National Children's Study Waukesha County Vanguard Center

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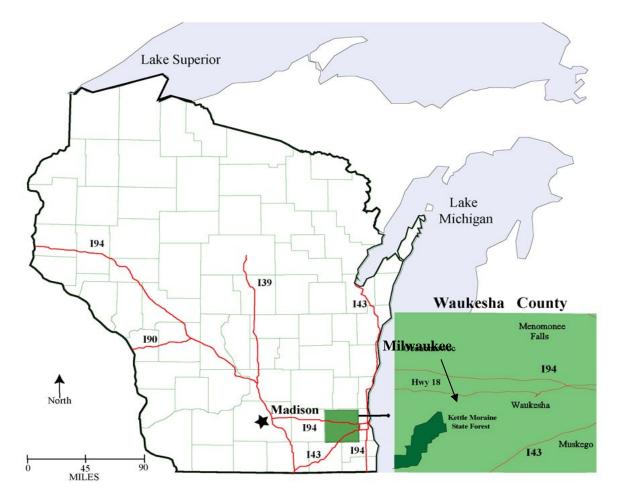
> NCS Assembly Meeting Washington D.C. 11/29/05

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Waukesha County, Wisconsin

Located in Milwaukee – Waukesha – West Allis, Wisconsin MSA; a metropolitan, non-certainty NCS Vanguard site

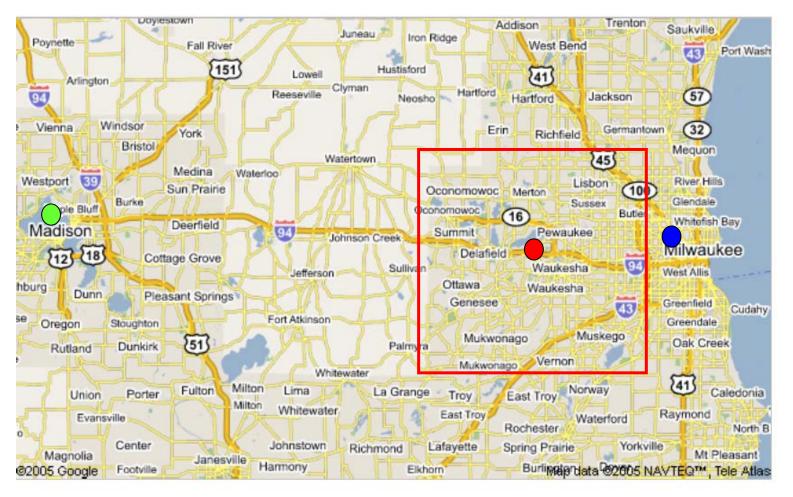




Map created by UW Staff using ESRI ArcGis 9.0 and Illustrator 9.0.

HEALTH GROWTH ENVIRONMENT

Waukesha County, University of Wisconsin Madison, Medical College of Wisconsin/Children's Research Institute



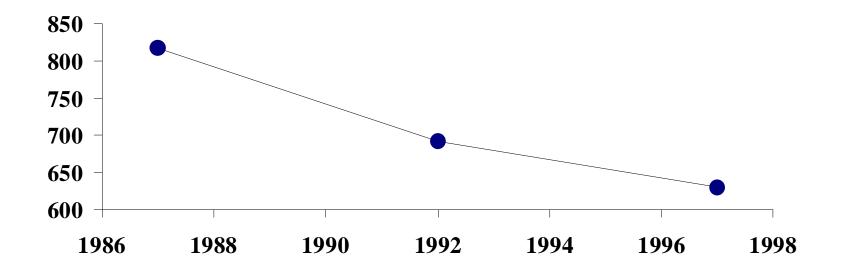
Map downloaded from MapQuest.

MCW/CRI 15 miles

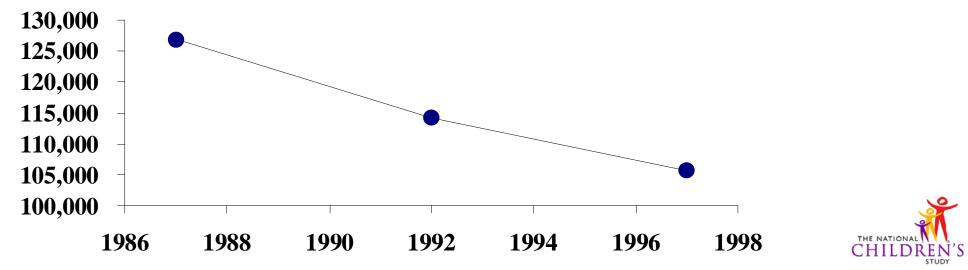


THE NATIONAL CHILDREN'S STUDY

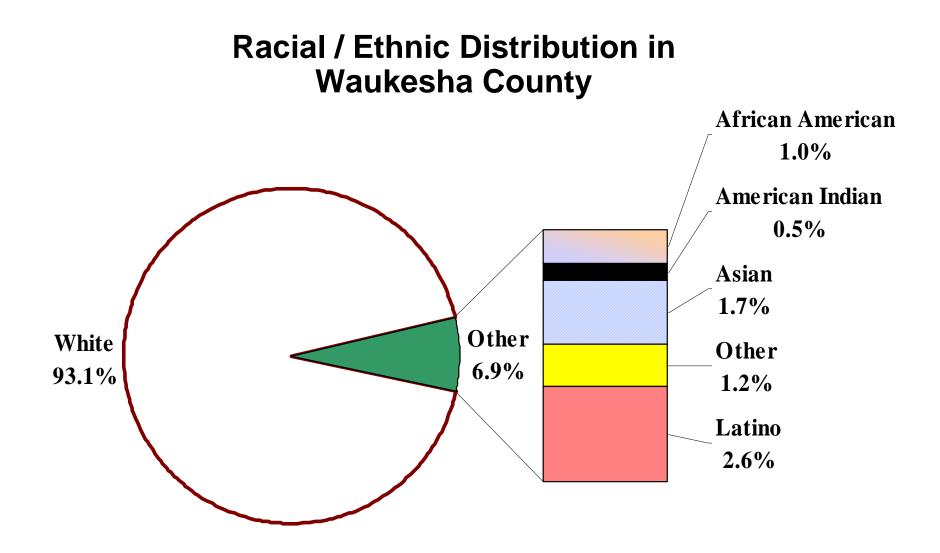
Number of Farms in Waukesha County 1987-1997



Acres of Farmland In Waukesha County 1987 to 1997

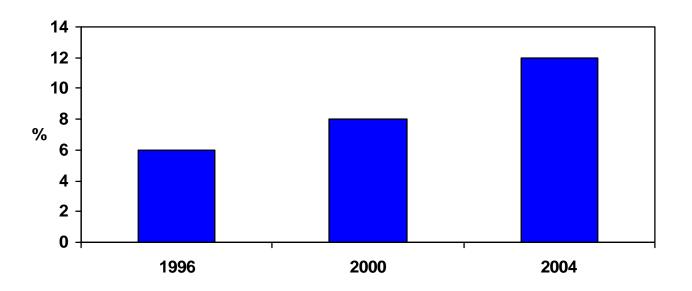


HEALTH GROWTH ENVIRONMENT





Other Facts about Waukesha County Births



% of Births Classified Hispanic or Non-White

- Increasingly diverse infant population-largest increase is in Hispanic and Asian births.
- 23% of births are to women >=35



Vanguard Center Demographic Comparisons

	Midwest			South	East		West			
	Waukesha WI	Lincoln MN	Pipestone MN	Yellow Medicine MN	Brookings SD	Duplin NC	Queens NY	Montgo mery PA	Orange CA	Salt Lake UT
	1									
Population 2000	360,767	6,429	9,895	11,080	28,220	49,063	2,229,379	750,097	2,846,289	898,387
% change 90-00	18.4	-6.7	-5.7	-5.2	12	22.7	14.2	10.6	18.1	23.8
Persons per sq mile	649	12	21	15	35	60	20,409	1,553	3,606	1,218
Median Income	\$62,800	\$31,607	\$31,909	\$34,393	\$35,343	\$29,900	\$42,400	\$60,800	\$58,800	\$48,400
White, Non-Hispanic	93%	94%	96%	95%	96%	55%	33%	85%	51%	81%
	1									
Live births	4,311	75	106	131	309	728	32,268	9,376	45,366	18,223
Births/1,000 population	11.6	12.2	10.9	12.3	10.9	14.8	14.5	12.2	15.1	19.4
Infant Mortality	3.5	15.1	11.8	14.1	0	9	5	4.8	4.5	5.6
Low birth weight (%)	5.7	6.8	2.9	8.5	5.2	8.8	7.7	7.3	6.1	7.0
Early Prenatal Care	96%	77%	92%	86%	86%	80%	66%	89%	91%	76%



Environmental Exposures, Waukesha County

- Maternal smoking (10% according to maternal reporting between 1996 and 2000)
- High levels of and intra-county variability in radium and arsenic, trihalomethanes, and nitrates in the water supply
- Radon (a high percentage of the homes in Waukesha County have radon levels above the US EPA guideline)
- Lead (nearly 20% of existing households in Waukesha built before 1950)
- Expansion of housing, 25% of the housing structures in the county in 2000 constructed after 1990.
- Widespread agricultural pesticide exposures
- Outdoor air pollution -Air quality cancer risk, hazard index and fine particulate matter highest within the State of Wisconsin



Park in the City of Waukesha





Photo taken by co-principal investigator.





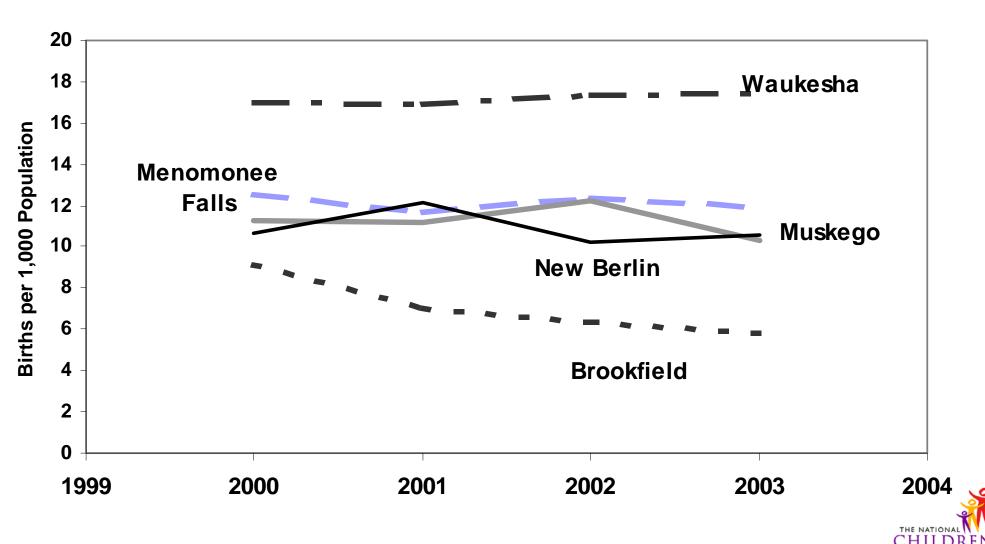
Photo taken by co-principal investigator.



Photo taken by co-principal investigator.



Crude Birth Rate for Larger Civil Divisions in Waukesha County 2000-2003



STUDY HEALTH GROWTH ENVIRONMENT

Hospitals with >5% of Deliveries to Waukesha County Residents by County and City

				% of All
County	City	Hospital	Births	Births
Waukesha	Brookfield	Elmbrook	432	10%
		Community		
	Menomonee Falls	Memorial	319	7%
	Oconomowoc	Oconomowoc Memorial	393	9%
	Waukesha	Waukesha Memorial	1,831	42%
Milwaukee	Milwaukee	St Joseph	525	12%
	West Allis	West Allis Memorial	375	9%
Totals			3,875	89%



NCS-Waukesha Vanguard Center Collaborators Key Partners – Roles and Areas of Expertise

University of Wisconsin-Madison

- Neurodevelopment, Asthma, Injury
- Environmental Health, Epidemiology
- Demography/Population Sciences
- Longitudinal Studies
- Medical College of Wisconsin /Children's Research Institute
 - Community based participatory research
 - Medical Community Engagement
 - Environmental Health
 - Gene-Environment Interaction
- **Marquette University** Colleges of Nursing and Communication
 - Biometry/Data Collection, Perinatal Data
 - Hospital-based Data Collection
 - Risk Perception
 - Outreach

- National Opinion Research Center (University of Chicago)
 - Field Operations
 - Recruitment & Retention
 - Sampling/Segment Selection
- Children's Service Society of Wisconsin
 - Recruitment & Retention
 - Interviewing
 - Community Connection
- University of Wisconsin-Milwaukee
 - Environmental Health, Built Environment
 - Community Outreach & Education
 - Psychosocial Development
- Wisconsin Department of Health & Family Services
 - Environmental Health
 - Vital Records
 - Maternal and Child Health



NCS-Waukesha Vanguard Center Collaborators Other Partners (Established or Initiated)

Hospitals & Health Systems

- ProHealth Care
- Covenant Health Care
- Froedtert & Community Memorial
- Aurora Health Care
- Waukesha Family Practice Center

Waukesha County

- Executive Offices
- County Board of Supervisors
- Department of Health & Social Services

State Legislators

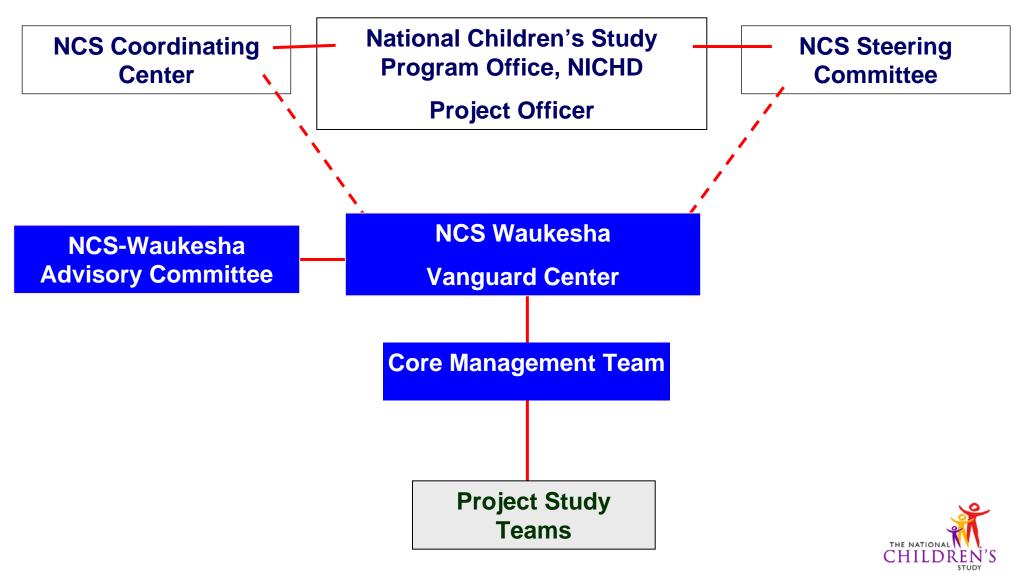
City Government

- Waukesha
- New Berlin
- Merton
- Pewaukee

- Other Community Agencies/Institutions
 - Casa de Esperanza
 - Wisconsin Association for Perinatal Care
 - University of Wisconsin Extension
 - St. Joseph's Clinic
 - March of Dimes
 - Waukesha Women's Center
 - Catholic Charities
 - Waukesha County Technical College
 - University of Wisconsin-Waukesha
 - Addiction Resource Council



NCS-Waukesha Vanguard Center Organizational Structure



HEALTH GROWTH ENVIRONMENT

Study Teams

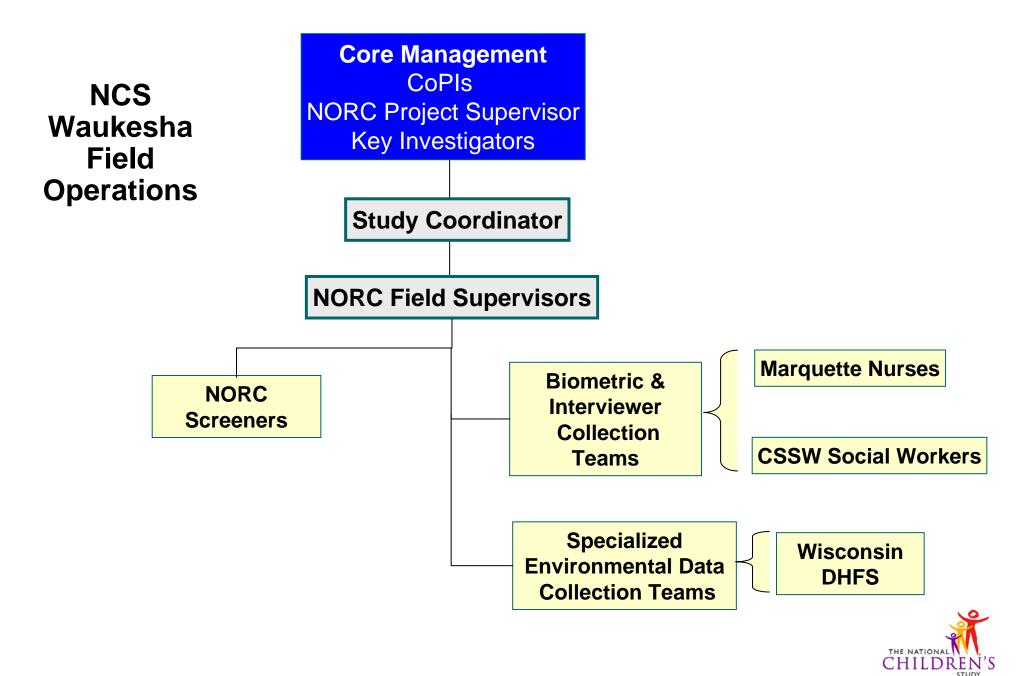
Phase I

- Community Outreach & Collaboration
- Protocol Development
- Sampling & Characterization
- Testing & Research

Phase II

- Community Outreach & Collaboration
- Recruitment & Enrollment
- Data Collection & Handling
- Quality Assurance & Control
- Analysis, Reports, Deliverables





HEALTH GROWTH ENVIRONMENT