 - Ethnic variations in practice
 - Geographic distribution of practice

Midwifery Birth Attendance Lawrence, Mass, 1896-1914



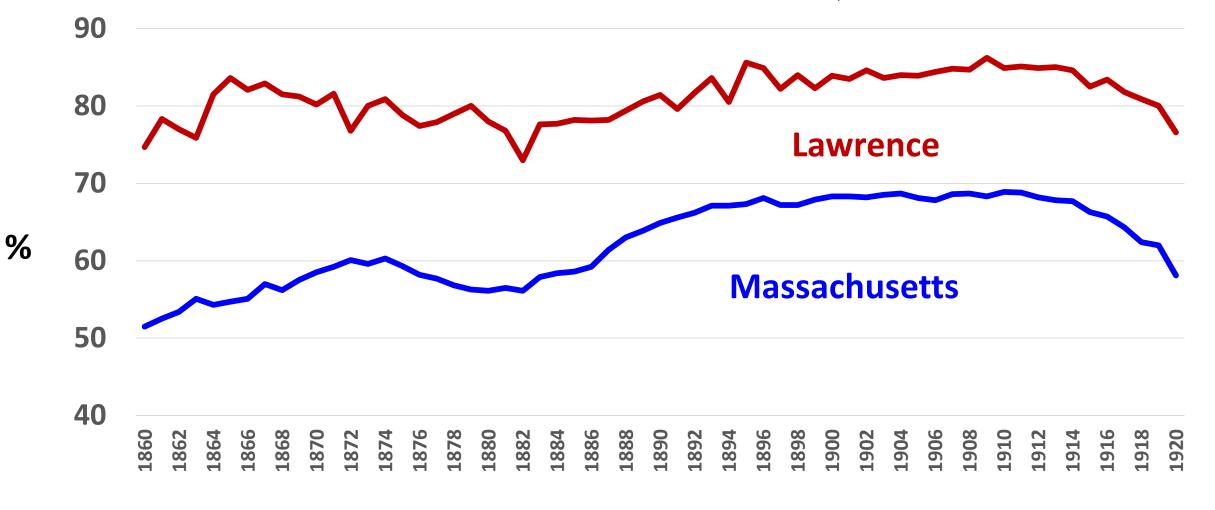
Physician's Perspectives on Immigrant Midwives

Dr. Ira Wile, who noted that: "the interrelation of immigration and midwifery may not seem patent at first glance. A moment's thought, however, will show that in the problems relating to the restriction of immigration and the restriction of midwifery there are many points in common."³⁵

Wile. Boston Med & Surg J. 1916

Lawrence was an example of ... "(the midwife's stronghold) a manufacturing city of about 100,000 population largely composed of immigrants" Emmons & Huntington, *Am J Obstet.*, 1912

Percent Births to Foreign Born Mothers, Lawrence & Massachusetts, 1860-1920



So who were the midwives of Lawrence?

Year	# Midwives	# Active MW	Total MW Births	Ave. per Active MW	# Leading MW	Leading MW	% Leading MW
1896	1	1	327	327	327	Louise Beck	100
1897	1	1	285	285	285	u	100
1898	4	3	335	268	307	u	92
1899	6	4	290	73	112	u	39
1900	5	3	259	86	199	M. Riehm	77
1901	7	5	324	65	229	u	71
1902	11	5	368	74	180	u	49
1903	8	4	500	125	238	u	48
1904	7	6	537	90	210	u	39
1905	7	4	569	142	192	u	34
1906	8	6	726	121	263	H. Himmer	36
1907	11	8	810	101	272	u	34
1908	14	10	937	94	241	M. Riehm	26
1909	11	8	885	111	292	u	33
1910	14	9	1003	111	272	u	28
1911	17	9	967	107	223	u	23
1912	18	10	940	94	185	u	20
1913	20	13	1192	92	211	u	18
1914	18	12	869	72	162	V. Pedrazzini	19

Name	Primary Ethnic Group Served	% Primary Group	# Precincts Worked in	% Busiest Precinct	N* ('96, '00, '05, '10, '14)
Louise Beck	German	48	29	16	291
Concetta Carbonaro	Italian	100	9	62	93
Laura Carpenito	Italian	95	11	40	119
Ann Currran	Irish	74	9	52	42
Angelina DeMarco	Italian	99	10	49	121
Antonia Dyba	Austiran/Polish	24	14	39	228
Hanarata Groele	Austrian	48	8	32	50
Hedwig Himmer	Russian	23	29	12	346
Serafina Isabella	Italian	95	5	51	37
Louise Loppes	Portugese	48	2	96	25
Angelina Lopiano	Italian	98	10	40	274
Virginia Pedrazzini	Italian	99	13	55	297
Minnie Riehm	Russian	39	34	23	801
Paola Ripa	Italian	100	9	59	71
Christine Shaheen	Syrian	100	2	79	24
Elena Stella	Italian	100	5	48	23

Strategies of the Lawrence Midwives

Strategies used by midwives to continue practice after Porn

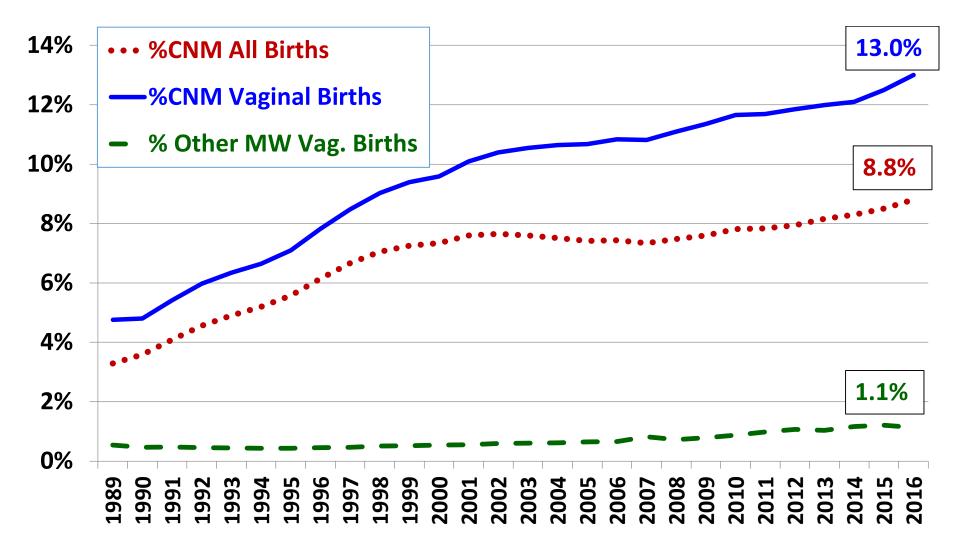
- 1. Rely on good outcomes
- 2. Work with helpful doctors
- 3. Community support
- 4. Flexible payment schemes
- 5. Advertising
- 6. "Going underground"



The return of midwifery in the U.S.

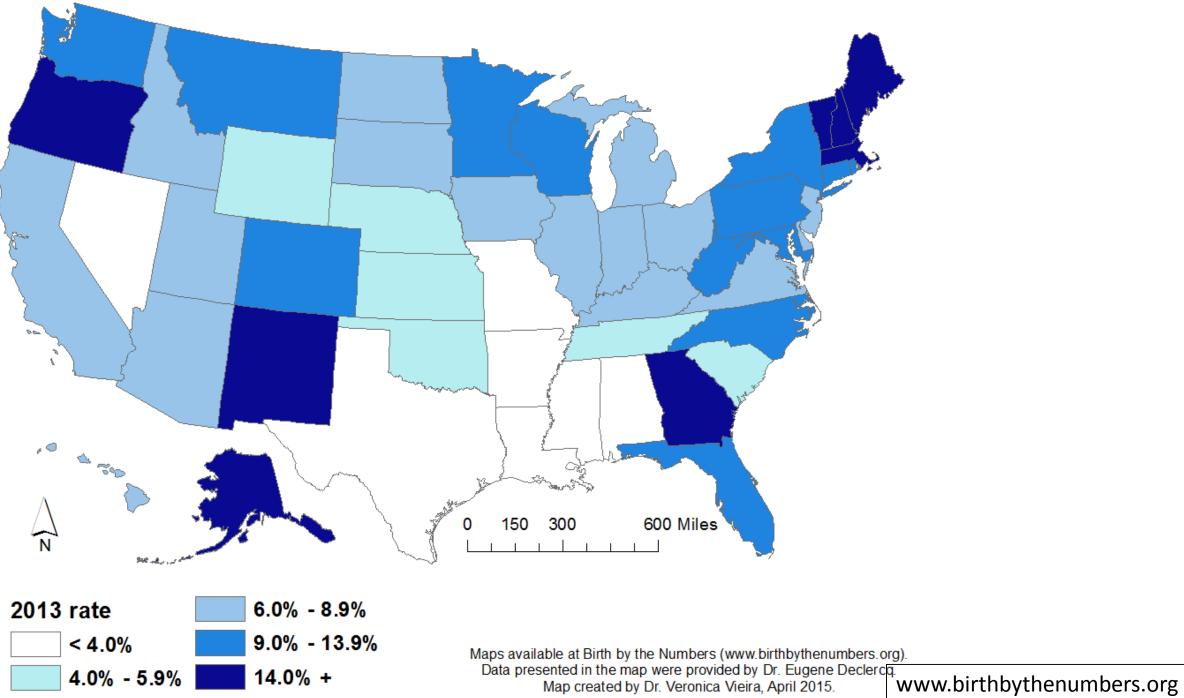
Current Maternal and Infant Health Status in Lawrence

Midwife Attended Births 1989-2016



Source: NCHS Annual Birth Reports

BirthByTheNumbers.org



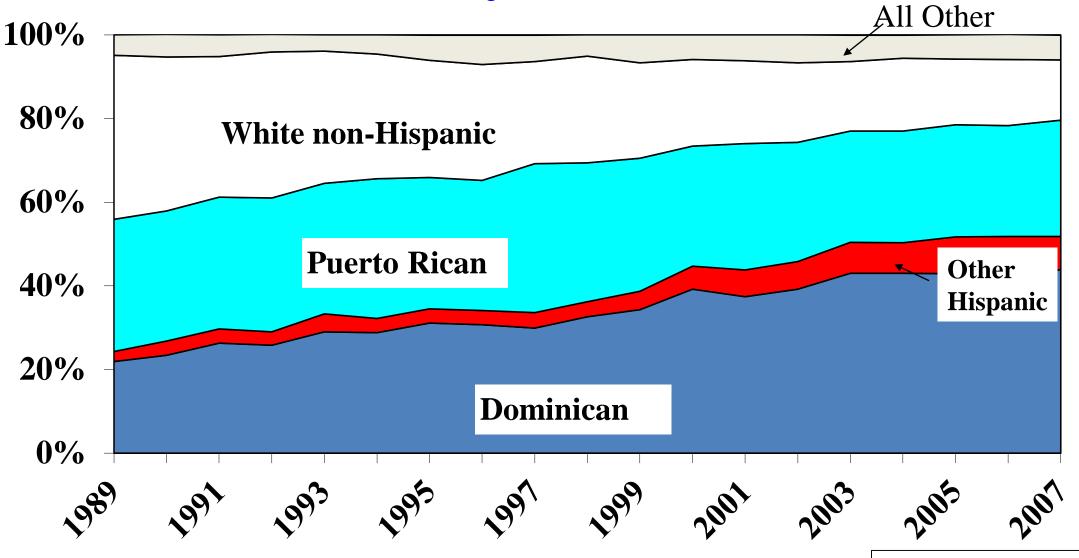
Current Maternal and Infant Health Status in Lawrence

Local Lawrence Population Shifts, 1980-2015

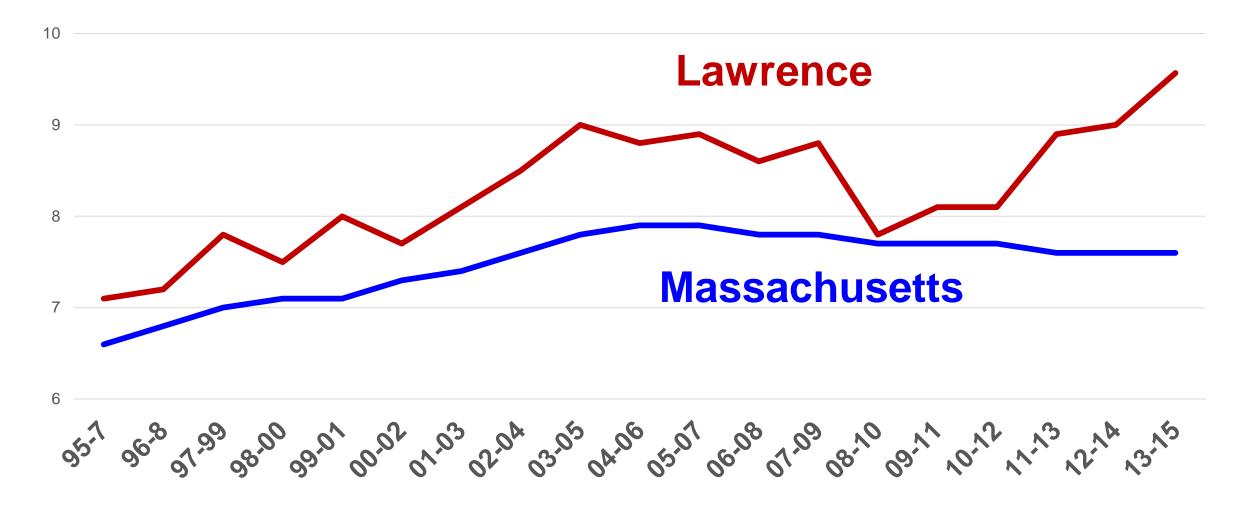
	1980	1990	2000	2010	2015*
Lawrence					
Hispanic	10,171	29,237	43,019	56,363	60,168
Total	63,175	70,207	72,043	76,337	78,804
%	16.1%	41.6%	59.7%	73.8%	76.4%
Census Tract 2517	(1400000US250092 51700)				
Hispanic		1,088	2,280	3,136	3,623
Total		4,119	4,413	5,145	5,661
%		26.4%	51.7%	61.0%	64.0%

* American Community Survey – 5 yr estimate

Distribution of Lawrence Births by Hispanic Ethnicity, 1989-2007

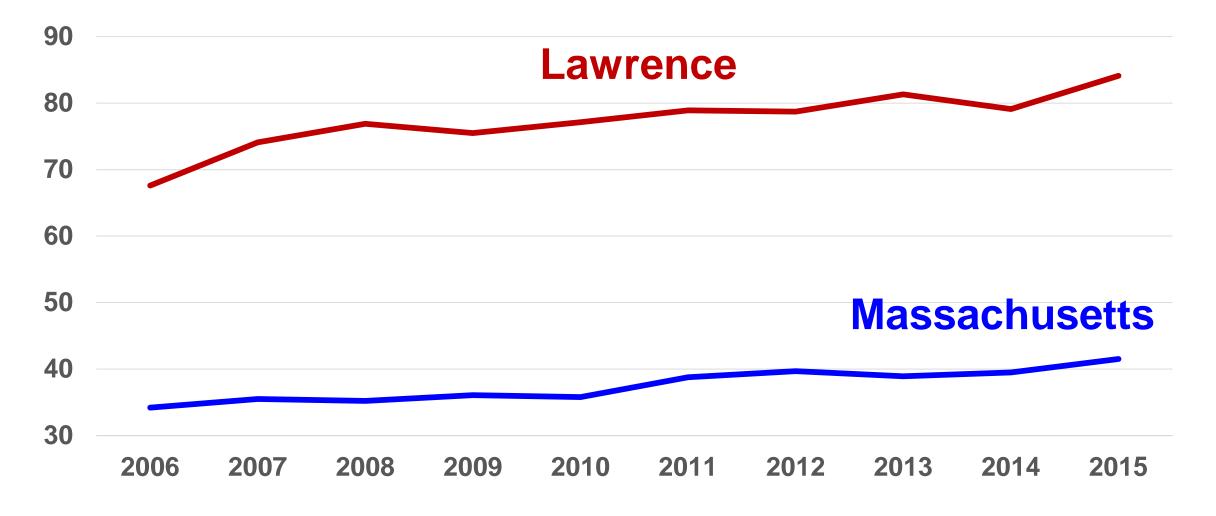


Trends in Low Birth Weight Using 3 year Moving Averages: Lawrence & Massachusetts, 1995-2015



Source: Mass. DPH Annual Reports.

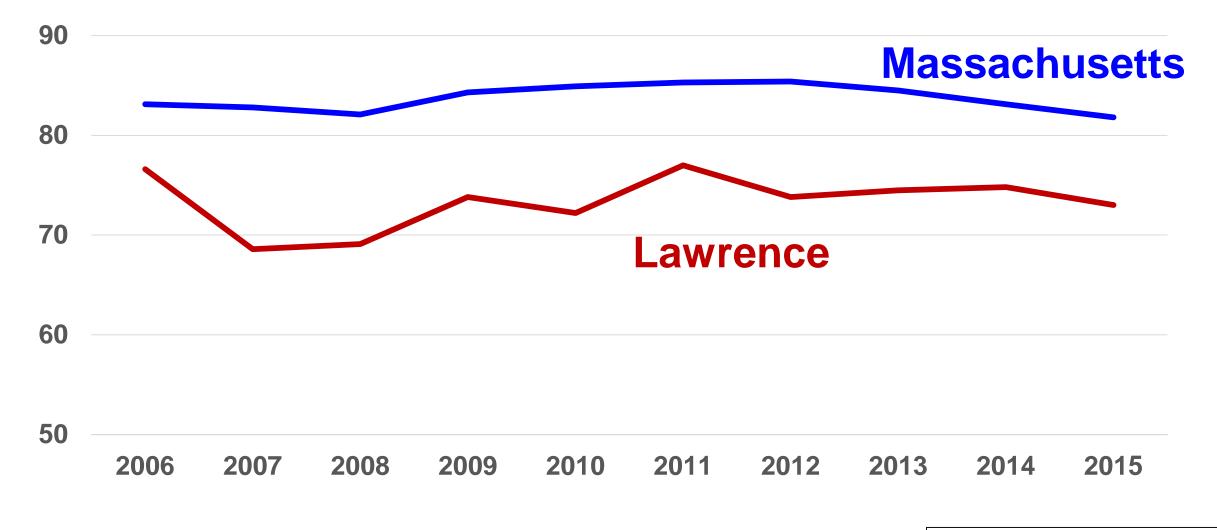
Public Payment (%) for Prenatal Care, Lawrence & Massachusetts, 2006-2015



Source: Mass. DPH Annual Reports.

www.birthbythenumbers.org

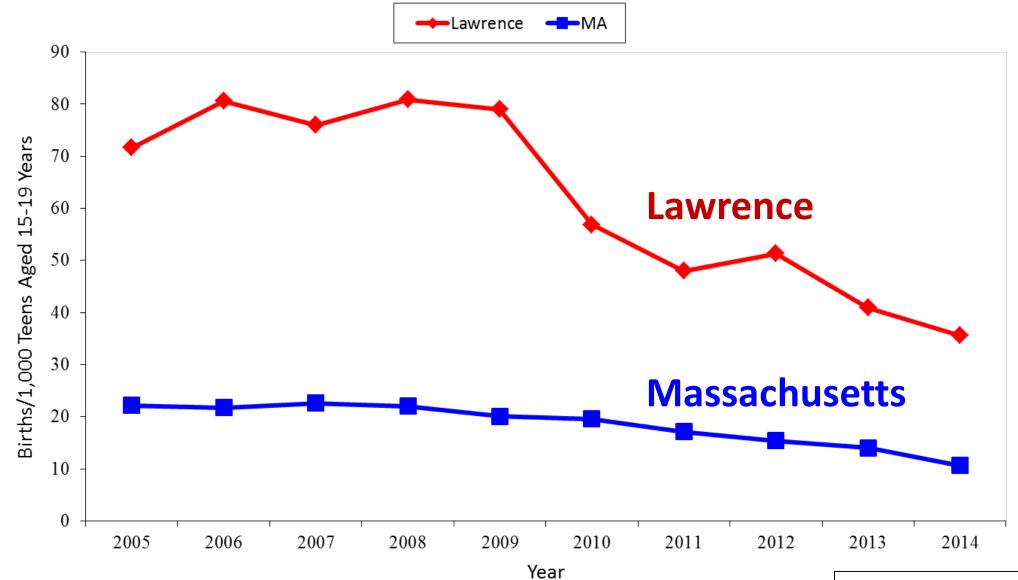
Adequate Prenatal Care(%), Lawrence & Massachusetts, 2006-2015



Source: Mass. DPH Annual Reports.

www.birthbythenumbers.org

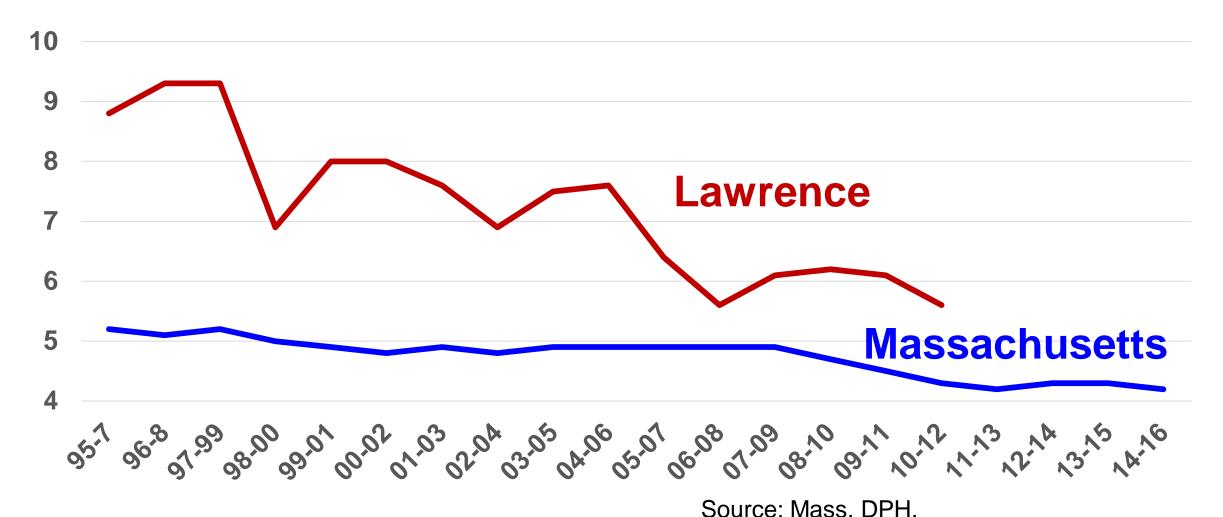
Birth Rates Among Teens Aged 15–19 Years— Lawrence and Massachusetts, 2005–2014



Source: Mass. DPH Annual Reports.

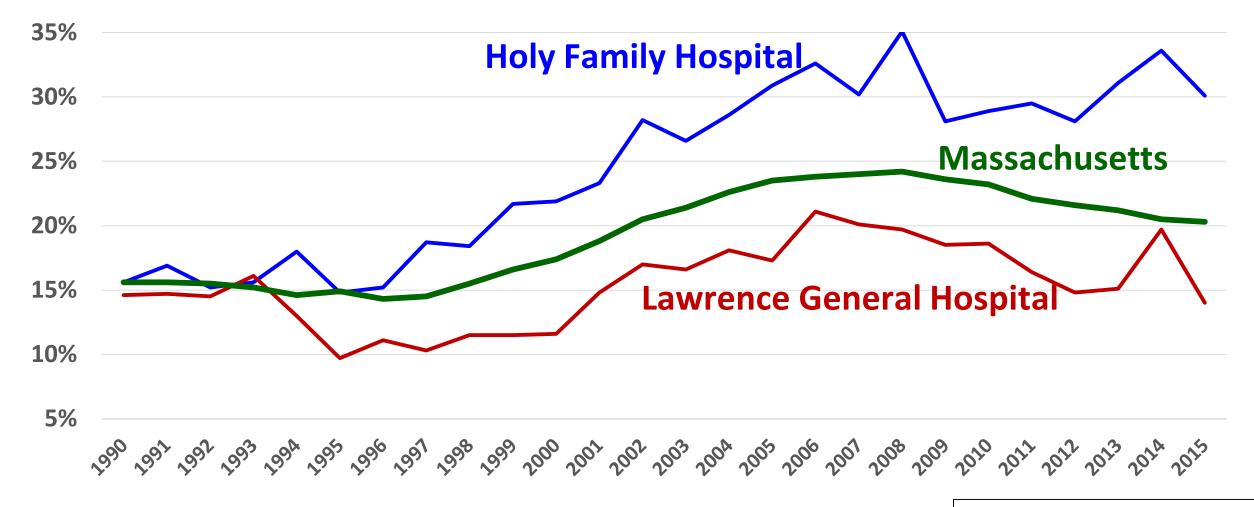
www.birthbythenumbers.org

Trends in Infant Mortality* Rates Using 3 year Moving Averages: Lawrence & Massachusetts, 1995-2015



* Death of an infant up to a year after birth

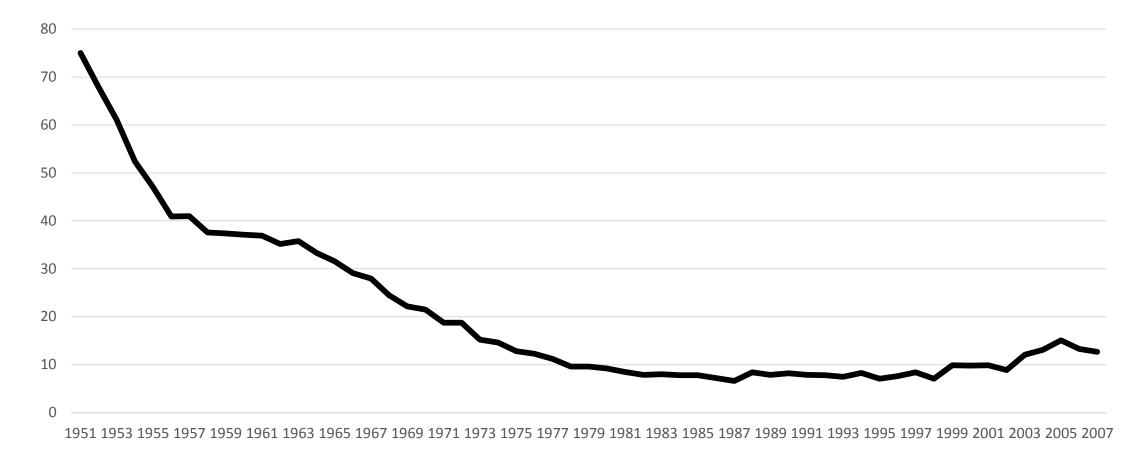
Primary Cesarean Rates, Greater Lawrence Hospitals 1990-2015



Source: Mass. DPH Annual Reports.

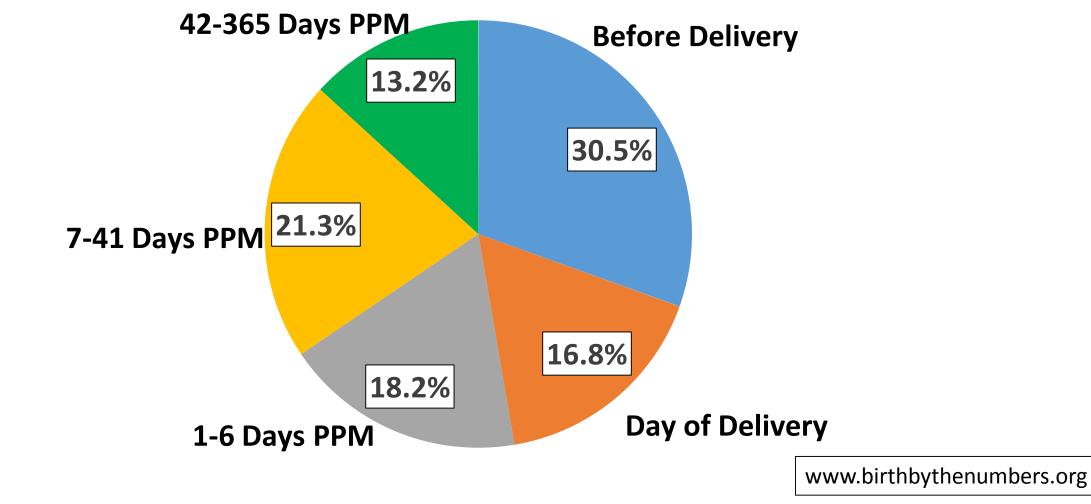
A Final Note on Maternal Mortality

U.S. Maternal Mortality (per 100,000 live births), 1951-2007



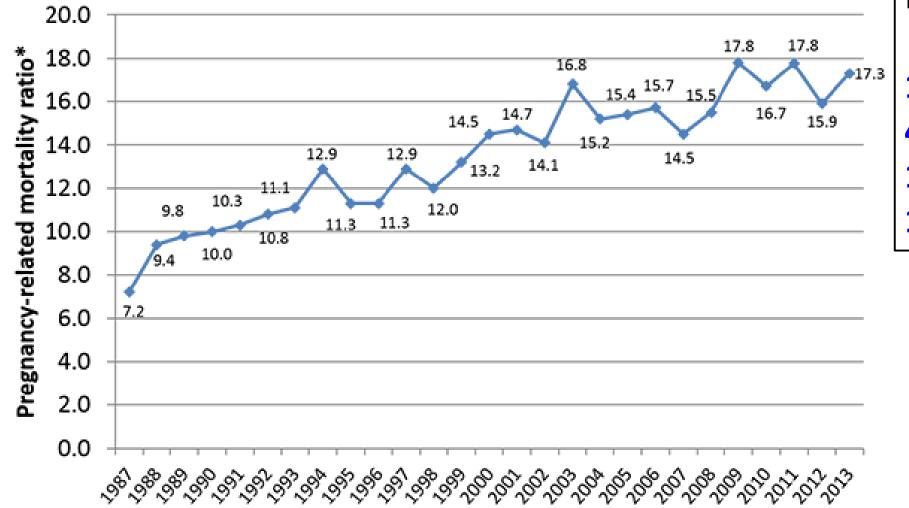
Source: NCHS. Deaths: Final Data. Annual Reports.

Timing of Maternal Deaths



Source: Creanga A et al. Pregnancy Related Mortality in the U.S., 2011-2013. Obstet & Gynec 2017 & MMRIA (2017).

Pregnancy Related Mortality, U.S., 1987-2013



*Note: Number of pregnancy-related deaths per 100,000 live births per year.

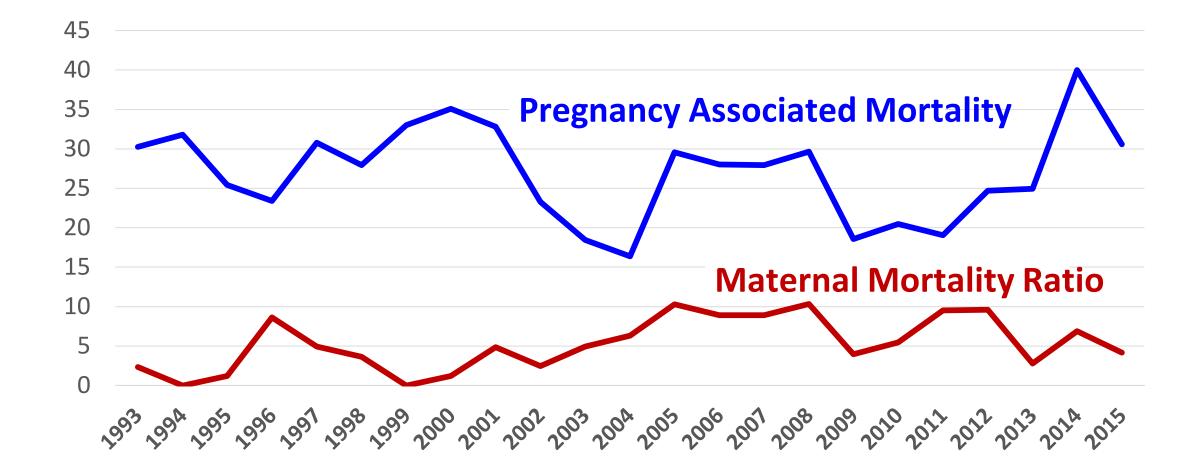
Racial Disparities

Rates for 2011-13:

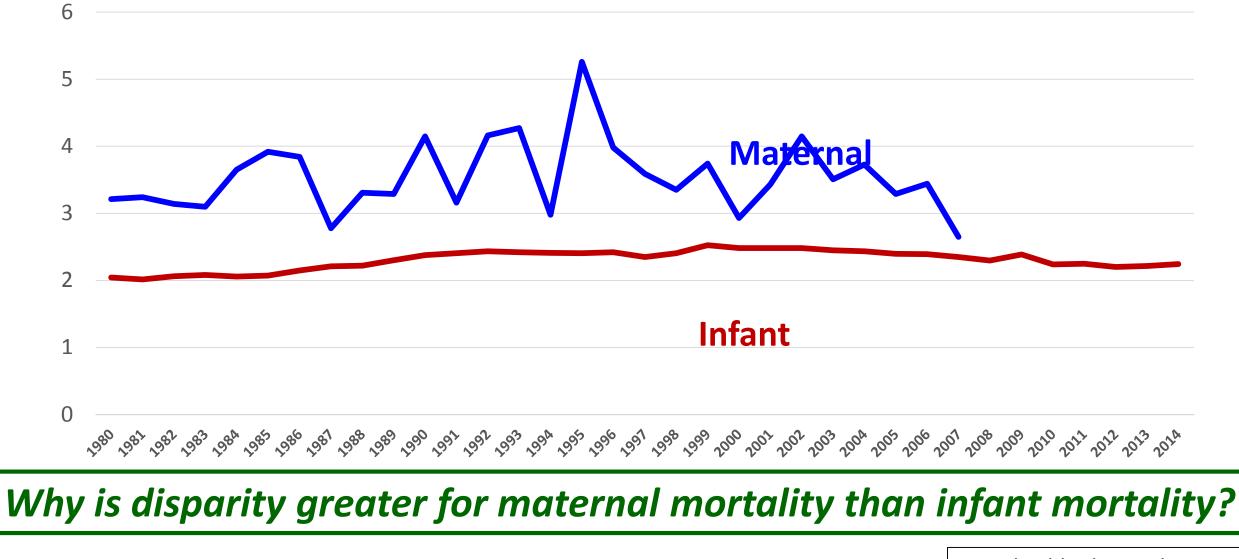
12.7 white women43.5 black women11.0 Hispanic14.4 other races

Source: CDC. Creanga. Pregnancy-Related Mortality in the United States. Obstet Gynecol 2017.

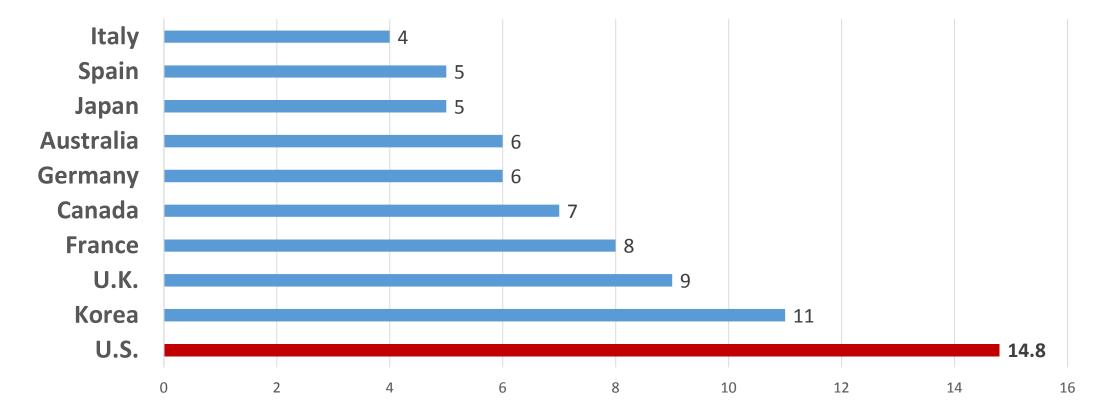
Massachusetts Maternal Deaths, (per 100,000), 1992-2015



U.S. Infant & Maternal Mortality Black to White Ratios of 1980-2014



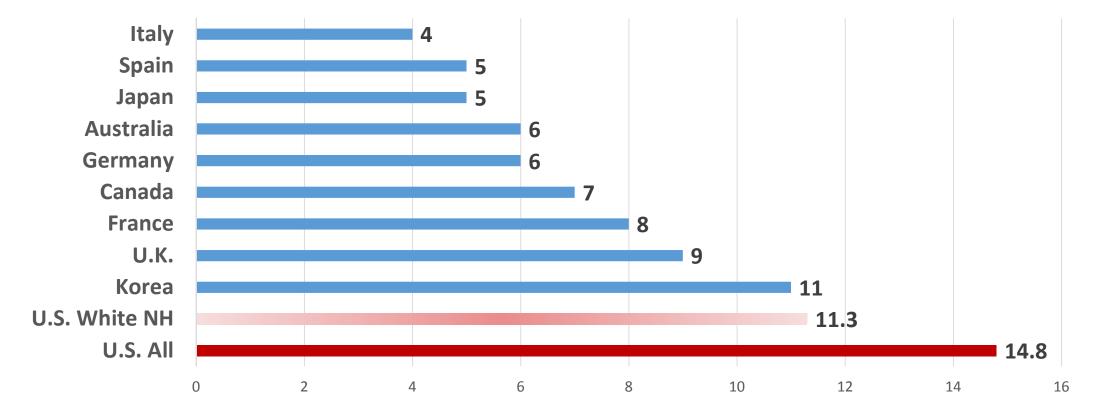
U.S. MMR* Compared to Countries with 300,000+ births, 2014, using WHO Estim.



* Maternal Mortality per 100,000 births

Source: Maternal Mortality: 1990 to 2015 Estimates by WHO, UNICEF, UNFPA, World Bank Group & UN Population Division. Geneva: 2015.

U.S. MMR* Compared to Countries with 300,000+ births, 2014, using WHO Estim.



* Maternal Mortality Ratio per 100,000 births

Source: Maternal Mortality: 1990 to 2015 Estimates by WHO, UNICEF, UNFPA, World Bank Group & UN Population Division. Geneva: 2015.

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Birth by the Numbers Team

8 doulas



