Asthma Surveillance in DC Emergency Departments

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Methods

- IMPACT DC Asthma Surveillance
 - ED visits and admissions only
 - All non-military DC hospitals
 - Data stratified by age and residential zip code



Methods

- Based on ICD-9 codes 493.xy
- Includes cases with primary, secondary, or tertiary diagnosis of asthma*
- -Incidence, not prevalence data
- Visit level data, not patient level

*In 2008, data from Providence Hospital includes only cases with a primary diagnosis of asthma. Based on earlier submissions, we estimate that this under represents pediatric ED visits by 0.1%, adult visits by 1.3%, and senior visits by 3.5%, for 2008 only.



Methods

–Age Categories:

• Pediatric: 12m-17y

• Adults: 18-65y

• Seniors: >65y

– Pediatric age stratification:

 For comparison with CDC National Center for Health Statistics data:¹

0-4y, 5-10y, 11-17y

For comparison with Healthy People 2010 data:²
 0-4y, 5-14y

^{2.} U.S. Department of Health and Human Services. *Healthy People 2010*. 2nd ed. With Understanding and Improving Health and Objectives for Improving Health. 2 vols. Washington, DC: U.S. Government Printing Office, November 2000.

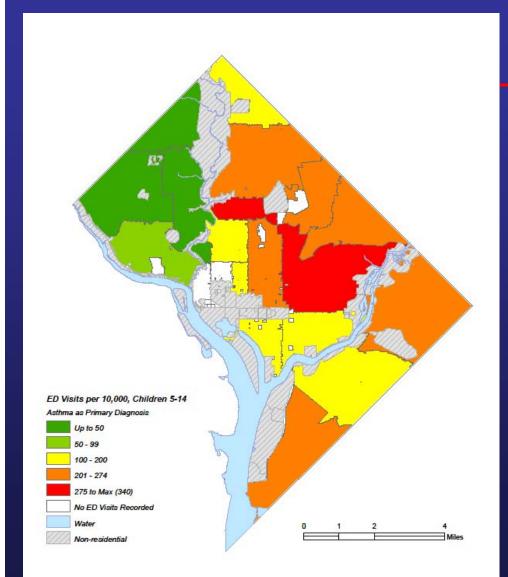


^{1.} Akinbami, L.J., *The state of childhood asthma, United States, 1980-2005.* 2006, National Center for Health Statistics: Hyattsville, MD.

Pediatric Data Age 12 months – 17 Years 2002-2009



Visit Rate by Zip Code, 2006

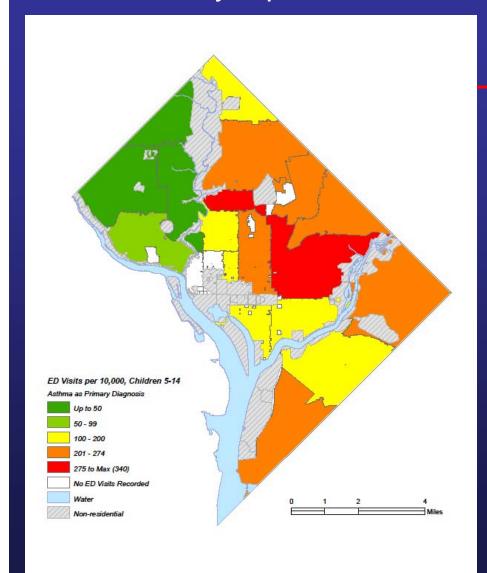


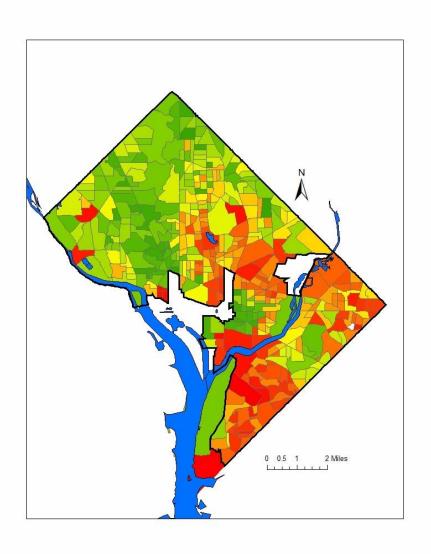
>10 fold Difference in Rate



Visit Rate by Zip Code, 2006

Poverty in DC, 2000







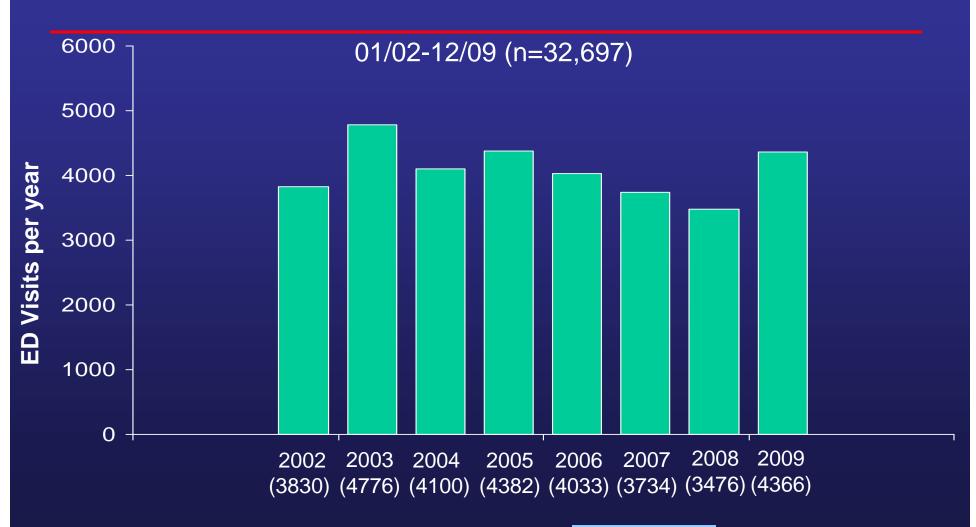
Pediatric ED Visits by DC Hospital

All Zip Codes, Ages 12 mo-17 y

01/02-12/09 (n=53,829)

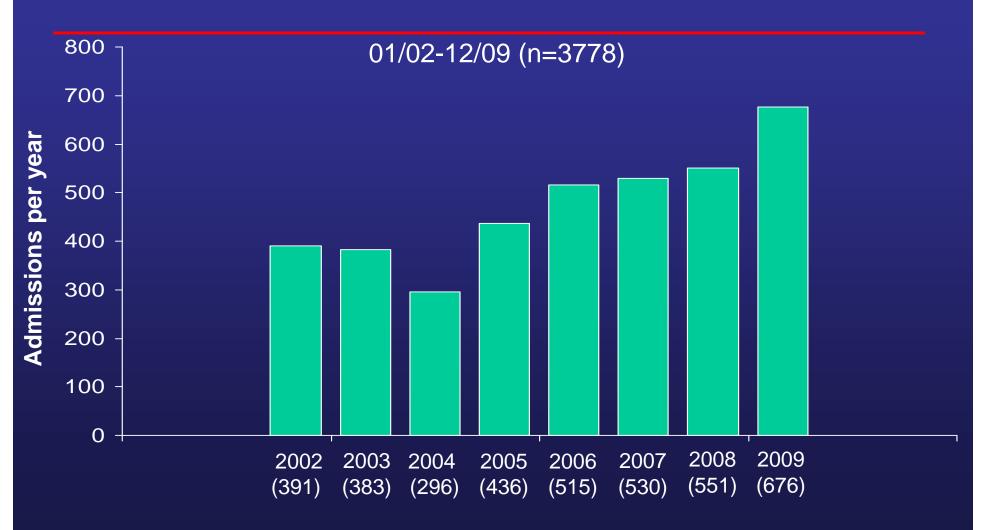
Site	# of Visits	% of Visits
Children's	45,116	83.8
United Medical Center	2,789	5.2
Georgetown	2,289	4.3
Howard	2,069	3.8
Providence	435	0.8
Sibley Memorial	360	0.7
Wash Hospital Ctr	345	0.6
George Washington	296	0.6
DC General	130	0.3

Pediatric ED Visits for Asthma DC Zip Codes, Ages 12 mo-17 y





Pediatric Admissions for Asthma DC Zip Codes, Ages 12 mo-17 y



Pediatric Admissions for Asthma DC Zip Codes, Ages 12 mo-17 y

	ED Visits	Admissions	% Admitted
2002	3,830	391	10.2 %
2003	4,776	383	8.0 %
2004	4,100	296	7.2 %
2005	4,382	436	9.9 %
2006	4,033	515	12.8 %
2007	3,734	530	14.2 %
2008	3,476	551	15.9%
2009	4,366	676	15.5%
TOTAL	32,697	3778	11.6%

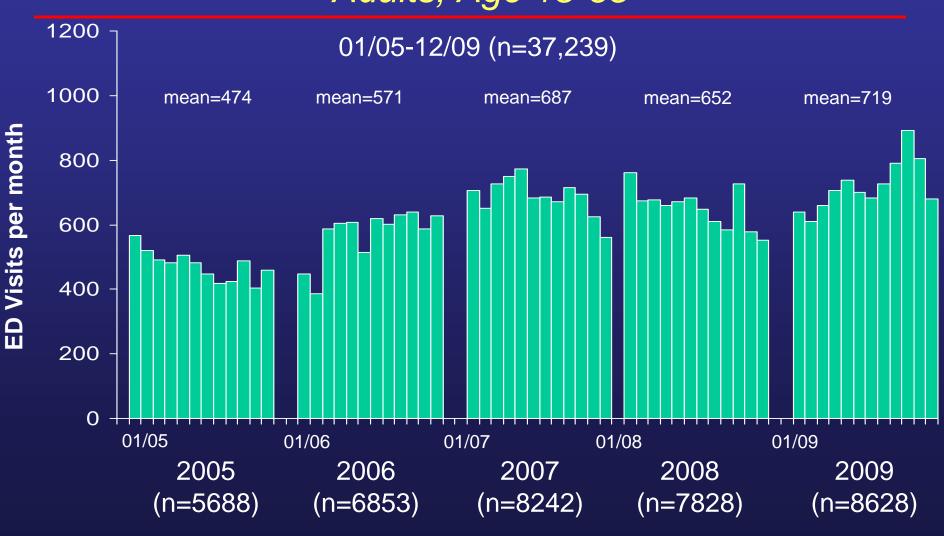
Adult Data

Age 18 – 65 Years

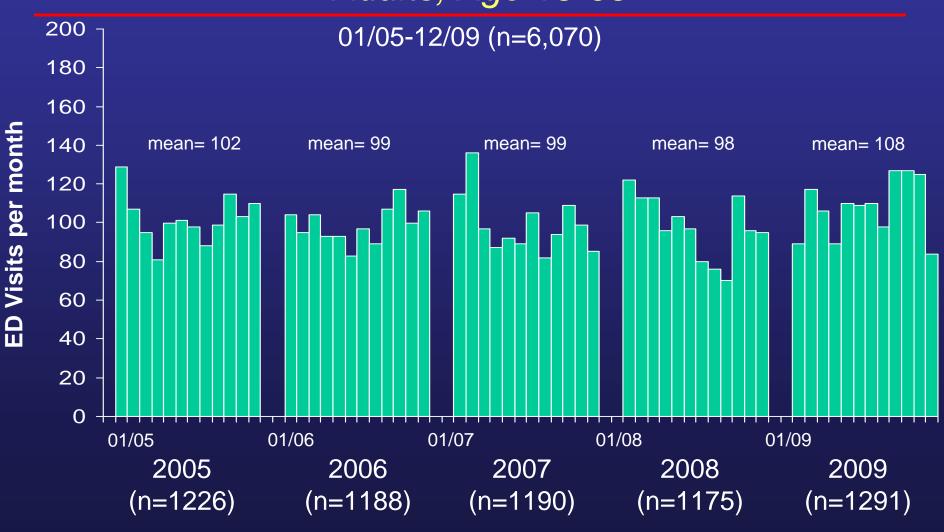
2005-2009



ED Visits for Asthma 2005-2009, DC Zip Codes Adults, Age 18-65



Admissions for Asthma 2005-2009, DC Zip Codes Adults, Age 18-65



ED Visits by DC Hospital

2005-2009, all Zip Codes Adults, Age 18-65

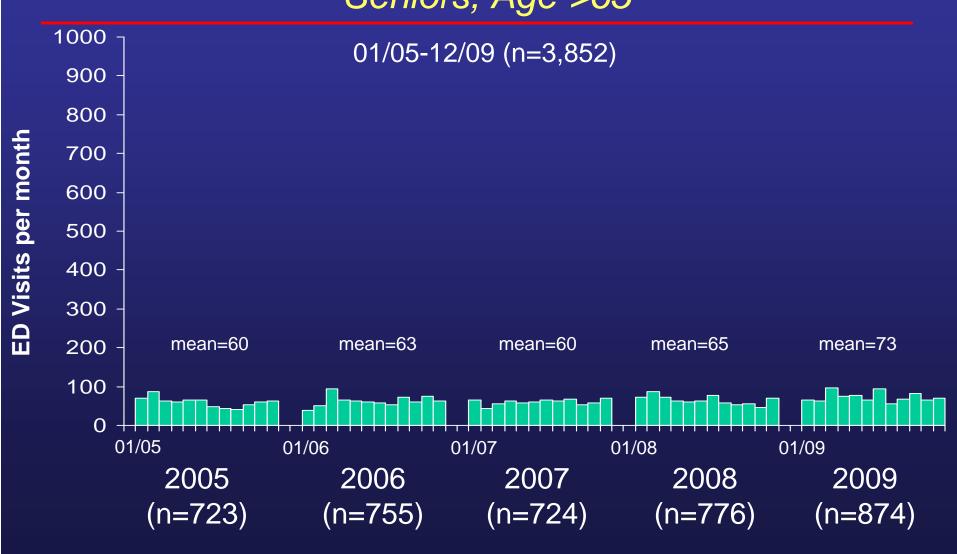
Site	# of ED Visits	% of Visits
Washington Hosp Cent	19,896	41.0
Howard	9,772	20.1
Georgetown	4,731	9.8
United Medical Center	4,395	9.1
Providence	4,036	8.3
George Washington	3,396	7.0
Sibley Memorial	1,646	3.4
Children's	652	1.3

Senior Data
Age >65 Years
2005-2009

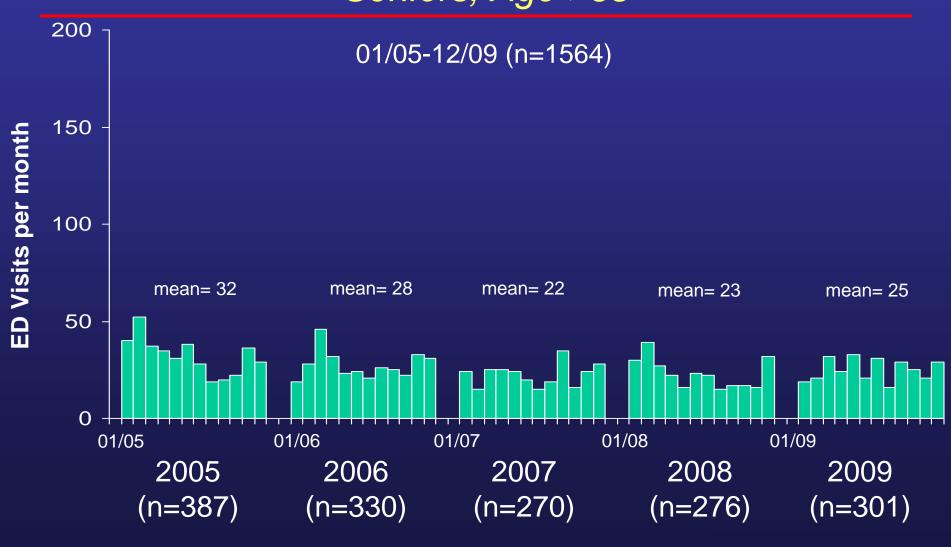


ED Visits for Asthma 2005-2009, DC Zip Codes

Seniors, Age >65



Admissions for Asthma 2005-2009, DC Zip Codes Seniors, Age >65



ED Visits by DC Hospital

2005-2009, all Zip Codes Seniors, Age >65

Site	# of	% of
	ED Visits	Visits
Washington Hosp Cent	2316	47.0
Providence	749	15.2
Howard	534	10.9
Sibley Memorial	443	9.0
Georgetown	433	8.8
United Medical Center	255	5.2
George Washington	192	3.9
Children's	1	0.0



Thank you!

