



CONSORTIUM FOR INFANT AND CHILD HEALTH

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CINCH Organizational Membership

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Children's Hospital of The King's
Daughters
CHIP of Norfolk
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Chesapeake
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Christ The King Catholic Church
City of Norfolk
Compatible Solutions, Inc
Daily Press
Department of Medical Assistance
Services/FAMIS Outreach
DHA - Newport News/ Resource
Mothers
E.A. Brown Consulting, Inc.
Eastern Shore Health District
Eastern Virginia Medical School
Eastern Virginia Region Perinatal
Council
Emmanuel Baptist Church
Empowerment 2010
For Kids
Ft. Eustis MACH
GlaxoSmithKline
Gloucester County Public Schools
Gloucester Parks, Recreation and
Tourism
Great Bridge/Hickory Family YMCA
H.E.L.P.

Hampton City Schools
Hampton Health Department
Hampton Roads Pediatrics-CMG
Hampton University School of
Pharmacy
Head Start
Healthy Families
Interdenominational Children
Foundation of VA
Interfaith Advisory Board to Virginia
Beach DSS
J&F Productions
James City County
JCC VA Cooperative Extension
Kids Priority One
Kiwanis Club of Mercury 64
Kraft Elementary School
Little Creek Clinic
Merck Pharmaceuticals
Mid Atlantic (NMCP) Immunization
Minority Health Coalition of South
Hampton Roads
Naval Medical Center, Portsmouth
Navy New Parent Support Team
Newport News Department of Social
Services
Newport News Family YMCA
Newport News Office on Youth
Development
Newport News Public Schools
Newport News Redevelopment and
Housing Authority
Norfolk Academy
Norfolk Community Services Board
Norfolk Department of Human
Services
Norfolk Department of Public Health
Norfolk Federation of Civic Leagues
Norfolk Inter-Agency Consortium
Norfolk Public Schools
Norfolk Public Schools, Oceanaire
Elementary
Norfolk Redevelopment and Housing
Authority
Norfolk State University
Norfolk Urban League
Norfolk WIC
North District United Methodist
Women
Obici Health System
OHA Head Start
Old Dominion School of Nursing
Old Dominion University
Olde Towne Medical Center
Operation Breaking Through
Park Place Multi-Service Center
Patient Advocate Foundation
Peninsula Department of Public
Health District
Peninsula Institute for Community
Health (PICH)
Peninsula Metro YMCA
Places & Programs for Children
Portsmouth Community Health
Center

Portsmouth Department of Social
Services
Portsmouth Health Department
Portsmouth Public Schools
Portsmouth Redevelopment and
Housing Authority
Portsmouth Regional Vaccine
Healthcare Center
Priority Health Care
Project Immunize Virginia
Project Link
Renaissance Pediatrics, PC
Riverside Family Practice Residency
Program
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Urban League of Hampton Roads
Virginia Action For Healthy Kids
Virginia Beach City Public Schools
Virginia Beach Department of
Human Services
Virginia Beach Dept of Public Health
Virginia Cooperative Extension
Virginia Department of Health -
Vaccines for Children Program
Virginia Health Care Foundation
Virginia Premier Health Plan
Well Now!
Western Tidewater Health District
WHRO
Williamsburg Community Health
Foundation
WVEC-TV, Channel 13
Wyeth Vaccine
YMCA of South Hampton Roads
Youth Matter, Inc.

Table of Contents

Section 1.	Introduction	Page 1
Section 2.	Demographics	Page 10
Section 3.	Pregnancy and Infant Outcomes	Page 15
Section 4.	Preventive Health Services	Page 28
Section 5.	Physical Illness & Injury	Page 38
Section 6.	Mental Health	Page 81
Section 7.	Goals and Disparities	Page 107

Introduction

Many of the things we need can wait, the Child cannot. Right now is the time his bones are being formed, his blood is being made and his senses are being developed.

To him we cannot answer "Tomorrow." His name is "Today."

- Gabriela Mistral,
- Poet and 1945 Nobel Laureate in Literature

These words of wisdom underscore the many ways in which America in general and Hampton Roads in particular fail to ensure that all children have an opportunity to grow into healthy adults. At any given time, nearly 10 million children lack health insurance, and despite investments in health care, the United States exceeds other nations in the rates of infant mortality, adolescent pregnancy, childhood asthma, obesity and overweight and accidental and violence-related injuries and deaths.

In this 3rd *Report on the Health of Children in Hampton Roads*, we find some interesting trends in child health data from 1998-2003. Children in the Hampton Roads region account for nearly 24% of the Commonwealth's children and the number of children in our region continues to grow. The incidence of teen pregnancy and infant mortality has decreased, although our rate of low birth weight infants continues to rise. Rates of hospital discharge for unintentional injury declined over this period due to motor vehicle crashes and accidental poisonings decreasing dramatically, even lower than state rates. Similarly, the region's rate of HIV and AIDS hospitalization decreased 45%. The rate of asthma-related hospitalizations decreased in our region and remains lower than the rest of Virginia. From 2002 to 2004, the number of uninsured children in Hampton Roads decreased by half. Coincidentally, CINCH's Work Groups for child health insurance, asthma, injury prevention and our partners in the Eastern Virginia Perinatal Council have focused intensive efforts on improving public awareness of child health issues, as well as providing quality educational programs, services and advocacy efforts over this same time period. Although we cannot attribute all of these changes to the work that the Consortium for Infant & Child Health (CINCH) and its partners have done over the past five years, we believe our work has contributed to improvements in vital child health indicators.

Unfortunately, not all of the news in this Report is good. Although the number of uninsured children in Hampton Roads has decreased, the percentage of Virginia's children that these numbers represent has risen from 30% to 50%. Hospitalizations due to accidental falls remained constant over this period. Regional rates of child abuse and child abuse fatalities remains higher than the state average. Hospitalization rates for mental health disorders have remained constant over this period and are roughly comparable to state rates. Even though the rate of HIV and AIDS hospitalizations in Hampton Roads decreased, it is still higher than in the rest of Virginia, comprising over 70% the state's hospitalizations during this period. There is also a need to collect and provide data on what disparities exist within populations related to these indicators. We have much more work to do.

Our partnership efforts are sorely needed to provide valuable programming in the content areas described above, but also in obtaining reliable baseline data upon which to base our programming. Although the Peninsula Health District has measured the incidence of overweight and obesity among school children and Norfolk City Public School System plans to do the same in 2005, comparable state and local data related to pediatric obesity is severely lacking. Even though CINCH claimed success in helping to improve immunization rates in our region in 1996, we have not collected comprehensive regional data since and can only extrapolate from available state-level data. These issues should be an obvious wake up call for our region – a catalyst for us to work together in partnership across our communities to collect standardized data that is critically needed to apply for funding and to plan and implement child health programs that are likely to succeed.

To address all of the challenges presented in this Report, the child health agenda is remarkably simple. We need a broad commitment to protect and strengthen access to services and service delivery systems already in place, and to build from this base toward a more effective, comprehensive health care system for all of our children. In her insightful 1997 book, *Health Care for Children: What's Right, What's Wrong, What's Next*, Ruth Stein raised five imperatives that would help us successfully navigate our child health agenda:

- Employ a child-specific standard of care
- Align incentives to assure appropriate care, particularly for vulnerable and medical costly children
- Expand coverage to provide wide access to health care services
- Strengthen community health functions and partnerships
- Invest in research, education and information systems needed to assure future quality of health care

Each of these elements would increase the ability of children to reach their potential and thrive and to become productive adult members of the community. Together, the imperatives form the building blocks of a systematic effort to reshape child health, an effort that we, in Hampton Roads, began twelve years ago with CINCH and continue today. On January 24, U.S. Surgeon General Richard Carmona, M.D., dubbed his 2005 agenda, "The Year of the Healthy Child." Among the topics he will address are prenatal care, immunizations, childhood obesity, child abuse prevention and teen driving. Certainly, we can capitalize on his influence and dedicate the rest of this decade to "Healthy Children for Hampton Roads".

Frances D. Butterfoss, PhD
Director, Consortium for Infant & Child Health

Trends in Health Indicators by Year

Region Compared to State: Better, Worse, or About the Same

Indicators	1998	1999	2000	2001	2002	2003
Asthma	Better	Better	Better	Better	Better	Better
Child Abuse	1	1	Worse	Worse	Worse	1
Child Health Insurance	1	1	Worse	Worse	Worse	1
HIV/AIDS	Worse	Worse	Worse	Worse	Worse	Worse
Infant Mortality	Worse	Worse	Worse	Worse	Worse	Worse
Injuries Intentionally Inflicted by Others	Worse	Worse	Worse	Worse	Worse	Worse
Low birth weight births	Worse	Worse	Worse	Worse	Worse	Worse
Mental Health Conditions	About the same	Better	Better	Better	Better	Better
Prenatal Care	About the same	About the same	About the same	About the same	About the same	About the same
Self Inflicted Injuries	Better	Better	Better	Better	Better	Better
Teenage pregnancy	Worse	Worse	Worse	Worse	Worse	Worse
Unintentional Injuries	Better	Better	Better	Better	Better	Better
Up-to-Date Immunizations at Start of Kindergarten	1	1	1	1	1	Better

¹ Data not available.

² A health indicator in the Region is determined to be better or worse than the state if the Region's rate or percentage differs from the State's rate or percentage by more than 5%. If they differ by less than 5%, the rates are considered to be about the same.

³ The formula for the percent difference is: $(R_i - R_r) / R_r * 100$ where R_i is the poorer rate or percentage and R_r is better rate. This formula is taken from the Center for Disease Control and Prevention's Statistical Notes for Healthy People 2010 and can be found at <http://www.cdc.gov/nchs/data/statnt/statnt25.pdf>.

About The Data

- **Commentary:** In this 2005 report, we present brief commentaries on significant child health indicators alongside the statistical data. These commentaries were written by experts in each area of pediatrics and child health.
- **The Data:** The report uses a variety of data sources that provide information pertinent to the health of children in this region. Sources used in this report include the U.S. Census Bureau, Virginia Department of Health, Virginia Health Information, Inc. In addition to these standard data sources, we have used several special sources, notably, Body Mass Index Data from the Peninsula Health District, and Sign Up Now Virginia.
- **Definition of the Region:** No single definition of geographic boundaries of Eastern Virginia or of Hampton Roads has universal acceptance. For purposes of this report, we defined Urban Hampton Roads as the area encompassing Chesapeake, Hampton, Norfolk, Portsmouth, Newport News, Suffolk, and Virginia Beach. Eastern Virginia Region is defined as the area encompassing the previously mentioned cities, and the following cities/counties: Franklin City, Isle of Wight, Gloucester, James City County, Poquoson, Williamsburg, York County, Accomack, and Northampton.
- **Tables:** Most tables list the number of events and the rate for each locality, Urban Hampton Roads, the Region, and Virginia. Furthermore, most tables include this data over time. Sources of data and definitions are found below each table, in addition to any special information about the data.
- **Charts and Graphs:** For most indicators, we present a variety of graphs. The pie charts indicate the percent of all events that occurred within the region by locality for the most recent years reported. The line graphs indicate the trend over time in rates for the Region as compared to Virginia. Bar graphs indicate the rate of occurrence by locality for the most recent years reported.
- **Variation in Format:** For the most part, we have attempted to present data in a standardized format throughout the report. However, this was not always possible. The variation follows from the differing type of information available from the variety of data sources used in this report. Additionally, data sources and statistical analysis vary on some indicators as compared to past Reports. Thus, some data is not comparable to previous editions of this Report.
- **Benchmarks:** For most indicators, we have included statewide data to compare with data from the region. Although some of the indicators also can be compared to national Healthy People 2010 goals, most of the indicators are not directly comparable. Therefore, Healthy People 2010 goals are included in a separate table at the back of this report.

Eastern Virginia Region



Questions and Answers

1. What is CINCH?

The Consortium for Infant and Child Health (CINCH) is a community partnership to promote health and prevent disease among all children in Hampton Roads. CINCH's programs are made possible through grant funding and assistance from over 400 volunteer members from a variety of organizations whose contributions help to plan, develop, implement, and evaluate our many programs. CINCH was started in 1993, as part of a Centers for Disease Control and Prevention Demonstration Project to determine if community coalitions were an effective agent to change health behavior related to childhood immunizations. Twelve years and many other childhood health topics later, CINCH is still going strong and is our region's premier childhood health organization.

CINCH addresses many child health issues and is continually expanding the topics addressed. Topics include asthma, immunizations, perinatal health, obesity prevention, injury prevention, and health disparities including access to health care, health insurance, and reducing risk factors for a variety of health conditions for high risk/low income children. Health topics are addressed through community needs assessment, and program development, implementation, and evaluation. Topics are typically addressed through Work Groups – which consist of MANY individual and organizational community partners who meet regularly to work on these issues.

2. What is the Center for Pediatric Research?

CINCH's lead agency is the Center for Pediatric Research, a joint program of Children's Hospital of The King's Daughters and Eastern Virginia Medical School. The Center for Pediatric Research (CPR) conducts scientific investigations aimed at improving the health of children and their families worldwide. Established in 1992, the CPR is internationally regarded for its pioneering efforts in bioelectrics, as well as its investigations in viral gastroenteritis, human milk, pectus excavatum and its public health mechanisms to educate and improve child safety, asthma, immunizations, behavioral health and child health insurance. Home-based at the Center for Pediatric Research, CINCH is a nationally recognized health coalition model that has provided significantly to health coalition and child health research literature. CINCH has made significant progress in improving the health of children in Hampton Roads, VA, as well as in assisting communities throughout the United States to create and improve health coalitions of their own.

3. Why does CINCH release a Report on the Health of Children in Hampton Roads?

A snapshot of the health of our children today is an indicator of the health of tomorrow's whole community. The single most effective place to begin affecting the health of a

population of people is to ensure healthy pregnancies and births, and to pay attention to the health of our infants and children. This Report provides an understanding of the issues affecting child health as a starting point for action. While this data book is by no means comprehensive, the data included affords us the ability to measure our progress and to judge interventions that work and those that do not. Guided by information we can work together to identify effective strategies and engage all levels of society: families, health care providers, faith communities, neighborhoods, schools, businesses, governments—in united, sustained effort to “build strong children.”

Investigators at the Center for Pediatric Research, the lead agency for CINCH and a joint program of Children’s Hospital of The King’s Daughters and Eastern Virginia Medical School, are engaged in scientific discovery to uncover new information to improve the health of children. Community-level data allows those involved in community health research and community service to create and implement new programs to affect child health in a methodical and measured manner.

4. Who uses this information and why?

Feedback from our community members suggests that a variety of both medical and lay community professionals use the Report for differing needs. The Report is most *commonly* used by community professionals to identify topic areas needing intervention and programming, provide baseline data and other information for community interventions, and to provide data on areas for which our partners are developing grant proposals.

5. What are the limitations of this Report?

The data in this report are a crude comparison, meaning, that the rates are not standardized on differences between populations or years in terms of age distribution, ethnicity, income, or other potential explanatory factors. The crude comparison simply indicates the extent to which we have a greater or lesser health problem or need relative to our own child population over time or compared to children in Virginia overall. It should be noted that many alternative explanations may be proposed to explain the same data. Crude data alone cannot provide answers to “why rates differ.” This report should be used along with other studies and with first hand experience in order to guide efforts toward health promotion in our communities.

One of the most challenging goals cited in Healthy People 2010 is the elimination of disparities in health. While the current Report does not highlight health issues by race, the authors are hopeful that development of future editions will be supported by funding that will allow for a more in-depth reporting of regional health statistics, especially data related to racial and ethnic minorities. More data are needed regarding the specific needs of racial and ethnic minorities in the Hampton Roads region to help us better identify strategies, strengthen community partnerships, and ultimately eliminate disparities in health.

6. Is this a comprehensive data assessment of the health of Hampton Roads children?

As part of the 1997 Report, CINCH members identified a “top ten” list of health problems, or needs, of children in Hampton Roads including: prenatal care, teen pregnancy, low birth weight, breastfeeding, immunization, child abuse and neglect, human immunodeficiency virus (HIV) infection, asthma, ADHD, and injury. In the 2000 Report, the focus remained on the original top ten health indicators and how Hampton Roads compared to itself and the Commonwealth of Virginia over the past years. The 2005 Report continues to report on these original significant indicators, and it adds data related to child health insurance and obesity, two health indicators considered of great importance to future health outcomes. The data is trended over time and compared against the Commonwealth, when possible.

7. What is the most hopeful statistical outcome of this data book?

Ideally, this Report can be used to identify correlations between trend data and funding or programmatic changes, both good and bad, related to that indicator. For instance, the numbers of low birth weight infants and infant mortality is decreasing. Comparing trends in the data with the introduction of specific community programming to address birth outcomes, and also with changes in levels of funding across time may help those programs to show a correlation between their programming and outcomes. This use of the Report supports the efficacy of community intervention and is instructive in terms of where to place our time and money. It is data worth celebrating.

8. How does Hampton Roads compare to the Commonwealth?

There is no overall trend to our comparison to the Commonwealth – it varies greatly by indicator. Each indicator must be assessed individually as to contributing factors related to improvements or decline.

For instance, Hampton Roads used to have the highest low-weight baby and infant mortality rates in the Commonwealth. No more. We are beginning to make a dent in these numbers and it would appear from our data that programs like Healthy Start, March of Dimes Initiatives, and Resource Mothers programs are effective. On the other hand, we have half of the state’s uninsured children in our region. Public awareness and enrollment barriers specific to our region factor heavily on this indicator, despite significant local programming.

9. What can the community do to become involved in improving the health of children in Hampton Roads?

Individuals and groups in the community with an interest in child health are encouraged to work together to make the most of every dollar and every hour of service. Become involved in the Consortium for Infant and Child Health and volunteer to serve on one of its workgroups. Community health promotion works best when communities work together. CINCH is a partnership of partnerships, and collaborates with a variety of other community groups on our common goals.

We are always looking for new partners to improve our work in the community. CINCH is an inclusive and diverse group of individuals and organizations dedicated to improving the health and well-being of children and their families in Hampton Roads. Our members are energetic and committed and believe that health problems can be solved by working together. Members do not need to have a health background to participate. Members should be willing to attend meetings and contribute their time to help plan and implement programs. We achieve positive outcomes by cooperating across communities and by using sound judgment, data, and resources to implement innovative and effective strategies. You can access more information, including our mission and goals at www.chkd.org/cinch.

10. How is the development and distribution of this Report funded?

Past Reports have been supported in part by grant funding, in-kind contributions of staff time of community partners, local foundation funding, and support from the Center for Pediatric Research, Children's Hospital of The King's Daughters and Eastern Virginia Medical School. The development of the current Report is a product of volunteer contributions from CINCH and support from the Center for Pediatric Research, including staff time from epidemiologists, program coordinators, and administrative support staff, in addition to a significant monetary contribution to purchase Virginia Health Information data for analysis. The current Report would not be possible without the support and contributions from the Center for Pediatric Research.

Printing in the past has been covered through grant and local foundation funding and supported by the Center for Pediatric Research. Past Reports were distributed to community members free of charge. Unfortunately, lack of grant funding and community contributions for this current Report have made it financially unfeasible to offer hard copies of the Report free of charge to the community. Thus, additional hard copies of the Report will be available at cost through local print shop and CINCH community partner, CHJ Digital Repro. Order forms will be available via web in the future. Electronic copies may be downloaded in the future at no charge from www.chkd.org/cinch and other community partner websites. Future editions of this very valuable Report will only be possible if support from the local community funds the development and printing. Additionally, continued general community support for the Center for Pediatric Research to continue to offer in-kind and monetary support related to data analysis and child health research is needed to produce future Reports.

Demographics

Section 2: Demographics
Population Estimates Table

Population Estimates of Children Ages 0 - 19, 1998-2003						
	1998	1999	2000	2001	2002	2003
Southside						
Chesapeake	61,406	62,309	62,462	63,104	63,401	63,800
Franklin City	2,419	2,311	2,315	2,289	2,255	2,261
Isle of Wright	8,107	8,189	8,159	8,198	8,302	8,443
Norfolk	64,139	63,708	67,052	67,025	68,422	70,204
Portsmouth	28,920	28,657	28,969	28,690	28,899	28,984
Suffolk	18,501	19,122	19,186	20,019	20,791	21,565
Virginia Beach	131,710	132,498	128,127	129,206	129,699	131,018
Peninsula						
Gloucester	10,213	10,362	9,917	9,943	9,909	9,952
Hampton	38,387	38,385	40,866	40,477	40,439	40,781
James City County	11,398	11,704	12,092	12,227	12,434	12,835
Newport News	53,725	54,062	55,225	55,402	55,973	56,979
Poquoson	3,410	3,461	3,377	3,291	3,217	3,133
Williamsburg	3,289	3,317	3,172	3,070	2,996	3,038
York County	17,752	17,930	17,664	18,122	18,282	18,192
Eastern Shore						
Accomack	8,243	8,176	10,271	10,264	10,306	10,199
Northampton	3,417	3,431	3,361	3,317	3,249	3,435
Totals						
Urban Hampton Roads	396,788	398,741	401,887	403,923	407,624	413,331
Region	465,036	467,622	472,215	474,644	478,574	484,819
Virginia	1,837,928	1,958,259	1,937,086	1,962,509	1,982,102	2,004,453

Observation:

Children in Urban Hampton Roads have comprised at least 20% of Virginia's total population of children ages 0-19 years each year from 1998 and 2003. The Region's children have comprised at least 24% of this population each year from 1998 and 2003. Although Virginia's total population of children 0-19 years had a slight decrease in 2000, the population of both urban Hampton Roads and the Region did not experience this decrease, but instead had a steady increase each year from 1998 to 2003.

Sources:

U.S. Census Bureau, Population Estimates 1998-2003³
Virginia NCHS Bridged Race Population Estimates 2001-2003

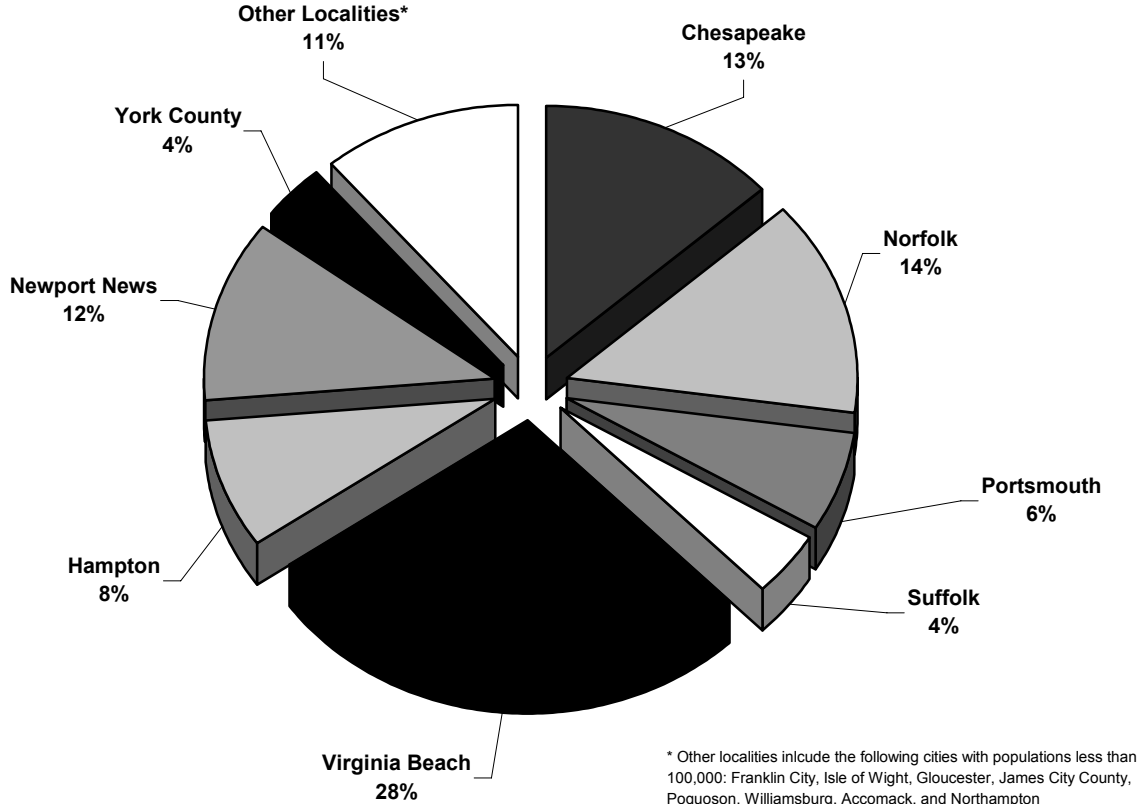
Footnotes:

¹Urban Hampton Roads is defined as the area encompassing the following cities: Chesapeake, Norfolk, Portsmouth, Suffolk, Virginia Beach, Hampton, Newport News.

²Region is defined as the area encompassing all cities and counties included in the above table.

³The Census Bureau did not produce city/county estimates for 2001.

**Regional Population Estimates of Children Ages 0-19 Years by Locality
1998-2003**



Section 2: Demographics
Live Births Table

Live Births by Place of Residence, 1998-2003							
	1998	1999	2000	2001	2002	2003	
Southside							
Chesapeake	2,818	2,805	2,834	2,741	2,744	2,860	
Franklin City	92	102	114	128	137	145	
Isle of Wight	358	336	364	338	358	322	
Norfolk	4,018	3,843	3,984	4,015	4,119	3,942	
Portsmouth	1,644	1,604	1,544	1,585	1,539	1,597	
Suffolk	884	938	1,008	953	1,058	1,087	
Virginia Beach	6,363	6,201	6,455	6,173	6,234	6,370	
Peninsula							
Gloucester	386	381	405	399	413	381	
Hampton	2,038	2,026	2,023	1,927	1,867	1,810	
James City County	423	487	487	502	466	532	
Newport News	3,124	3,183	3,126	3,194	3,170	3,212	
Poquoson	101	90	104	84	93	91	
Williamsburg	144	72	59	96	129	188	
York County	547	654	719	628	590	579	
Eastern Shore							
Accomack	419	427	465	445	477	456	
Northampton	147	188	151	188	135	166	
Totals							
Urban Hampton Roads	20,889	20,600	20,974	20,588	20,731	20,878	
Region	23,506	23,337	23,842	23,396	23,529	23,738	
Virginia	94,114	95,207	98,864	98,531	99,235	100,561	
Rate Live Birth /1000							
Urban Hampton Roads	15.0	14.7	15.5	15.2	15.1	15.0	
Region	14.5	14.2	14.9	14.5	14.4	14.4	
Rest of Virginia	13.8	13.9	13.7	13.5	13.4	13.4	

Observation:

Urban Hampton Roads and the Region have slightly higher birth rates than the rest of Virginia. This translates to 4,429 more children in the years 1998-2003 than we would expect if the Hampton Roads Region had the same birth rate as the rest of Virginia in the years 1998-2003. Also, each year from 1998 to 2003, the Region had almost a quarter of the live births that occurred in the State.

Source:

Virginia Health Statistics, Virginia Department of Health, Center for Health Statistics, 1998-2003.

Footnotes:

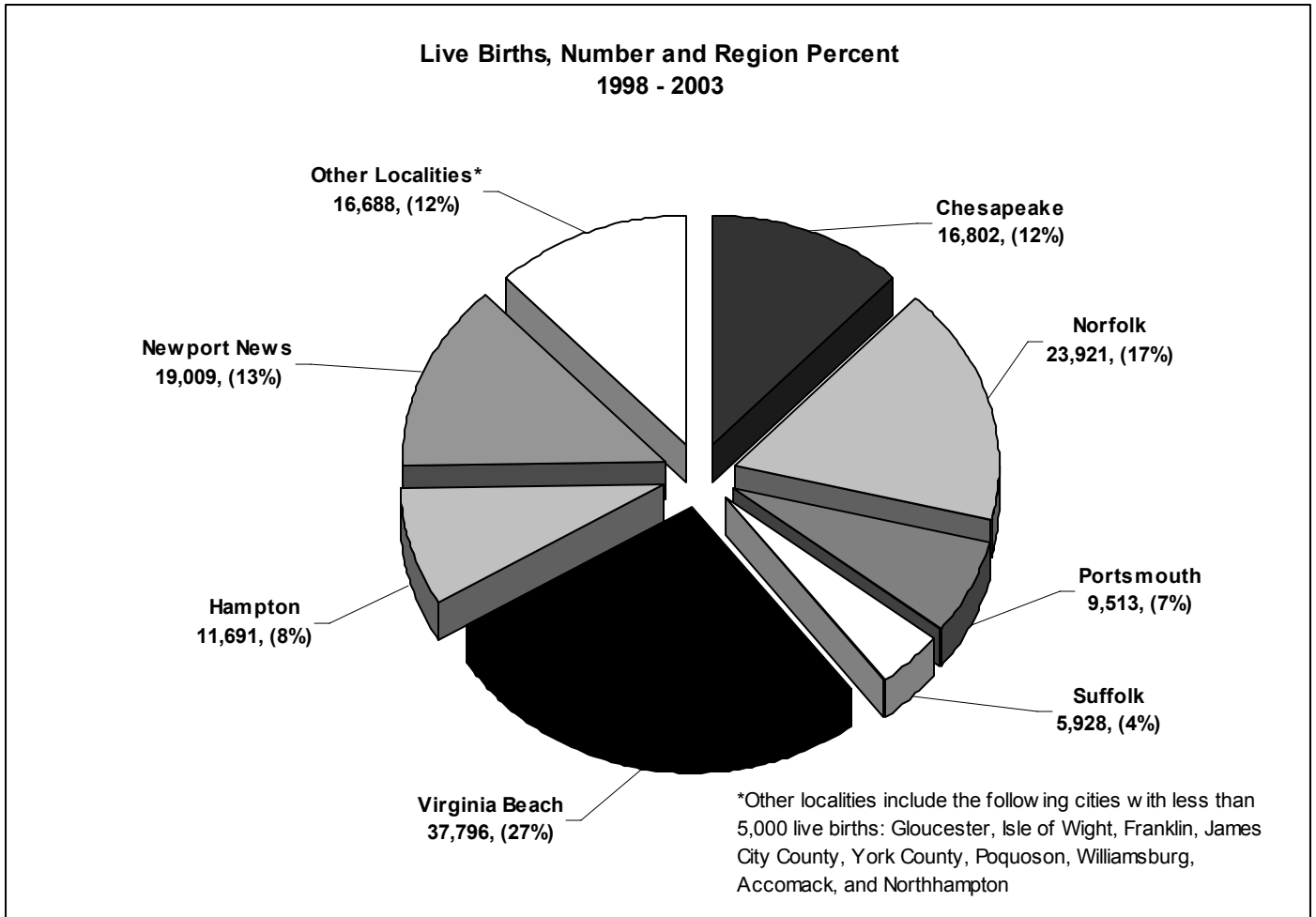
¹ Urban Hampton Roads is defined as the area encompassing the following cities: Chesapeake, Norfolk, Portsmouth, Suffolk, Virginia Beach, Hampton, Newport News.

² Region is defined as the area encompassing all cities and counties included in the table above.

³ Rates were calculated using total number of live births divided by total population for each year.

⁴ Rates for the rest of Virginia were calculated using (total number of live births in Virginia – total number of live births in the Region) divided by (total population in Virginia for each year – population in the Region for each year).

⁵ Number of excess children in Hampton Roads was calculated using total number of live births in Hampton Roads – (Rate of rest of Virginia multiplied by population in Hampton Roads region).



Pregnancy & Infant Outcomes

Commentary on Pregnancy and Infant Outcomes

This Report presents us with a wealth of important information that allows us to conclude that at least some of our programs designed to improve the outcome of pregnancy are working. On the other hand, some of the data is very troubling, since despite many of the technological and therapeutic advances that have been made in perinatal and neonatal care, too many accepted indicators of maternal and child health have not improved over the past several years.

The dramatic fall in teenage pregnancy rates is very encouraging and those programs which have worked hard to decrease the incidence of teenage pregnancy in our region and throughout Virginia should be applauded. Likewise, the decrease in infant mortality rates from 2001 to 2003 in our region is a welcome trend. However, the increase in infant mortality rate in the Commonwealth of Virginia during that same time period is cause for some concern. What is particularly worrisome is the steady increase in the rate of low birth weight infants born between 1999 and 2003, not only in our region but throughout the Commonwealth of Virginia.

This report should strengthen the resolve of health professionals dedicated to improving the outcome of pregnancy to continue the programs which have been effective at improving the indicators of maternal and child health. Based on this information, communities should work to stimulate the development of new and creative programs that might lower the low birth weight rate, which is not only one of the most important measurements of a community's health, but the statistic that is most directly linked to poor neonatal outcome.

Programs such as Resource Mothers, Healthy Families, and others which have been shown to increase the likelihood of a mother receiving comprehensive prenatal care and improving the health of infants during the first few years of life should be funded and encouraged to flourish. The expansion of these types of programs will increase the likelihood that good prenatal health care and newborn care is available to all citizens of the Commonwealth of Virginia.

Edward H. Karotkin, M.D.

Professor of Pediatrics
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Children's Hospital of The King's Daughters

Section 3: Pregnancy and Infant Outcomes
Low weight Births Table

Low weight Births, Number and Percent of Total Live Births, 1998-2003												
	1998		1999		2000		2001		2002		2003	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Southside												
Chesapeake	251	8.9	235	8.4	259	9.1	230	8.4	224	8.2	241	8.4
Franklin City	10	10.9	8	7.8	9	7.9	13	10.2	18	13.1	14	9.7
Isle of Wight	24	6.7	22	6.5	33	9.1	39	11.5	29	8.1	18	5.6
Norfolk	452	11.3	388	10.1	387	9.7	410	10.2	442	10.7	428	10.9
Portsmouth	181	11	157	9.8	175	11.3	169	10.7	155	10.1	187	11.7
Suffolk	68	7.7	93	9.9	97	9.6	106	11.1	96	9.1	114	10.5
Virginia Beach	501	7.9	460	7.4	461	7.1	447	7.2	450	7.2	489	7.7
Peninsula												
Gloucester	24	6.2	24	6.3	35	8.6	23	5.8	26	6.3	29	7.6
Hampton	174	8.5	185	9.1	194	9.6	192	10	179	9.6	183	10.1
James City County	24	5.7	32	6.6	29	6	31	6.2	27	5.8	45	8.5
Newport News	292	9.3	281	8.8	292	9.3	306	9.6	359	11.3	337	10.5
Poquoson	6	5.9	9	10	3	2.9	3	3.6	2	2.2	2	2.2
Williamsburg	24	16.7	9	12.5	5	8.5	11	11.5	15	11.6	23	12.2
York County	34	6.2	48	7.3	43	6	37	5.9	46	7.8	38	6.6
Eastern Shore												
Accomack	42	10	43	10.1	39	8.4	54	12.1	51	10.7	42	9.2
Northampton	15	10.2	18	9.6	17	11.3	20	10.6	15	11.1	10.0	6.0
Totals												
Urban Hampton Roads	1,919	9.2	1,799	8.7	1,865	8.9	1,860	9.0	1,905	9.2	1,979	9.5
Region	2,122	9.0	2,012	8.6	2,078	8.7	2,091	8.9	2,134	9.1	2,200	9.3
Virginia	7,479	7.9	7,416	7.8	7,886	8.0	7,816	7.9	7,904	8.0	8,278	8.2

Observation:

From 1998 – 2003, Urban Hampton Roads and the Region had slightly higher rates of low weight births than the rate for the state of Virginia. Urban Hampton Roads and the Region both experienced the same fluctuation in the rate of low weight births as the state during this time period. From 1998-2003, Urban Hampton Roads and the Region had as much as 25.6% and 28.4% of the state's total low weight births, respectively.

Source:

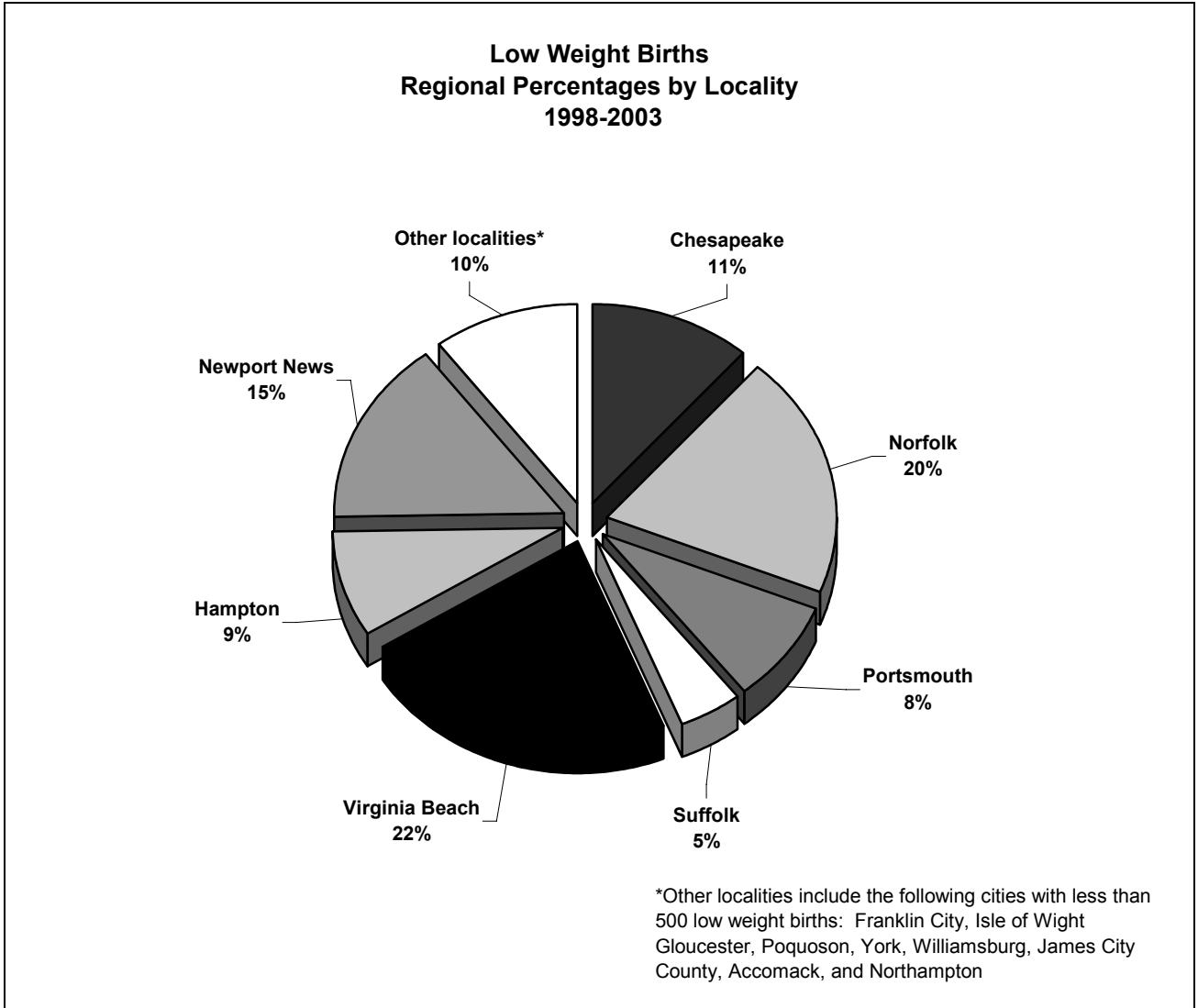
Virginia Health Statistics, Virginia Department of Health, Center for Health Statistics, 1998-2003.

Footnotes:

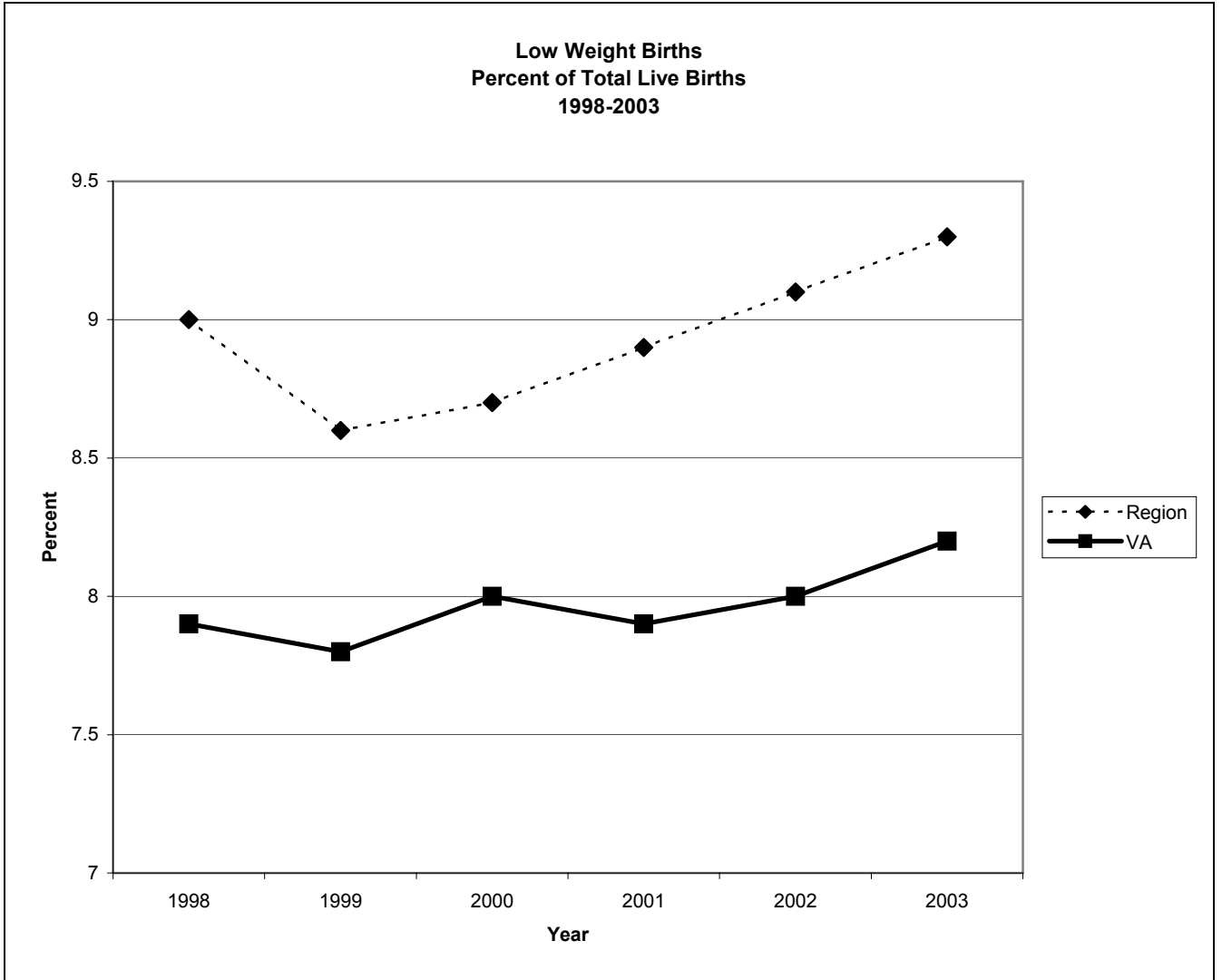
¹Urban Hampton Roads is defined as the area encompassing the following cities: Chesapeake, Norfolk, Portsmouth, Suffolk, Virginia Beach, Hampton, Newport News.

²Region is defined as the area encompassing all cities and counties included in the table above.

Section 3: Pregnancy and Infant Outcomes
Low Weight Births Chart



Section 3: Pregnancy and Infant Outcomes
Low Weight Births Graph



Section 3: Pregnancy and Infant Outcomes
Infant Mortality Table

Infant Mortality, Number and Rate per 1,000 Live Births, 1998-2003												
	1998		1999		2000		2001		2002		2003	
	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate
Southside												
Chesapeake	30	10.6	25	8.9	29	10.2	33	12	29	10.6	30	10.5
Franklin City	1	10.9	0	0	0	0	3	23.4	0	0	2	13.8
Isle of Wight	1	2.8	4	11.9	1	2.7	2	5.9	1	2.8	2	6.2
Norfolk	49	12.2	44	11.4	47	11.8	45	11.2	41	10	53	13.4
Portsmouth	24	14.6	11	6.9	15	9.7	28	17.7	20	13	22	13.8
Suffolk	7	7.9	14	14.9	8	7.9	8	8.4	8	7.6	15	13.8
Virginia Beach	57	9	58	9.4	39	6.0	44	7.1	45	7.2	43	6.8
Peninsula												
Gloucester	2	5.2	1	2.6	7	17.3	4	10	4	9.7	2	5.2
Hampton	17	8.3	13	6.4	17	8.4	27	14	20	10.7	18	9.9
James City County	2	4.7	3	6.2	2	4.1	2	4	2	4.3	5	9.4
Newport News	44	14.1	38	11.9	36	11.5	35	11	54	17	21	6.5
Poquoson	1	9.9	1	11.1	1	9.6	0	0	2	21.5	0	0
Williamsburg	2	13.9	0	0	1	16.9	1	10.4	1	7.8	2	10.6
York County	7	12.8	4	6.1	5	7	4	6.4	4	6.8	2	3.5
Eastern Shore												
Accomack	1	2.4	1	2.3	3	6.5	7	15.7	3	6.3	4	8.8
Northampton	0	0	1	5.3	1	6.6	2	10.6	3	22.2	0	0
Totals												
Urban Hampton Roads	228	10.9	203	9.9	191	9.1	220	10.7	217	10.5	202	9.7
Region	245	10.6	218	9.3	212	8.9	245	10.5	237	10.1	221	9.3
Virginia	695	7.4	685	7.2	676	6.8	730	7.4	725	7.3	766	7.6

Observation:

The rate of infant mortality in Virginia and the Region has fluctuated from 1998-2003. There was a decrease in the rate in 1999 and 2000, however, the rate began to increase again in 2001. Both urban Hampton Roads and the Region have higher infant mortality rates than the State.

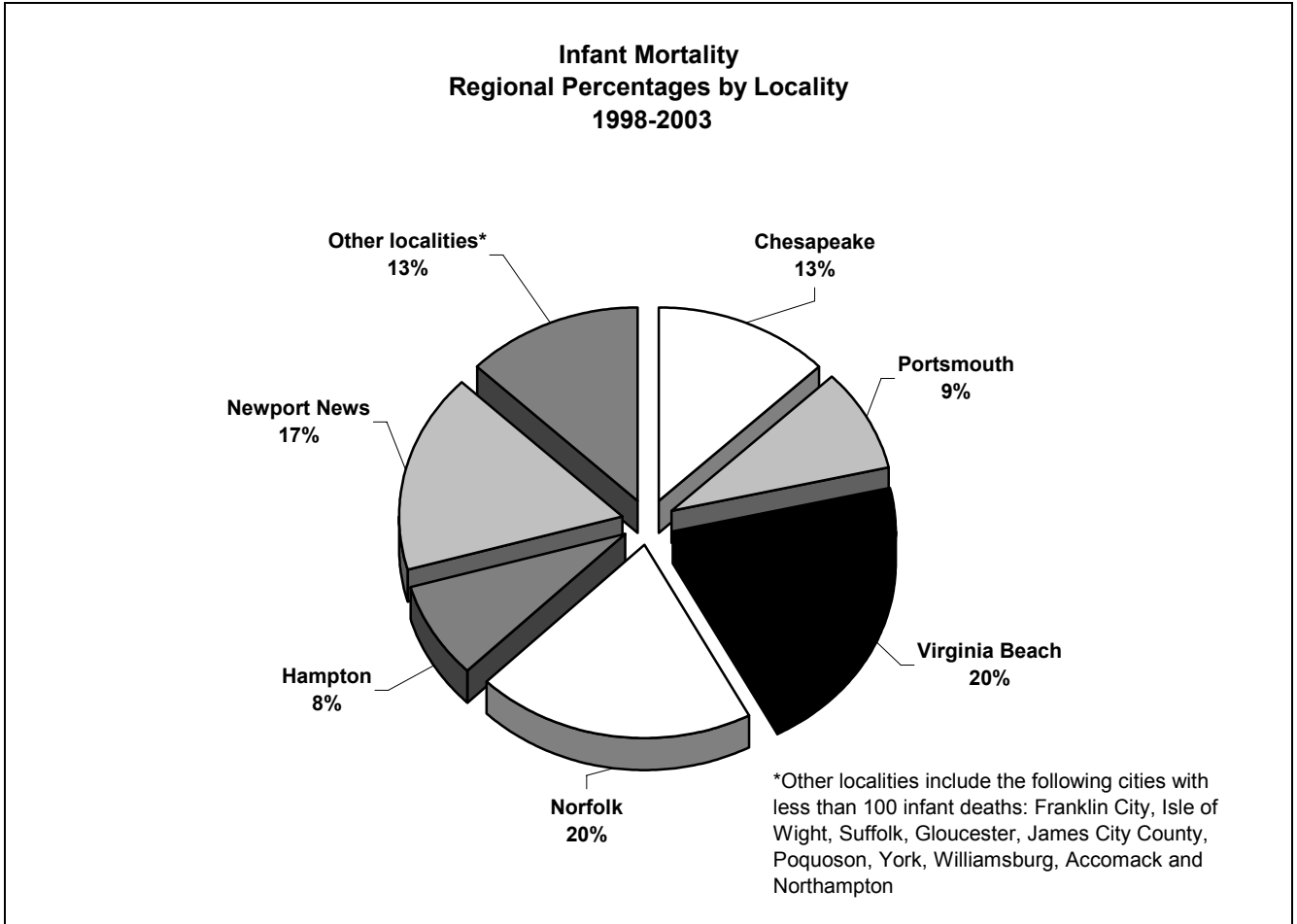
Source:

Virginia Health Statistics, Virginia Department of Health, Center for Health Statistics, 1998-2003.

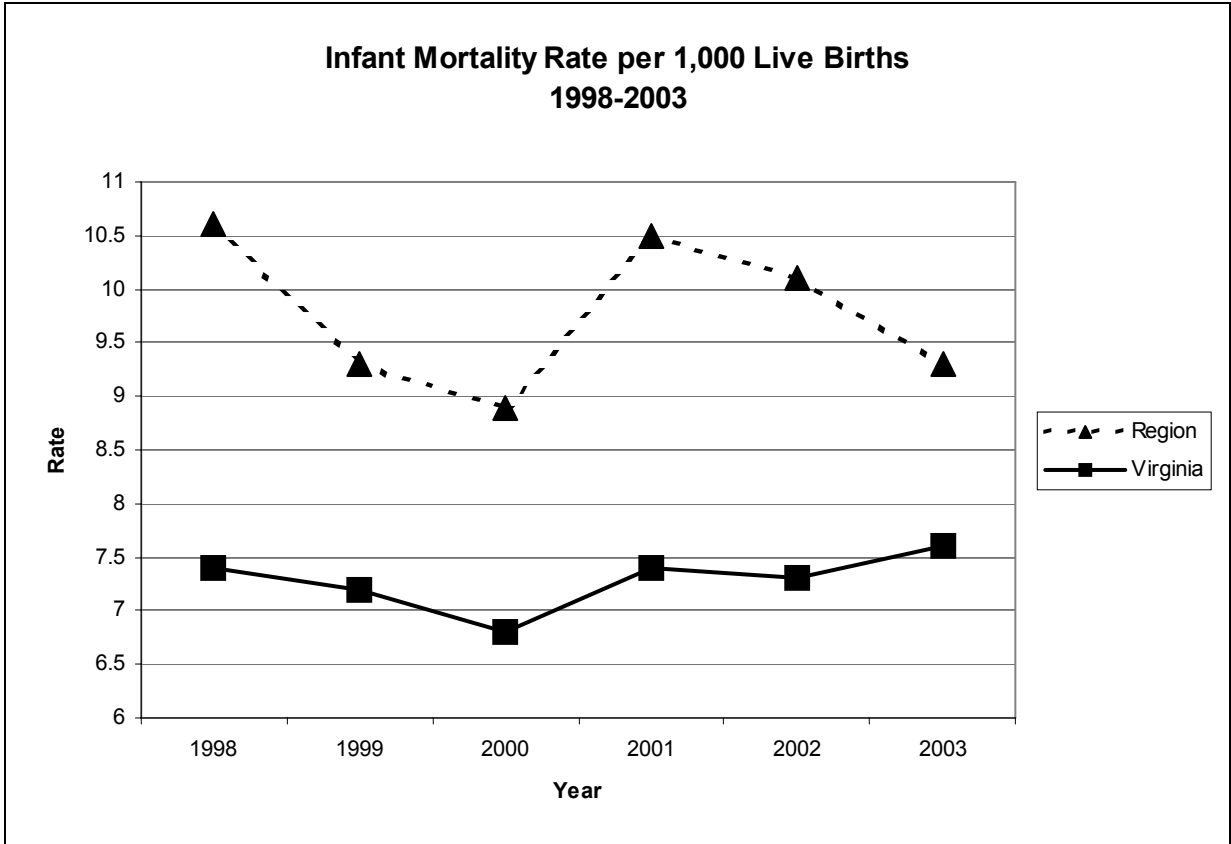
Footnotes:

- ¹ Urban Hampton Roads is defined as the area encompassing the following cities: Chesapeake, Norfolk, Portsmouth, Suffolk, Virginia Beach, Hampton, Newport News
- ² Region is defined as the area encompassing all cities and counties included in the above table.
- ³ Rate was calculated using Total # of Infant Deaths divided by Total # of Live Births for each city.

Section 3: Pregnancy and Infant Outcomes
Infant Mortality Chart



Section 3: Pregnancy and Infant Outcomes
Infant Mortality Graph



Teen Pregnancy, Number and Rate per 1,000 Females Ages 10-19, 1998 - 2003																		
	1998			1999			2000			2001 ¹			2002			2003		
	Number	Females 10-19	Rate	Number	Females 10-19	Rate	Number	Females 10-19	Rate	Number	Females 10-19	Rate	Number	Females 10-19	Rate	Number	Females 10-19	Rate
Southside																		
Chesapeake	519	13,930	37.3	546	14,290	38.2	505	15,678	32.2	501	15,656	32	467	16,243	28.8	465	16,526	28.1
Franklin City	28	587	47.7	20	594	33.7	36	648	55.6	24	649	37	27	633	42.7	36	630	57.1
Isle of Wight	58	1,977	29.3	69	2,019	34.2	52	1,978	26.3	45	1,974	22.8	59	2,088	28.3	61	2,152	28.3
Norfolk	1,081	17,404	62.1	1,039	17,626	58.9	965	16,447	58.7	924	16,441	56.2	930	15,886	58.5	850	16,188	52.5
Portsmouth	436	7,261	60	444	7,292	60.9	401	6,914	58.0	390	6,915	56.4	368	6,803	54.1	355	6,839	51.9
Suffolk	197	4,192	47	168	4,244	39.6	184	4,696	39.2	172	4,699	36.6	201	5,198	38.7	177	5,477	32.3
Virginia Beach	1,052	35,984	29.2	1,054	37,114	28.4	975	30,982	31.5	967	30,994	31.2	913	31,633	28.9	1069	32,181	33.2
Peninsula																		
Gloucester	71	2,873	24.7	65	2,967	21.9	61	2,600	23.5	52	2,600	20	61	2,649	23	41	2,660	15.4
Hampton	470	10,507	44.7	468	10,640	44.0	461	10,952	42.1	424	10,956	38.7	370	10,660	34.7	346	10,790	32.1
James City County	45	2,769	16.3	76	2,829	26.91	58	3,000	19.3	46	3,007	15.3	44	3,293	13.4	37	3,365	11
Newport News	678	13,646	49.7	646	13,975	46.2	635	12,876	49.3	593	12,863	46.1	563	12,894	43.7	578	13,189	43.8
Poquoson	8	938	8.5	16	941	17	16	869	18.4	9	865	10.4	9	891	10.1	12	900	13.3
Williamsburg	45	1,407	32.0	24	1,416	16.9	45	1,452	31.0	30	1,449	20.7	35	1,430	24.5	34	1,389	24.5
York County	68	3,936	17.3	93	4,002	23.2	81	4,568	17.7	64	4,571	14	62	4,922	12.6	49	5,017	9.8
Eastern Shore																		
Accomack	89	2,001	44.5	114	1,999	57.0	110	2,471	44.5	91	2,473	36.8	100	2,552	39.2	107	2,605	41.1
Northampton	33	894	36.9	40	896	44.6	39	883	44.2	51	882	57.8	45	884	50.9	28	910	30.8
Totals																		
Urban Hampton Roads	4,433	102,924	43.1	4,365	105,181	41.5	4,126	98,545	41.9	3,971	98,524	40.3	3,812	99,317	38.4	3,840	101,190	37.9
Region	4,878	120,306	40.5	4,882	122,844	39.7	4,624	117,014	39.5	4,383	116,994	37.5	4,254	118,659	35.9	4,245	120,818	35.1
Virginia	15,663	459,326	34.1	15,626	465,568	33.6	15,067	467,711	31.5	14,218	478,721	29.7	13,586	492,384	27.6	13,665	499,398	27.4

Observation:

The Region and Urban Hampton Roads both have had higher rates of teenage pregnancy than the state of Virginia as a whole from 1998-2000 and in 2002-2003. However, the teen pregnancy rates in all of these areas have consistently declined during this time period.

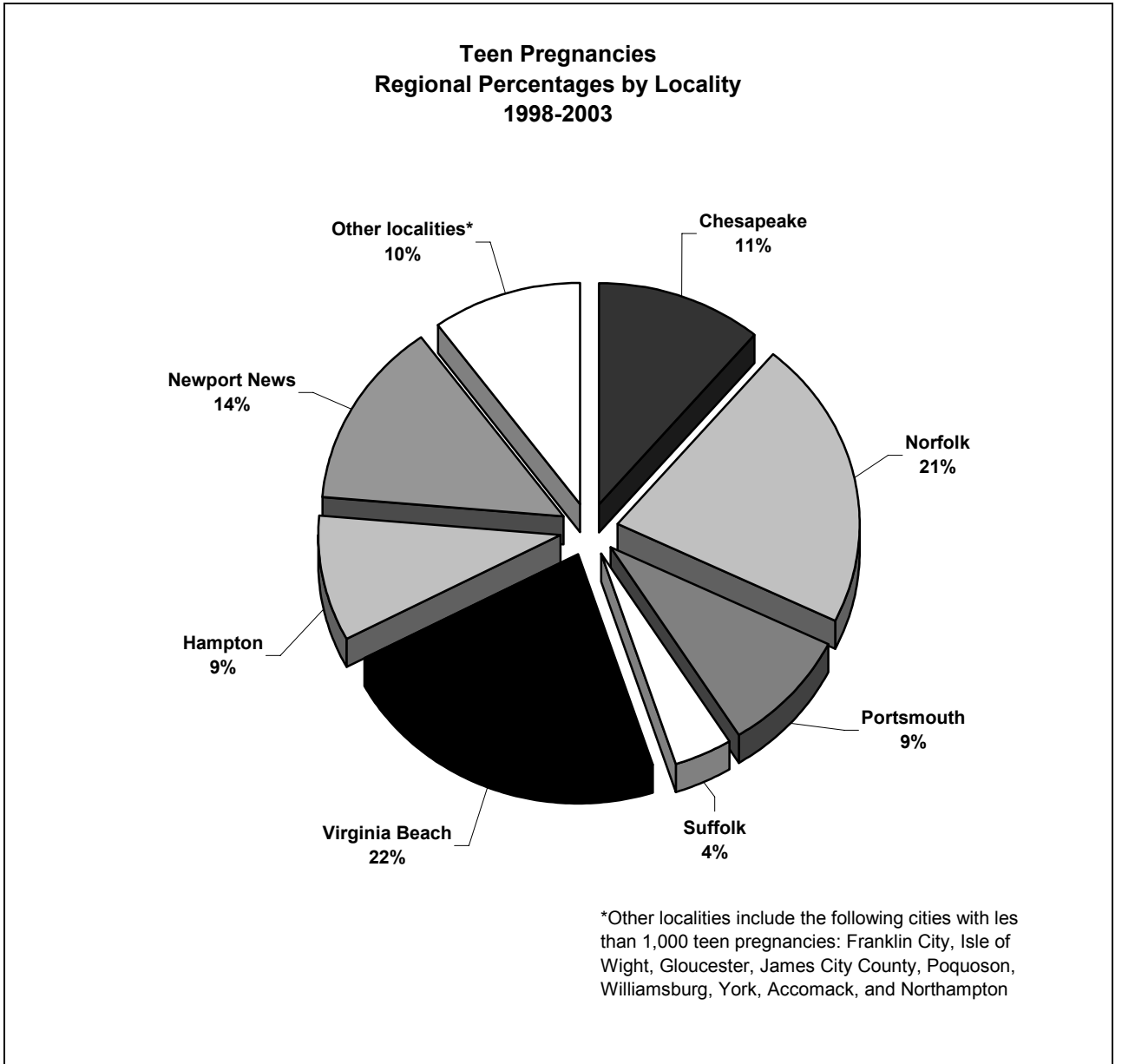
Source:

Virginia Health Statistics, Virginia Department of Health, Center for Health Statistics, 1998 -2003.

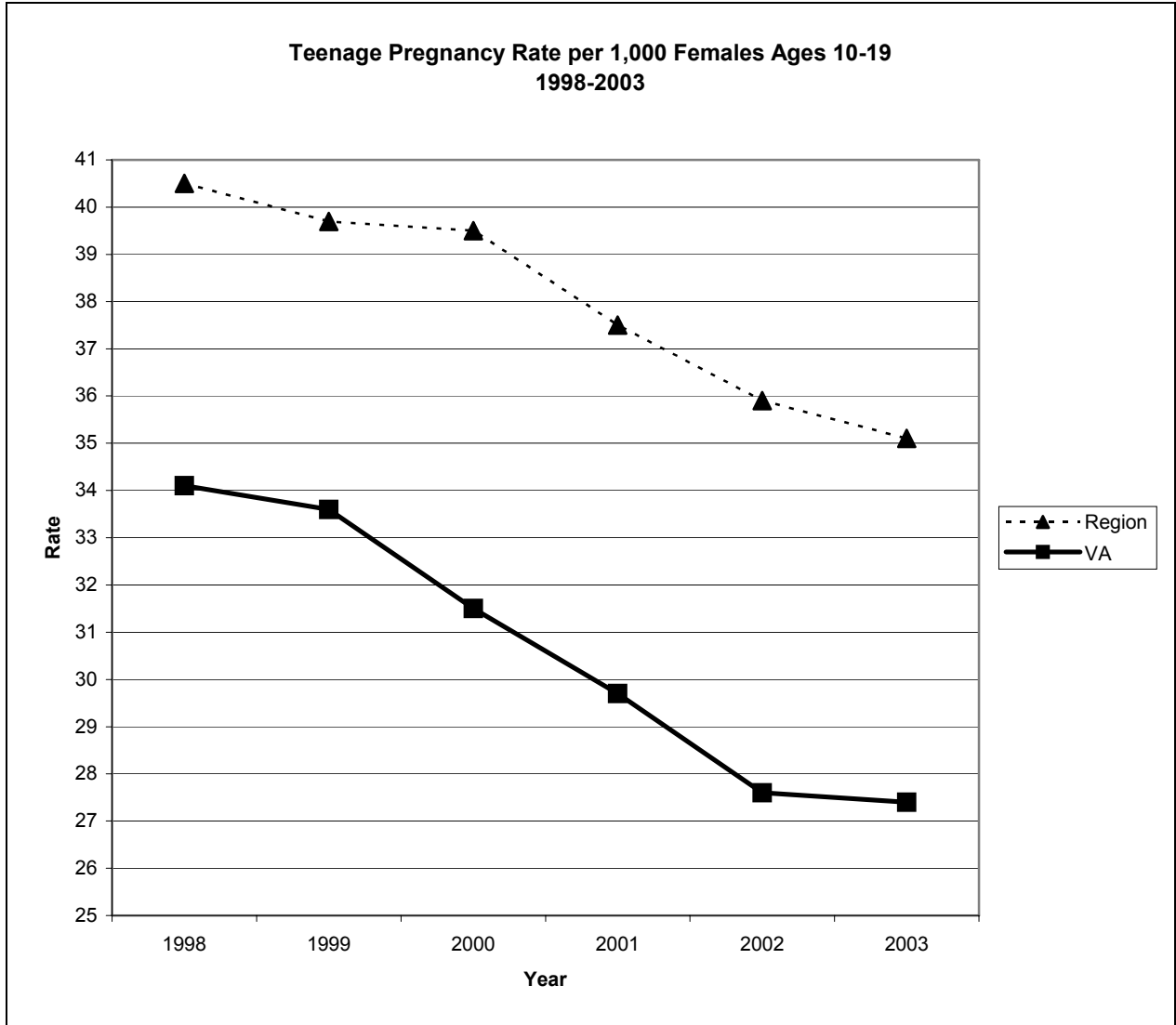
Footnotes:

¹VHD did not report the population of females 10-19 years in 2001. The estimates presented in the table were calculated by dividing the number of teenage pregnancies by the rate per 1000. Teen pregnancy rates were calculated by dividing the number of teenage pregnancies by the female population ages 10-19.
²Urban Hampton Roads is defined as the area encompassing the following cities: Chesapeake, Norfolk, Portsmouth, Suffolk, Virginia Beach, Hampton, Newport News. Region is defined as the area encompassing all cities and counties included in the above table.

Section 3: Pregnancy and Infant Outcomes
Teen Pregnancy Chart



Section 3: Pregnancy and Infant Outcomes
Teen Pregnancy Chart



Section 3: Pregnancy and Infant Outcomes
Prenatal Care Table

Prenatal Care in First Trimester, Number and Percent of Total Births, 1998 - 2003												
	1998		1999		2000		2001		2002		2003	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Southside												
Chesapeake	2,434	86.4	2,408	85.8	2,480	87.5	2,415	88.1	2,429	88.5	2,533	88.6
Franklin City	60	65.2	75	73.5	88	77.2	108	84.4	116	84.7	120	82.8
Isle of Wight	307	85.8	288	85.7	319	87.6	294	87.0	320	89.4	298	92.5
Norfolk	3,098	77.1	2,994	77.9	3,192	80.1	3,170	79.0	3,250	78.9	3,168	80.4
Portsmouth	1,220	74.2	1,200	74.8	1,180	76.4	1,220	77.0	1,176	76.4	1,229	77.0
Suffolk	762	86.2	802	85.5	871	86.4	813	85.3	906	85.6	956	87.9
Virginia Beach	5,470	86.0	5,364	86.5	5,674	87.9	5,480	88.8	5,429	87.1	5,697	89.4
Peninsula												
Gloucester	323	83.7	346	90.8	371	91.6	372	93.2	384	93.0	350	91.9
Hampton	1,590	78.0	1,567	77.3	1,634	80.8	1,556	80.7	1,514	81.1	1,480	81.8
James City County	362	85.6	454	93.2	450	92.4	492	98.0	442	94.8	465	87.4
Newport News	2,463	78.8	2,542	79.9	2,593	82.9	2,699	84.5	2,646	83.5	2,667	83.0
Poquoson	94	93.1	85	94.4	99	95.2	82	97.6	88	94.6	84	92.3
Williamsburg	116	80.6	58	80.6	54	91.5	90	93.8	119	92.2	151	80.3
York County	483	88.3	593	90.7	646	89.8	588	93.6	547	92.7	536	92.6
Eastern Shore												
Accomack	335	80.0	300	70.3	345	74.2	330	74.2	309	64.8	317	69.5
Northampton	115	78.2	144	76.6	115	76.2	124	66.0	85	63.0	109	65.7
Totals												
Urban Hampton Roads	17,037	81.6	16,877	81.9	17,624	84.0	17,353	84.3	17,350	83.7	17,730	84.9
Region	19,232	81.8	19,220	82.4	20,111	84.4	19,833	84.8	19,760	84.0	20,160	84.9
Virginia	79,774	84.8	80,609	84.7	83,633	84.6	83,619	84.9	84,085	84.7	85,259	84.8

Observation:

The State's percentage of live births that had prenatal care during the first trimester has remained stable at approximately 85% from 1998-2000. The region has gradually reached the State's rate during this time period, ranging from 82% in 1998 to slightly exceeding the State in 2003 at 84.9%. Norfolk, Portsmouth, Franklin City, Hampton, Newport News, Accomack and Northampton had the lowest rates during this time period.

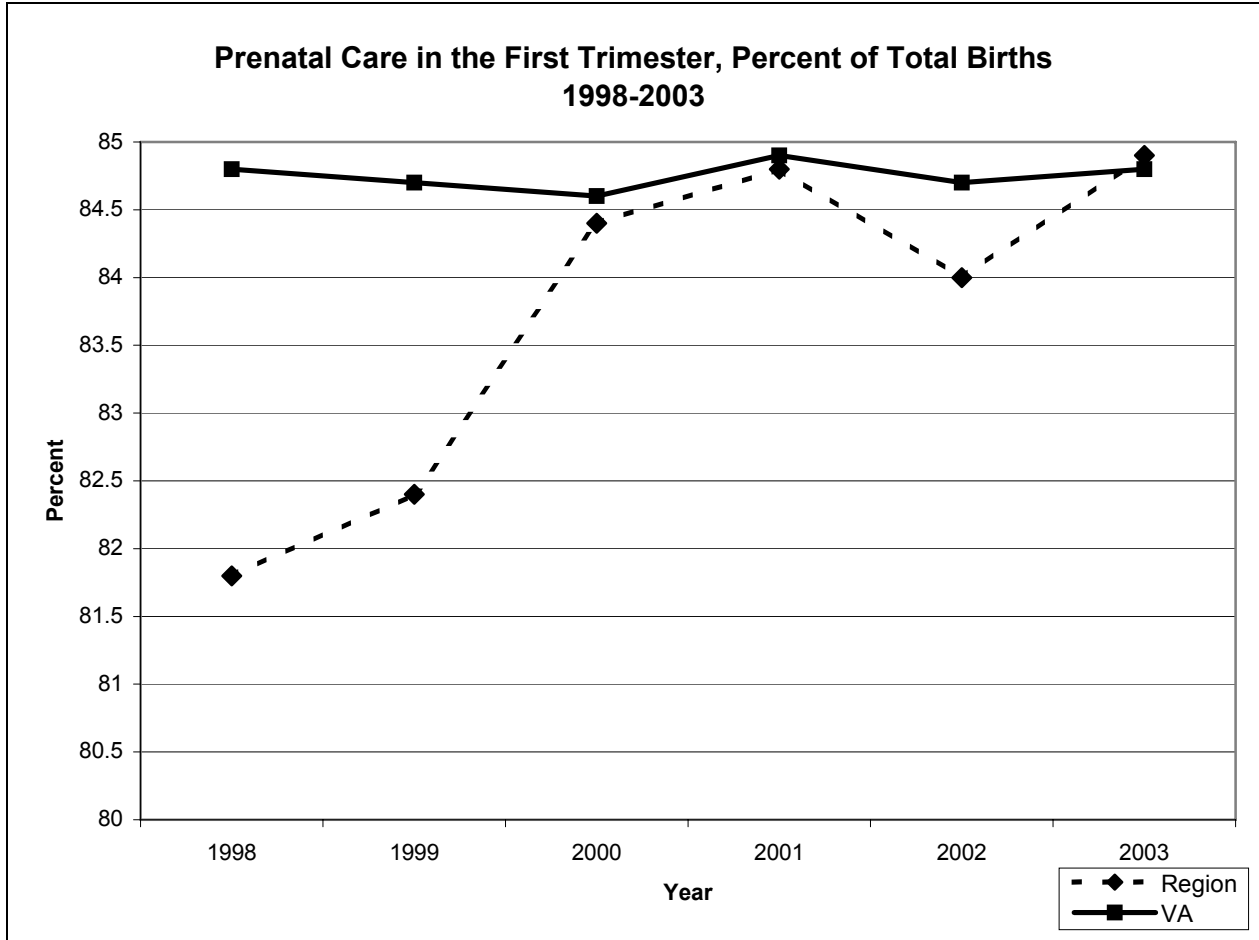
Source:

Virginia Health Statistics, Virginia Department of Health, Center for Health Statistics, 1998-2003.

Footnotes:

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²Region is defined as the area encompassing all cities and counties included in the table above.



Preventive Health Services

Child Health Insurance Commentary

Since 2002, CINCH has lead a Hampton Roads community coalition focused on reducing the number of uninsured children in our community. We have participated as part of the Robert Wood Johnson Foundation's national Covering Kids and Families outreach program. Our efforts in Hampton Roads are part of a larger state-wide initiative in collaboration with Virginia's Children's Health Coalition and the Virginia Health Care Foundation, which has served as the lead agency for this effort in Virginia.

The major focus of this work has been to identify and enroll eligible children in Medicaid and Virginia's version of the federal State Children's Health Insurance Program (SCHIP) called Virginia's Family Access to Medical Insurance Security Program (FAMIS).

This effort is important for several reasons. Lack of health insurance is the primary barrier to access to quality health care for children. Children without health insurance are less likely to see a primary care doctor on a regular basis. As a result, there are frequent delays in diagnosing and treating ailments that affect the quality of their lives and their ability to succeed in school. Vision and hearing problems are examples. The personal impact on children who struggle to learn with these undiagnosed and untreated conditions is incalculable.

There is also an impact on our community. Uninsured families tend to seek treatment in the Emergency Departments of local hospitals. Because of concerns for cost, they tend to delay seeking this treatment. As a result, the children are sicker and treatment is even more expensive. This creates additional demand and cost for our community health resources.

With CINCH's leadership, Hampton Roads has seen significant progress in reducing the number of uninsured. In total, the number has been reduced from just over 30,000 in 2002 to 15,600 in 2004. This is good news. But the news isn't all good. While our absolute numbers have decreased, the statewide percentage represented by Hampton Roads uninsured children has risen from 30% in 2002 to 50% in 2004. This means that we are not progressing as rapidly as other parts of Virginia in addressing this issue.

This highlights several challenges to our community. First, we must understand and approach this problem as one that affects us all since the health of our children is an investment in our community's future. Second, we must build lasting mechanisms that address this issue. This must be done by strengthening important partnerships with state and local governments, employers and schools. It is wrong to presume that private groups alone can address this ongoing problem. If anything, the experience of CINCH over the past three years affirms the fact that this is a structural, community issue that requires policy decisions and resource commitment. A key example of this is the need for added resources to support the already over-burdened school nurse programs. Schools are an excellent focus for this effort, and school nurses are a key contact point for these children. We must make a commitment to put resources where they count the most. Finally, we must be aggressive in raising awareness about the

importance of insurance for children and the availability of these effective programs. Most eligible children are in hard working families that simply do not know that help is available.

Our efforts should not be understood as charity, but as a real investment in the quality of our communities. Healthy children become healthy adults. They learn to their potential and prepare to contribute to our community life in important ways. We owe it to them and to ourselves to remove unnecessary barriers on the road to success.

Brian Yanofchick

Senior Vice-President of Mission, Bon Secours Hampton Roads

2003 -2006 CINCH Vice-Chairperson,

Former Chairperson, 2001-2003, CINCH Covering Kids & Families Work Group

Section 4: Preventive Health Services
Child Health Insurance Enrollment Table

Child Health Insurance									
Number of Eligible Children Unenrolled and Enrolled in Medicaid or FAMIS									
2002 - 2004									
	2002			2003			2004		
	Number Eligible But Not Enrolled	Number Enrolled in Virginia Child Health Insurance Program	Percent Enrolled	Number Eligible But Not Enrolled	Number Enrolled in Virginia Child Health Insurance Program	Percent Enrolled	Number Eligible But Not Enrolled	Number Enrolled in Virginia Child Health Insurance Program	Percent Enrolled
Southside									
Chesapeake	2,759	8,532	75.6	2,693	9,626	78.1	1,942	10,377	84.2
Franklin City	370	759	67.2	1,556	863	35.7	1,500	919	38.0
Isle of Wight	311	1,357	81.4	314	1,564	83.3	240	1,638	87.2
Norfolk	9,324	18,438	66.4	6,231	20,336	76.5	4,864	21,703	81.7
Portsmouth	3,686	7,895	68.2	2,456	8,812	78.2	1,002	10,266	91.1
Suffolk	1,700	4,449	72.4	1,155	5,085	81.5	842	5,398	86.5
Virginia Beach	4,821	12,872	72.8	6,201	15,076	70.9	4,841	16,436	77.2
Peninsula									
Gloucester	344	1,419	80.5	427	1,590	78.8	306	1,711	84.8
Hampton	2,765	8,422	75.3	1,510	10,090	87.0	781	10,819	93.3
James City County	314	1,385	81.5	100	1,779	94.7	0	1,921	100.0
Newport News	5,024	12,956	72.1	3,025	15,026	83.2	1,388	16,663	92.3
York/Poquoson	494	1,069	68.4	883	1,320	59.9	865	1,338	60.7
Williamsburg	462	311	40.2	118	295	71.4	87	326	78.9
Eastern Shore									
Accomack	1,101	2,713	71.1	820	3,083	79.0	560	3,343	85.7
Northampton	529	1,180	69.0	260	1,384	84.2	236	1,408	85.6
Totals									
Urban Hampton Roads	30,079	73,564	71.0	23,271	84,051	78.3	15,660	91,662	85.4
Region	34,004	83,757	71.1	27,749	95,929	77.6	19,454	104,266	84.3
Virginia	96,514	315,128	76.6	64,187	368,586	85.2	29,919	402,854	93.1

Observation:

The number of eligible children enrolled in Virginia health insurance programs has increased from 2002-2004 in the Region and the State. Norfolk and Virginia Beach have the highest number of uninsured children in the Region that are eligible for state health insurance programs.

Source:

Sign Up Now Virginia – data analyzed from the Virginia Department of Medical Assistance Services

Footnotes:

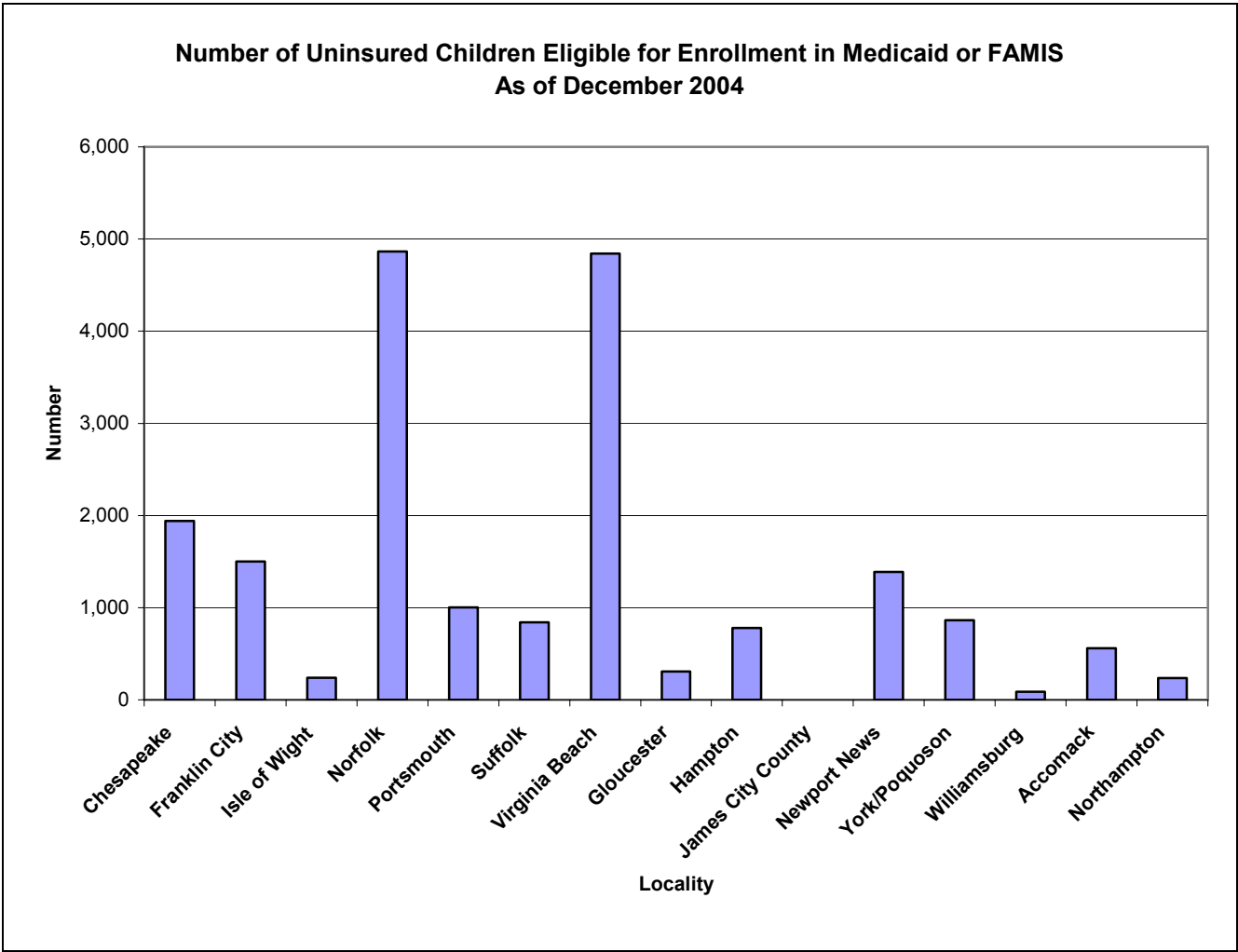
¹Urban Hampton Roads is defined as the area encompassing the following cities: Chesapeake, Norfolk, Portsmouth, Suffolk, Virginia Beach, Hampton, Newport News.

²Region is defined as the area encompassing all cities and counties included in the table above.

³The methodology used to estimate the number of uninsured children eligible for enrollment in Medicaid or FAMIS can be found at: <http://www.signupnowva.org/CHRC%20-%20Methodology%20for%20Estimating%20Eligible%20Uninsured.pdf>

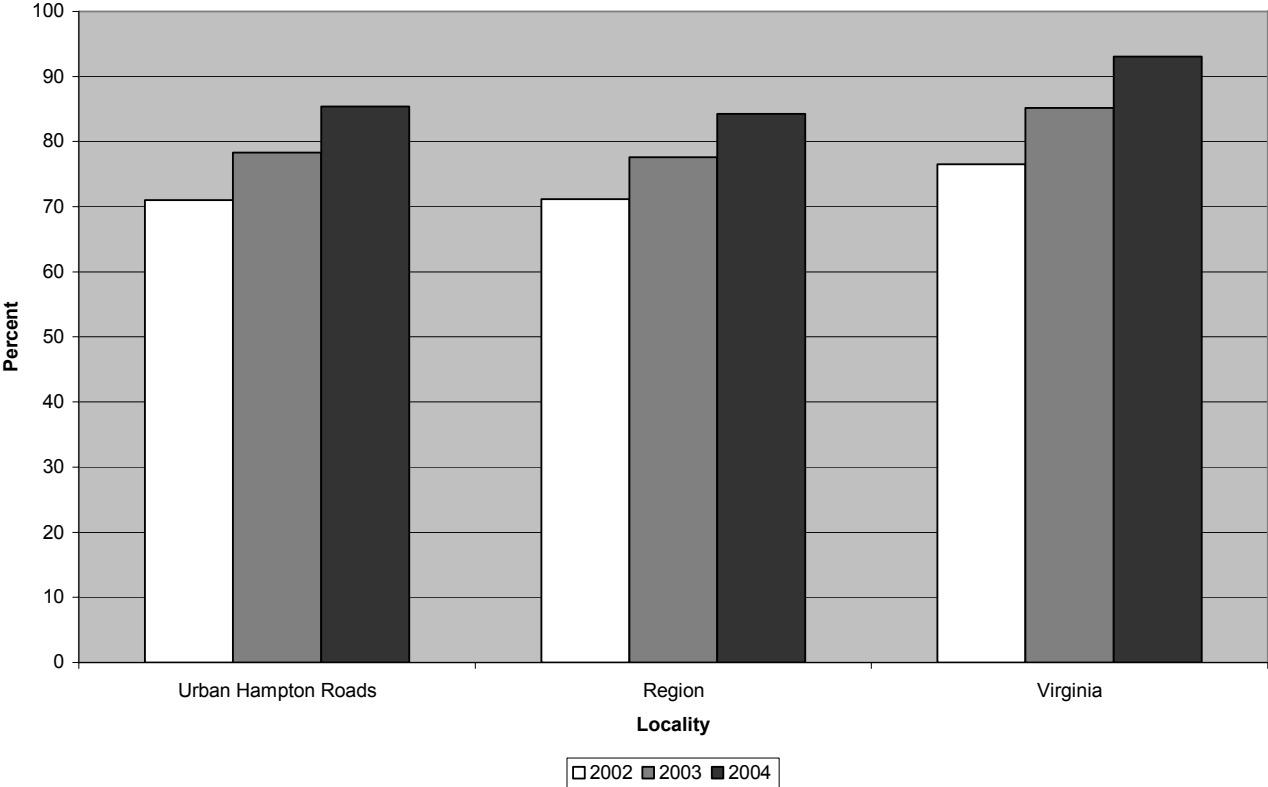
⁴Data for each year reflects the number of children reported by the state as of the January 1st of the following year (for example – 2002 data is reflective of the numbers published on January 1st 2003).

Section 4: Preventive Health Services
Child Health Insurance Graph

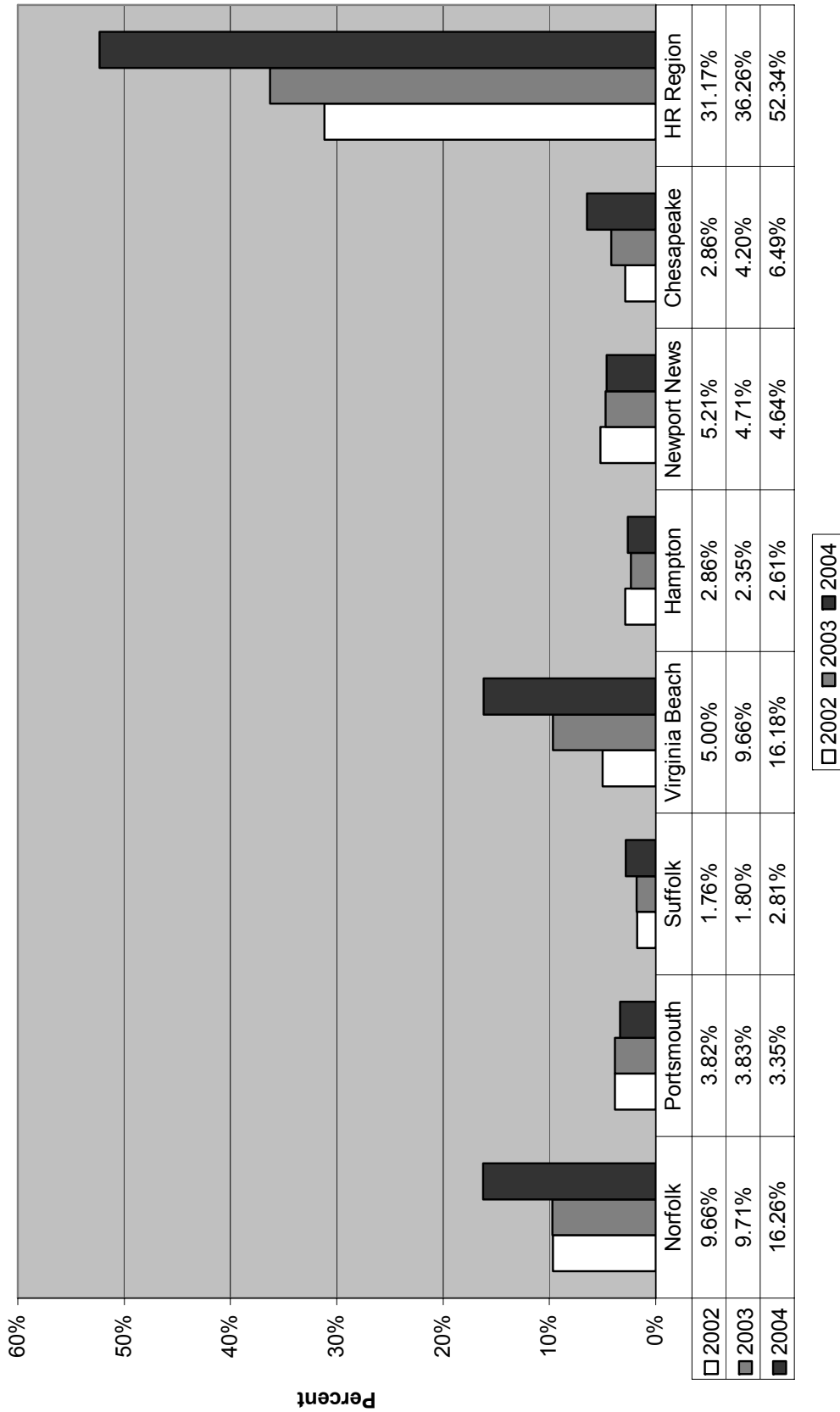


Section 4: Preventive Health Services
Child Health Insurance Bar Graph

Percentage Eligible Children Enrolled in Medicaid and FAMIS, 2002-2004



Uninsured Eligible Children Living in Hampton Roads as a Percentage of Virginia's Uninsured Eligible Children, 2002-2004



Commentary on Immunizations

The March 2005 Consortium for Infant and Child Health (CINCH) Report on The Health of Children in Hampton Roads shows the continued beneficial impact of vaccinations on childhood illnesses. Many classic childhood diseases such as measles, mumps, rubella, diphtheria, tetanus, and *Haemophilus influenzae* type b have become, fortunately, rare. The Healthy People 2010 target of 90% coverage levels of children aged 19 to 35 months has been met or surpassed (in 2002) nationally for four of seven recommended vaccinations—*Haemophilus influenzae* type b (Hib), hepatitis B, measles-mumps-rubella (MMR), and polio. In this region in 2004, 91% of children at 5 years of age have been immunized for the seven recommended vaccines (coverage target for pneumococcal vaccine has not been set). However, the region and the state lag behind on the levels of immunization achieved nationally for younger children by over 6%. These results suggests that our schools are much more effective at promoting or requiring vaccination than the community at large. There appear to be opportunities to increase vaccination rates among younger children through parent education and increasing community awareness.

There is uniformity of vaccination levels throughout the region, with the only significant difference being the lower percent (83.0%) of children in the Western Tidewater area that are immunized at the start of kindergarten. Overall, the vaccination rates for the younger age groups throughout the region have improved over the past few years but remain far below the Healthy People 2010 target levels.

Pertussis remains an important disease, and consistent with national rates, the region has shown an increase in pertussis over the past few years. While some of this reflects increased recognition, we can minimize this continued risk of pertussis by providing vaccinations on schedule. Partially-immunized children remain the major risk group for complications from pertussis. The expected licensure of the adult tetanus-acellular pertussis vaccine should help reduce community spread of this infection. Use of this vaccine among adolescents and adults should be promoted as soon as it is available in part to protect transmission of disease to these young infants who are at greatest risk for complications from the disease.

Varicella and influenza are the most common causes of vaccine-preventable illness. The recommendations for routine influenza immunization of all children 6-23 months of age should be implemented more effectively across the region, which will reduce the morbidity of influenza among both children and adults. The high rates of varicella reflect suboptimal levels of varicella vaccination. Use of varicella vaccine has been shown to protect against varicella and to decrease the risk of death due to varicella. The chance of an unimmunized child making it to adulthood without experiencing natural varicella is increasing because of reduced circulating virus with partial community immunization. Because varicella is a more serious disease among adults it is imperative that every child receive varicella vaccination.

Hal B. Jenson, M.D., M.B.A.

Chair, Department of Pediatrics and
Director, Center for Pediatric Research
Eastern Virginia Medical School and Children's Hospital of The King's Daughters

Percent of Children Up-to-Date (UTD) on Immunizations March 2004			
Health District	Sample Size	Percent of Sample with 4 DTP, 3 Polio, 1 MMR, 3 Hib, and 3 Hep B vaccines at 24 months of age	Percent of Sample Meeting School Immunization Requirements at the Start of Kindergarten
Chesapeake	355	71.1	92.0
Norfolk	416	66.3	90.7
Portsmouth	117	64.0	94.0
Virginia Beach	889	67.6	90.7
Western Tidewater	315	66.6	83.0
Hampton	119	66.6	95.3
Peninsula	293	62.8	91.1
Eastern Shore	92	67.3	96.5
Eastern VA region	2596	66.5	91.7
State of Virginia		72.6 (N=13,382)	72.7 (N=5,991)

Observation:

The State percentage of children UTD at 24 months of age and at 5 years of age are comparable, both being about 73%. The Eastern Virginia Region has a lower percentage of children UTD at 24 months than the State. However, over 91% of the children in the Eastern Virginia Region are UTD by the time they enter kindergarten.

Source:

Virginia Immunization Survey, Virginia Department of Health, March 2004

Footnotes:

¹Western Tidewater includes Southampton County, Isle of Wight, Franklin City, and Suffolk.

²The Peninsula includes Newport News, James City County, Poquoson, Williamsburg, and York County.

³Eastern Shore includes Northampton, Accomack, and Nassawadox.

⁴Schools and daycare programs included the table samples were randomly selected from the State Survey using the Probability Proportional to Size method.

⁵Vaccine abbreviations - DTP= Diphtheria, tetanus, pertussis; MMR= Measles, mumps, rubella; Hib= *Haemophilus influenzae* type b; HBV= Hepatitis B virus

Vaccine-Preventable Illnesses as a Cause for Hospital Discharges in Children 0-19 Years Total Number of Hospital Discharges in the Region and Virginia 1998 - 2003													
Illness	ICD-9 Code	1998		1999		2000		2001		2002		2003	
		Region	VA	Region	VA	Region	VA	Region	VA	Region	VA	Region	VA
Measles	055	1	1	0	1	0	0	0	1	0	1	0	0
Mumps	072	1	1	0	0	0	0	0	2	0	2	0	0
Rubella	056	0	0	0	2	0	2	0	0	0	0	0	0
Diphtheria	032	0	3	0	2	0	1	1	2	0	2	0	6
Tetanus	037	0	0	0	0	0	0	0	0	0	0	0	1
Pertussis	033	7	39	7	30	20	59	14	37	14	52	19	56
Varicella	052	20	120	24	98	13	75	5	53	6	33	10	35
Influenza	487	11	171	25	248	24	196	15	176	57	432	163	1334
<i>Haemophilus influenzae</i> type b	041.5	4	31	3	31	6	31	2	22	4	29	4	21
Hepatitis B	070.2, 070.3	7	19	2	9	7	19	4	9	3	14	5	11
Totals		51	385	61	421	70	383	41	302	84	565	201	1464
Region % of State Total		13.2		14.5		18.3		13.6		14.9		13.7	

Observation:

Influenza and varicella were the most frequent vaccine-preventable illnesses that were a cause for a hospital discharge from 1998-2003. The Region had as much as 18% of the State's hospital discharges with a vaccine-preventable illness as a cause for hospitalization.

Source:

Virginia Health Information, Statewide Patient-level Hospital Data, 1998-2003

Footnotes:

- ¹Urban Hampton Roads is defined as the area encompassing the following cities: Chesapeake, Norfolk, Portsmouth, Suffolk, Virginia Beach, Hampton, Newport News.
- ²Region is defined as the area encompassing all cities and counties included in the table above.
- ³Discharge rates are calculated by dividing the number of discharges by the total population.
- ⁴The number of hospitalizations reported in the table are those in which the patient survived the hospital stay to discharge.
- ⁵Observations were selected if the corresponding ICD-9 codes appeared in any of the 9 diagnosis fields in the VHI patient-level dataset.

Physical Illness & Injury

Commentary on Pediatric Asthma

From 1998 to 2003 the region has had a significant decline in asthma as a primary cause for hospitalization in children 0-19 years of age. Although patterns of fluctuation have mirrored that of the state, the hospitalization rate for children in the region has had a more significant decline between the years of 1999 and 2002. Certain cities on the Peninsula including Hampton and Newport News have had a more significant decrease than the Southside cities of Norfolk and Chesapeake. Portsmouth and Suffolk have seen moderate decreases while the rate in Virginia Beach has actually increased. The overall decrease in the region between 1998 and 2003 may be attributed to a variety of factors including changes in admission procedures and asthma therapies in hospital emergency rooms, new asthma therapies and treatments and community outreach programs, such as CINCH's Allies Against Asthma Program, which advocate for patient and family education.

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Section 5: Illness and Injury
Asthma Hospitalization Discharge Rate Table

Asthma in Children Ages 0 – 19 Years												
Number and Hospital Discharge Rate per 100,000, 1998 - 2003												
	1998		1999		2000		2001		2002		2003	
	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate
Southside												
Chesapeake	176	287	171	274	126	202	144	228	136	215	164	257
Franklin City	13	537	16	692	15	648	25	1,092	18	798	15	663
Isle of Wight	26	321	36	440	25	306	16	195	17	205	23	272
Norfolk	284	443	308	483	229	342	270	403	235	343	286	407
Portsmouth	162	560	157	548	97	335	142	495	118	408	118	407
Suffolk	79	427	88	460	56	292	68	340	50	240	60	278
Virginia Beach	245	186	279	211	252	197	255	197	260	200	279	213
Peninsula												
Gloucester	17	166	17	164	13	131	17	171	17	172	11	111
Hampton	145	378	166	432	120	294	85	210	74	183	94	230
James City County	42	368	74	632	60	496	59	483	40	322	54	421
Newport News	252	469	251	464	180	326	178	321	153	273	168	295
Poquoson	7	205	2	58	7	207	10	304	9	280	5	160
Williamsburg	3	91	0	0	0	0	1	33	0	0	0	0
York County	25	141	21	117	17	96	22	121	11	60	22	121
Eastern Shore												
Accomack	51	619	39	477	38	370	35	341	29	281	33	324
Northampton	18	527	29	845	17	506	10	301	9	277	6	175
Totals												
Urban Hampton Roads	1,343	338	1,420	356	1,060	264	1,142	283	1,026	252	1,169	283
Region	1,545	332	1,654	354	1,252	265	1,337	282	1,176	246	1,338	276
Virginia	6,666	363	7,878	402	6,916	357	7,823	399	7,305	369	7,981	398

Observation:

From 1998-2003, the Region had lower hospitalization rates due to asthma than the State. However, both the Region and State rates experienced the same pattern of fluctuation during this time period, increasing one year and then decreasing the next.

Source:

Virginia Health Information, Statewide Patient-level Hospital Data, 1998-2003

Footnotes:

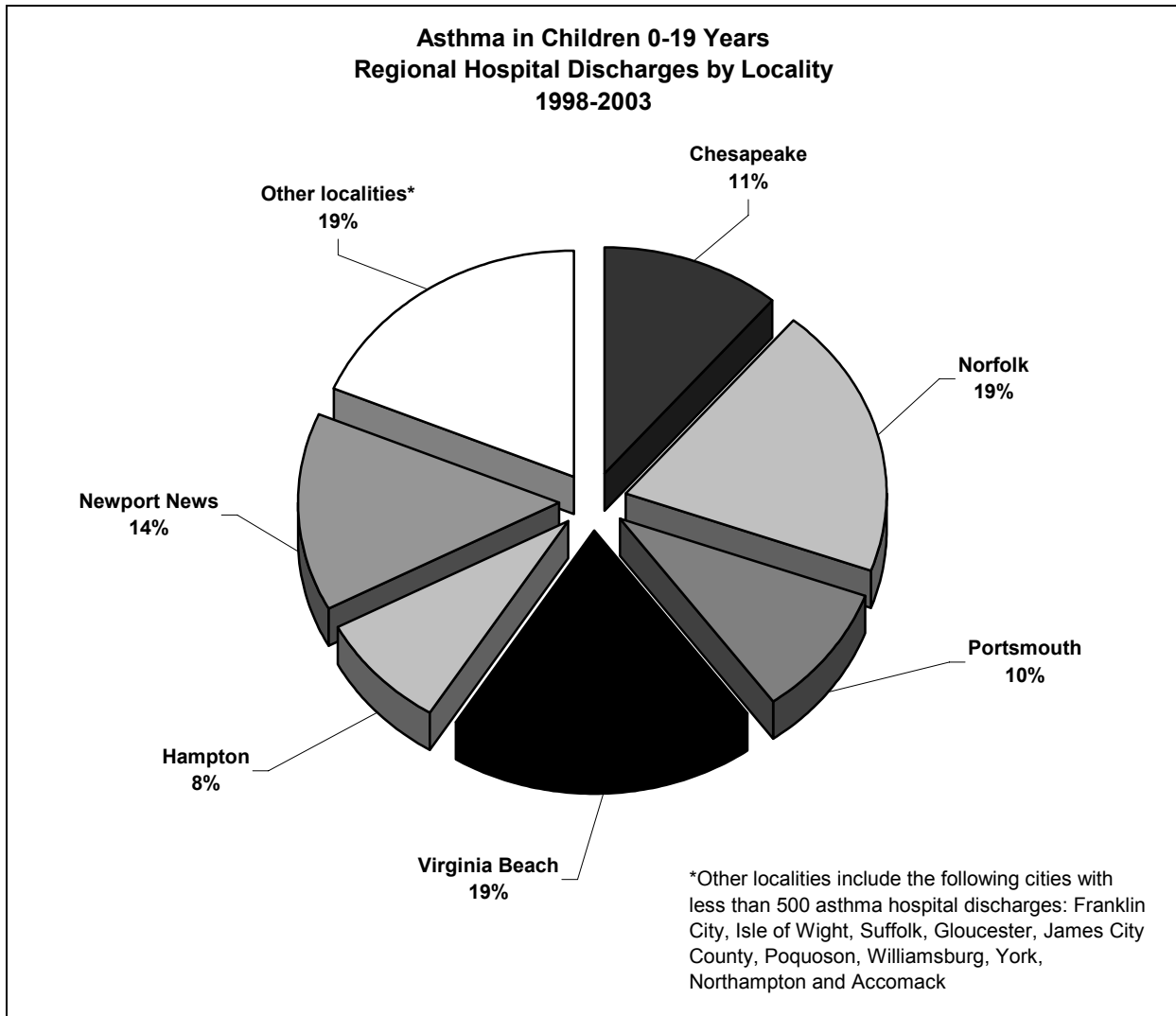
¹Urban Hampton Roads is defined as the area encompassing the following cities: Chesapeake, Norfolk, Portsmouth, Suffolk, Virginia Beach, Hampton, Newport News.

²Region is defined as the area encompassing all cities and counties included in the table above.

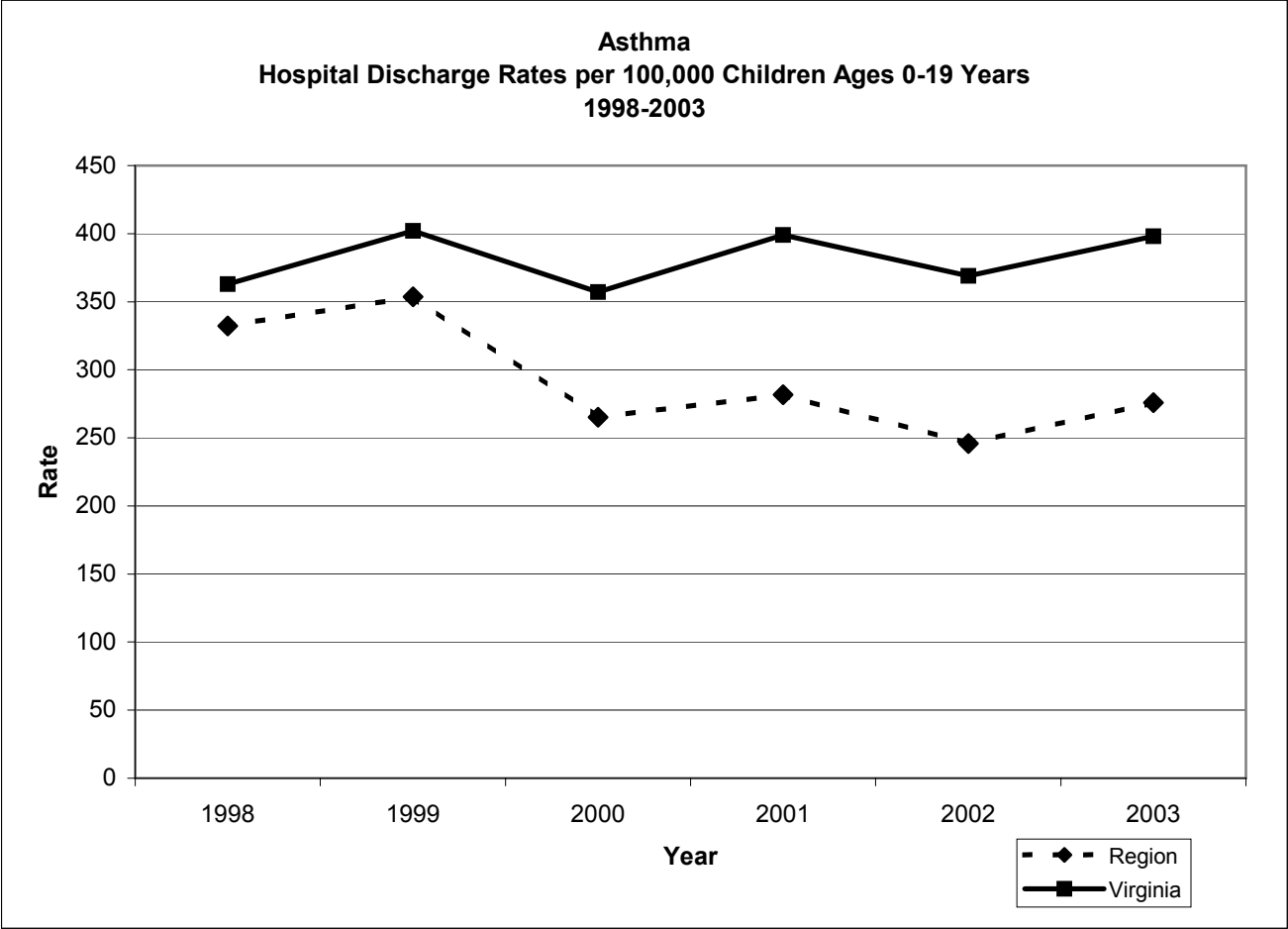
³Discharge rates are calculated by dividing the number of discharges by the total population.

⁴The number hospitalizations reported in the table are those in which the patient survived the hospital stay to discharge.

⁵The ICD-9 codes used to select the asthma hospitalizations are 493.00 – 493.99. Observations were selected if these codes appeared in any of the 9 diagnosis fields in the VHI patient-level dataset.



Section 5: Illness and Injury
Asthma Hospital Discharges Graph



Section 5: Illness and Injury
Asthma as Primary Diagnosis Table

Asthma as Primary Cause for Hospitalization in Children Ages 0-19 Years Number and Hospital Discharge Rate, 1998 - 2003													
	1998		1999		2000		2001		2002		2003		
	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate	
Southside													
Chesapeake	86	140	98	157	64	102	65	103	71	112	73	114	
Franklin City	10	413	13	563	7	302	11	481	11	488	5	221	
Isle of Wight	13	160	21	256	14	172	6	73	9	108	8	95	
Norfolk	159	248	174	273	128	191	129	192	98	143	109	155	
Portsmouth	84	290	105	366	49	169	71	247	41	142	57	197	
Suffolk	40	216	44	230	34	177	39	195	17	82	29	134	
Virginia Beach	122	93	149	112	102	80	91	70	61	47	107	82	
Peninsula													
Gloucester	7	69	9	87	6	61	7	70	9	91	4	40	
Hampton	84	219	112	292	72	176	51	126	28	69	47	115	
James City County	15	132	28	239	20	165	28	229	13	105	23	179	
Newport News	144	268	167	309	128	232	118	213	94	168	91	160	
Poquoson	1	29	0	0	4	118	7	213	6	187	2	64	
Williamsburg	2	61	0	0	0	0	0	0	0	0	0	0	
York County	13	73	15	84	9	51	10	55	5	27	10	55	
Eastern Shore													
Accomack	27	328	15	183	16	156	13	127	12	116	10	98	
Northampton	10	293	15	437	6	179	4	121	6	185	2	58	
Totals													
Urban Hampton Roads	719	181	849	213	577	144	564	140	410	101	513	124	
Region	817	176	965	206	659	140	650	137	481	101	577	119	
Virginia	3,637	198	4,414	225	3,713	192	4,167	212	3,488	176	3,947	197	

Observation:

From 1998-2003, the Region has had lower hospital discharge rates due to asthma as the primary cause for hospitalization than the State. The Region experienced a decreasing trend from 2000 to 2002, but the rate increased by 18% in 2003. The Region comprised 23% of the State's hospitalization rates due to asthma in 1998, but only 15% in 2003.

Source:

Virginia Health Information, Statewide Patient-level Hospital Data, 1998-2003

Footnotes:

¹Urban Hampton Roads is defined as the area encompassing the following cities: Chesapeake, Norfolk, Portsmouth, Suffolk, Virginia Beach, Hampton, Newport News.

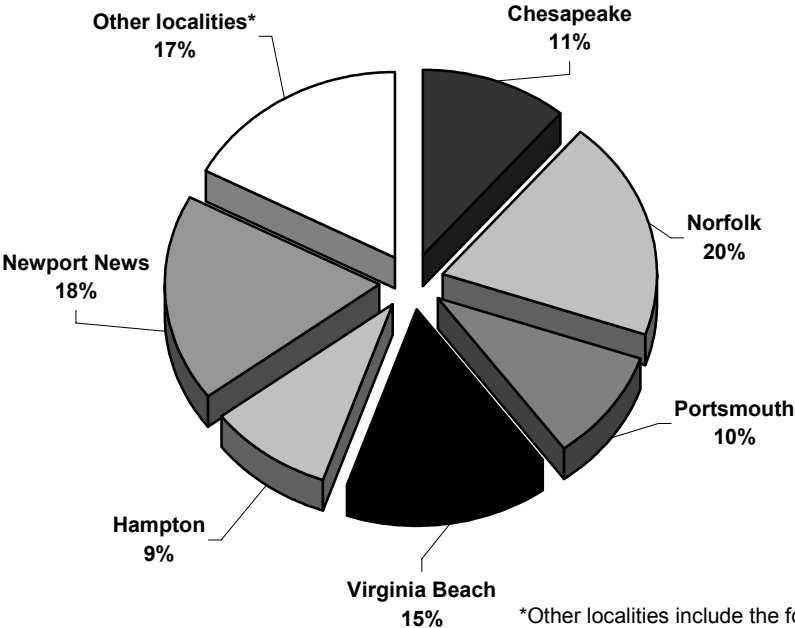
²Region is defined as the area encompassing all cities and counties included in the table above.

³Discharge rates are calculated by dividing the number of discharges by the total population.

⁴The number of hospitalizations reported in the table are those in which the patient survived the hospital stay to discharge.

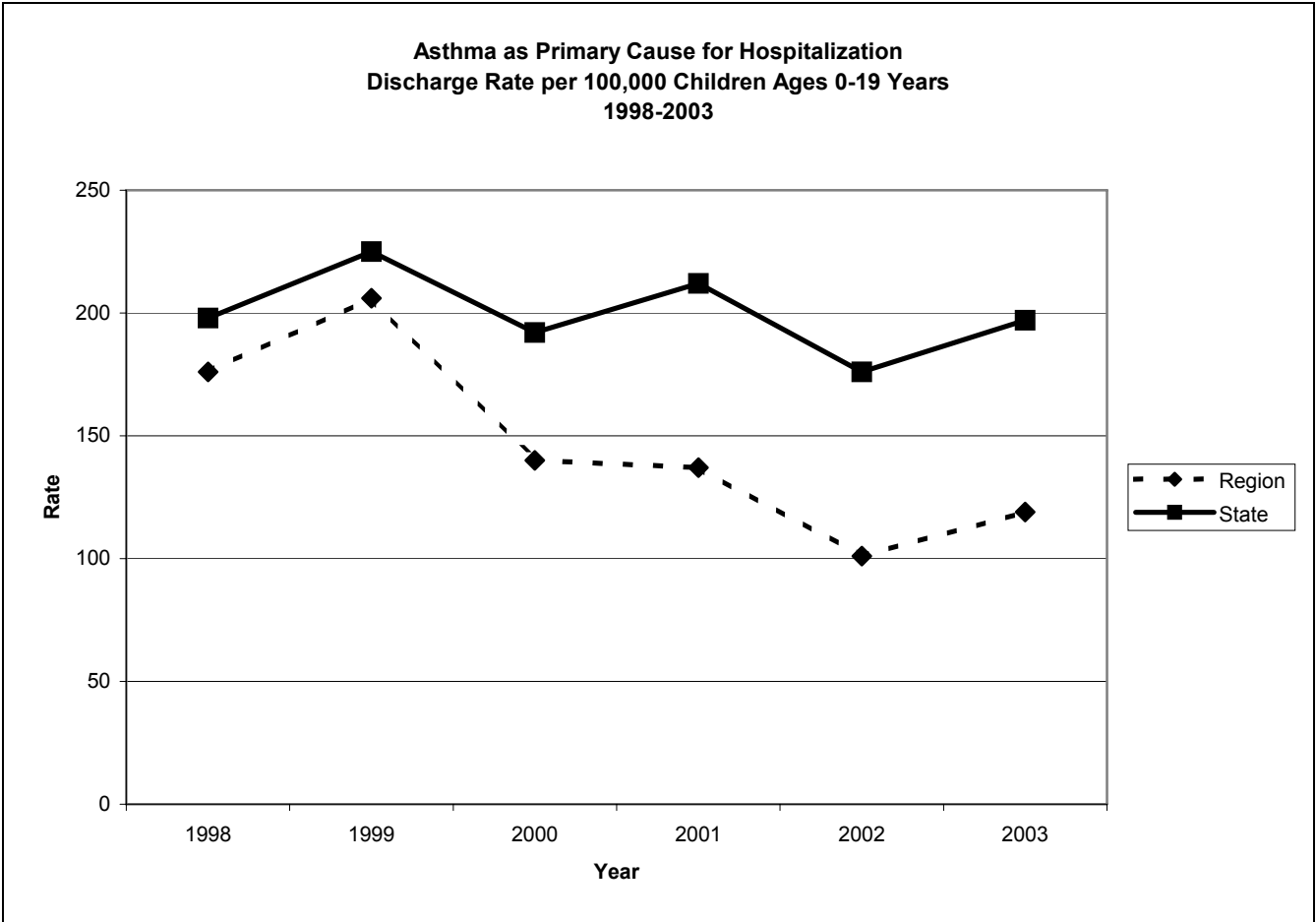
⁵The ICD-9 codes used to select the asthma hospitalizations are 493.00 – 493.99. Observations were selected if these codes appeared in the first diagnosis field in the VHI patient-level dataset.

**Asthma as Primary Cause for Hospitalization in Children 0-19 Years
Regional Hospital Discharges by Locality
1998-2003**



*Other localities include the following cities with less than 300 hospital discharges: Franklin, Isle of Wight, Suffolk, Gloucester, James City County, Poquoson, Williamsburg, York, Accomack, and Northampton

Section 5: Illness and Injury
Asthma as Primary Diagnosis Graph



Commentary on HIV/AIDS

HIV infection in babies, as a result of Mother To Child Transmission (MTCT) has decreased throughout Hampton Roads, which also reflects the national trends. For children living with HIV, the progress that Highly Active Anti-Retroviral Therapy (HAART) made in the late 1990's stabilized children's health and slowed the progression to AIDS. Unfortunately, many of these children are now developing side effects from medications. Children who were born with HIV are living longer, but years of taking medication is taking its toll. The side effects of medications and peer pressures are adherence challenges that must be addressed with children and teenagers to ensure continued treatment success.

Increase of AIDS diagnosis in children can be a result of children becoming resistant to medications or non-compliance to medical treatment. Intensive adherence strategies are needed to ensure children, primarily teens adhere to therapy. In addition to adherence challenges, many who were born HIV positive (+) are now at an age of becoming sexually active. Teaching HIV+ teens and pre-teens about their HIV status and prevention techniques must be a priority to ensure decreased HIV transmission in the adolescent populations.

The increase of HIV infection in children ages birth-19 years of age is most prevalent among sexually active teenagers, primarily young African American women ages 16-19. While HIV infection in children due to MTCT has been decreased, the HIV infection rates in women of childbearing age, primarily African-Americans, continues to increase at alarming rates. New HIV infections for young minority women are higher in Hampton Roads than any other part of the state.

Women with HIV/AIDS are able to have healthy pregnancies with good prenatal care and medical treatment, but extensive family supports is needed for children of young mothers who will eventually face many medical and social challenges due to their mother's HIV/AIDS. HIV+ women who seek no or very little prenatal care are still at risk of transmitting HIV to their babies. However, outreach and prevention efforts to teenagers prior to sexual activity or pregnancy can prevent HIV transmission.

Stacie Walls-Beegle

Executive Director

Children's AIDS Network Designed for Interfaith Involvement (CANDII)

Section 5: Illness and Injury
HIV/AIDS Table

HIV and AIDS in Children Ages 0 - 19 Years Number and Hospital Discharge Rate per 100,000, 1998 - 2003													
	1998		1999		2000		2001		2002		2003		
	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate	
Southside													
Chesapeake	14	23	15	24	8	13	10	16	7	11	4	6	
Franklin City	0	0	1	43	0	0	0	0	0	0	0	0	
Isle of Wight	0	0	0	0	0	0	0	0	0	0	0	0	
Norfolk	11	17	4	6	3	4	9	13	6	9	9	13	
Portsmouth	2	7	1	3	1	3	2	7	3	10	5	17	
Suffolk	0	0	0	0	0	0	0	0	0	0	0	0	
Virginia Beach	4	3	9	7	7	5	7	5	3	2	4	3	
Peninsula													
Gloucester	0	0	0	0	0	0	0	0	0	0	0	0	
Hampton	6	16	0	0	3	7	2	5	0	0	0	0	
James City County	1	9	0	0	0	0	1	8	0	0	0	0	
Newport News	10	19	11	20	6	11	3	5	2	4	1	2	
Poquoson	0	0	1	29	0	0	0	0	0	0	0	0	
Williamsburg	0	0	0	0	0	0	0	0	0	0	0	0	
York County	0	0	0	0	0	0	0	0	0	0	0	0	
Eastern Shore													
Accomack	0	0	0	0	0	0	0	0	0	0	0	0	
Northampton	4	117	0	0	0	0	0	0	2	62	4	116	
Totals													
Urban Hampton Roads	47	12	40	10	28	7	33	8	21	5	23	6	
Region	52	11	42	9	28	6	34	7	23	5	27	6	
Virginia	81	4	81	4	49	3	65	3	53	3	38	2	

Observation:

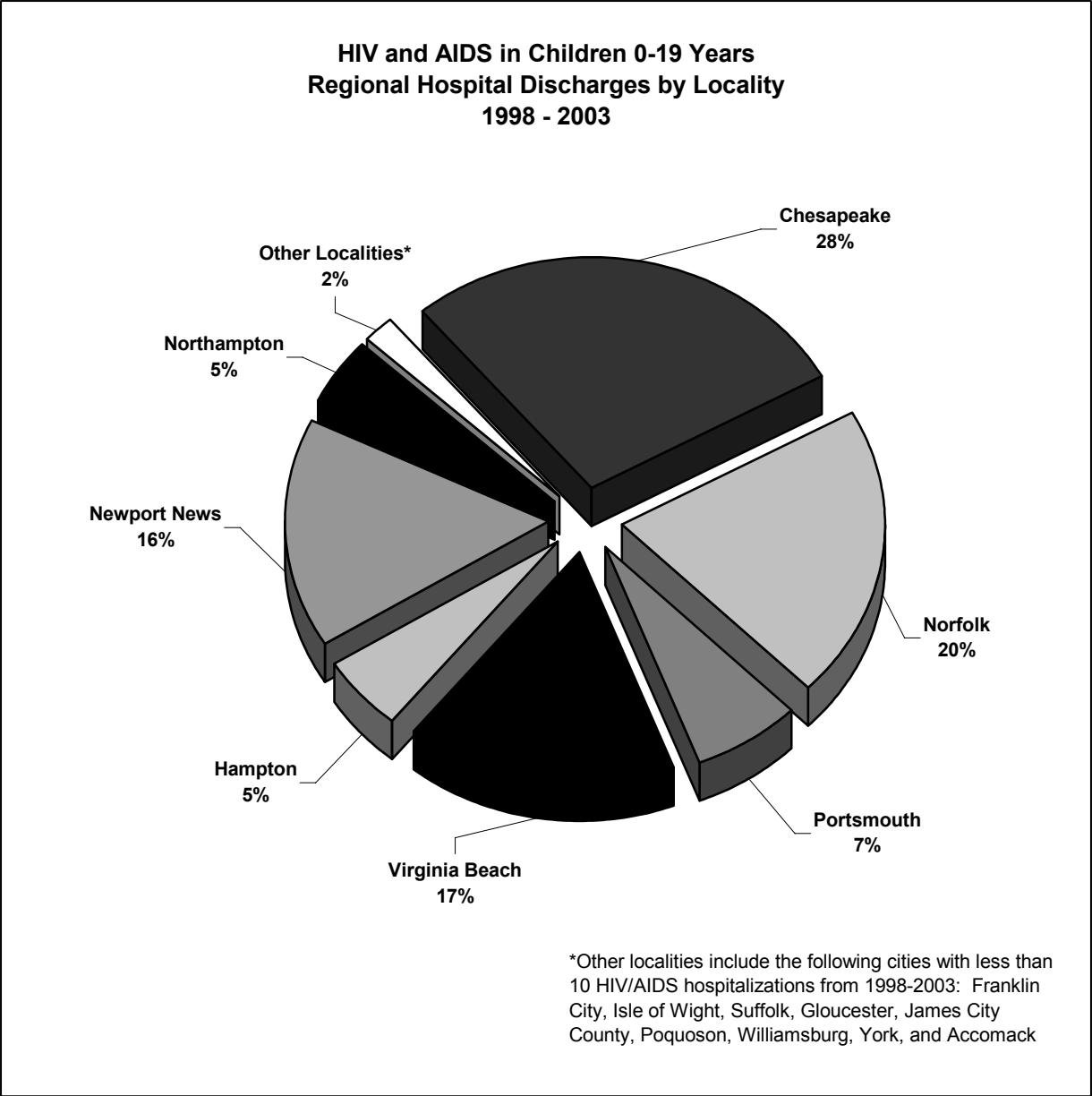
The State's rate of HIV and AIDS hospitalizations decreased from 1998-2003. That actual number of HIV and AIDS hospitalizations in the State decreased 53% from 1998 to 2003. During this time period, the Region's rate has been higher than the State's each year. However, the Region's numbers decreased by 45% from 1998 to 2003. The Region comprised as much as 71.1% of the State HIV and AIDS hospitalizations during this period.

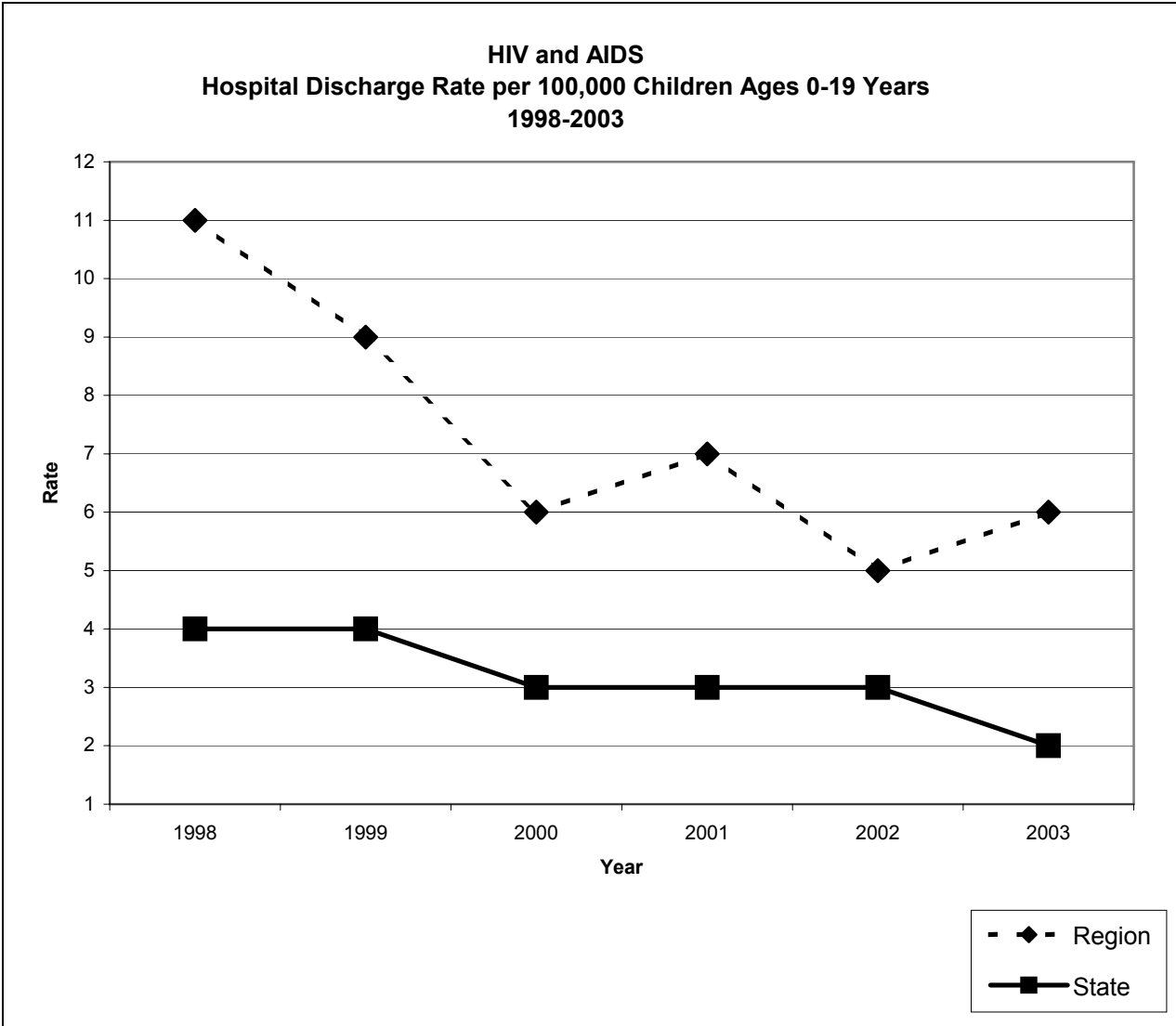
Source:

Virginia Health Information, Statewide Patient-level Hospital Data, 1998-2003

Footnotes:

- ¹Urban Hampton Roads is defined as the area encompassing the following cities: Chesapeake, Norfolk, Portsmouth, Suffolk, Virginia Beach, Hampton, Newport News.
- ²Region is defined as the area encompassing all cities and counties included in the table above.
- ³Discharge rates are calculated by dividing the number of discharges by the total population.
- ⁴The number of hospitalizations reported in the table are those in which the patient survived the hospital stay to discharge.
- ⁵The ICD-9 code used to select the HIV/AIDS hospitalizations is 042. Observations were selected if this code appeared in any of the 9 diagnosis fields in the VHI patient-level dataset.





Section 5: Illness and Injury
HIV/AIDS, Primary Diagnosis Table

HIV and AIDS as Primary Cause for Hospitalization in Children Ages 0-19 Years Number and Hospital Discharge Rate, 1998 - 2003												
	1998		1999		2000		2001		2002		2003	
	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate
Southside												
Chesapeake	7	11	6	10	5	8	5	8	3	5	4	6
Franklin City	0	0	0	0	0	0	0	0	0	0	0	0
Isle of Wight	0	0	0	0	0	0	0	0	0	0	0	0
Norfolk	6	9	3	5	1	1	8	12	3	4	8	11
Portsmouth	1	3	1	3	1	3	0	0	1	3	3	10
Suffolk	0	0	0	0	0	0	0	0	0	0	0	0
Virginia Beach	2	2	6	5	2	2	5	4	1	1	3	2
Peninsula												
Gloucester	0	0	0	0	0	0	0	0	0	0	0	0
Hampton	5	13	0	0	2	5	2	5	0	0	0	0
James City County	0	0	0	0	0	0	0	0	0	0	0	0
Newport News	2	4	8	15	5	9	3	5	0	0	1	2
Poquoson	0	0	0	0	0	0	0	0	0	0	0	0
Williamsburg	0	0	0	0	0	0	0	0	0	0	0	0
York County	0	0	0	0	0	0	0	0	0	0	0	0
Eastern Shore												
Accomack	0	0	0	0	0	0	0	0	0	0	0	0
Northampton	2	59	0	0	0	0	0	0	2	62	3	87
Totals												
Urban Hampton Roads	23	6	24	6	16	4	23	6	8	2	19	5
Region	25	5	24	5	16	3	23	5	10	2	22	5
Virginia	45	2	36	2	29	1	38	2	25	1	26	1

Observation:

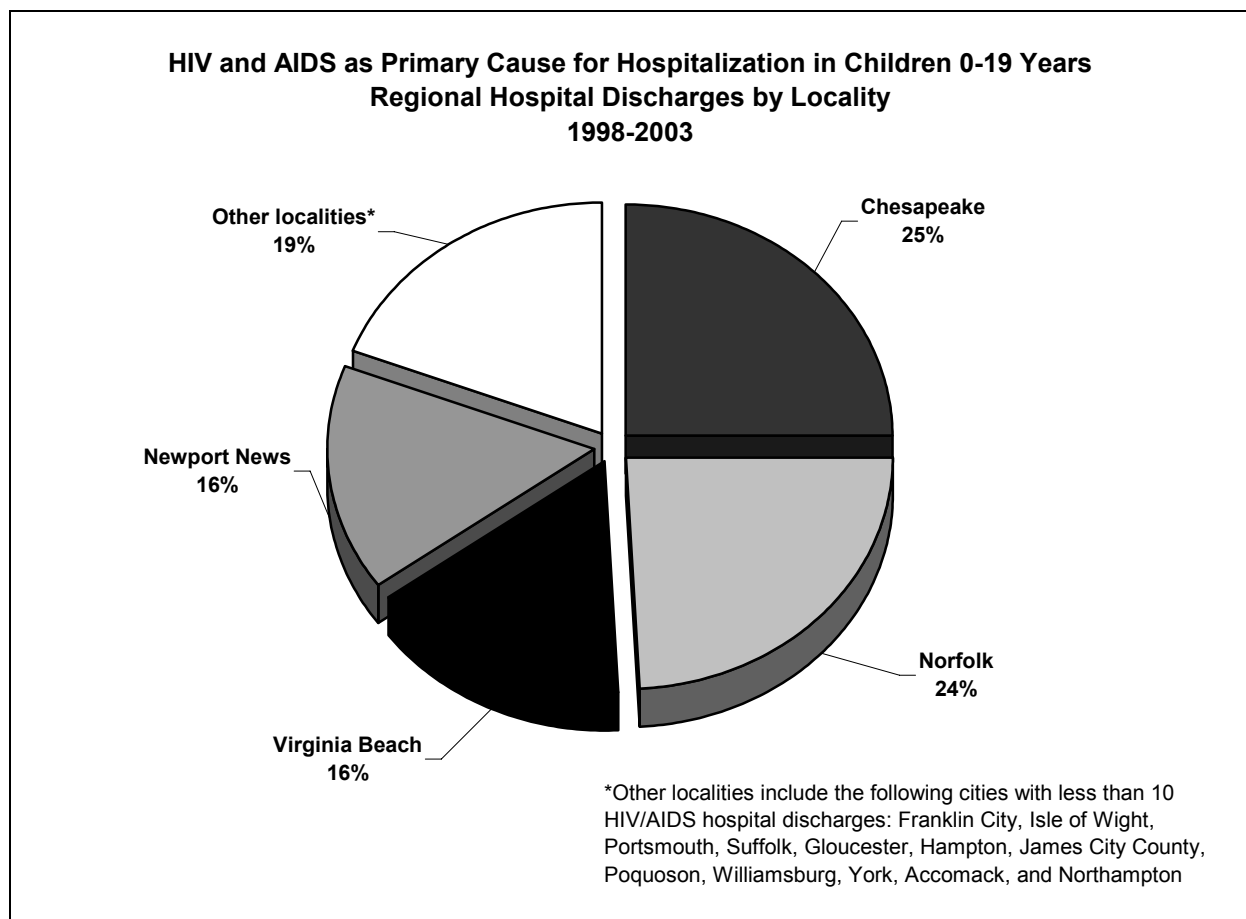
The State's rate of hospital discharges where HIV and AIDS are the primary cause for hospitalizations has remained fairly stable from 1998-2003. The Region's rate and actual number of HIV/AIDS hospitalizations have fluctuated during this time period, decreasing one year and increasing the next.

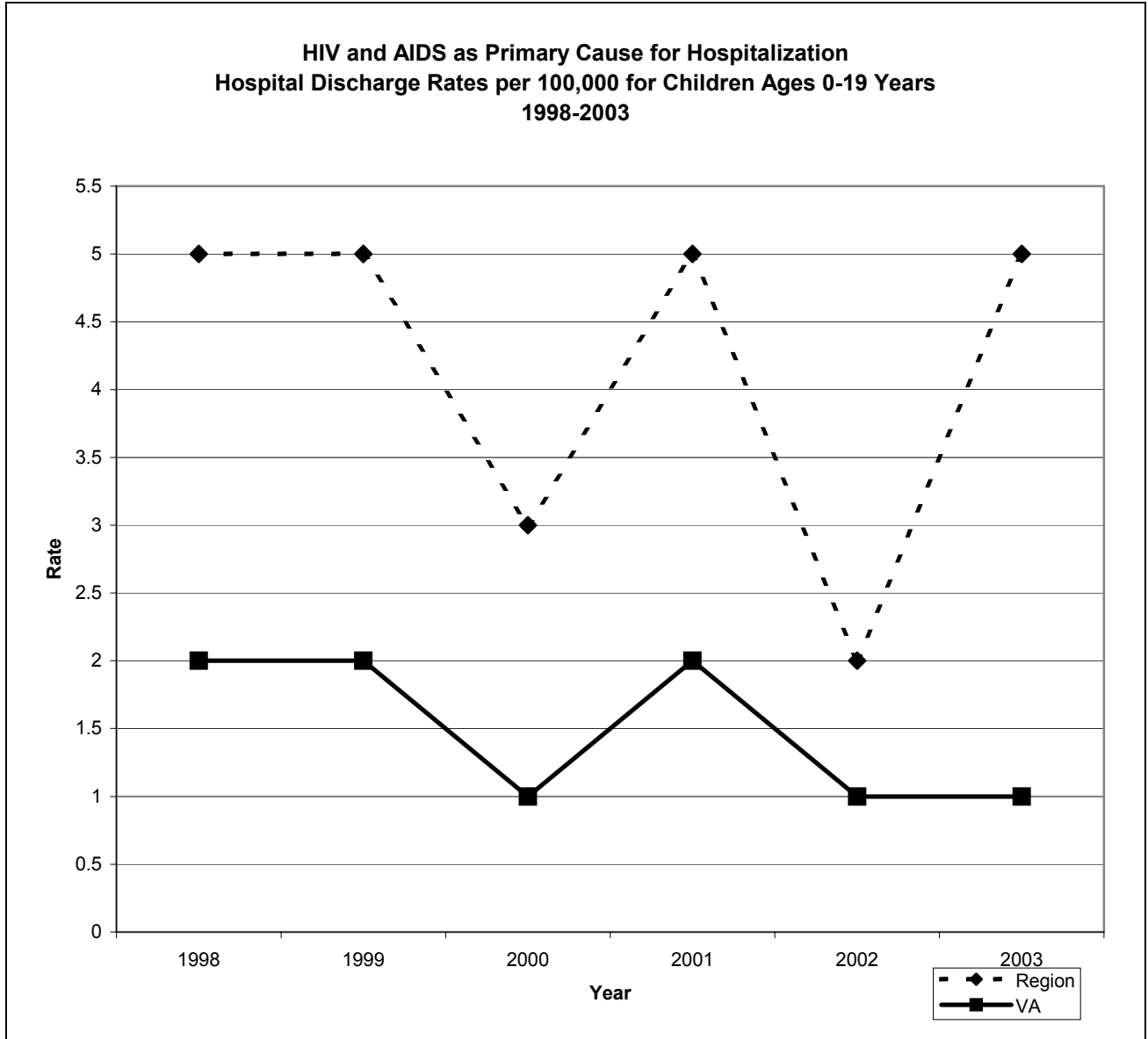
Source:

Virginia Health Information, Statewide Patient-level Hospital Data, 1998-2003

Footnotes:

- ¹Urban Hampton Roads is defined as the area encompassing the following cities: Chesapeake, Norfolk, Portsmouth, Suffolk, Virginia Beach, Hampton, Newport News.
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- ³Discharge rates are calculated by dividing the number of discharges by the total population.
- ⁴The number of hospitalizations reported in the table are those in which the patient survived the hospital stay to discharge.
- ⁵The ICD-9 code used to select the HIV/AIDS hospitalizations is 042. Observations were selected if this code appeared in the first diagnosis field in the VHI patient-level dataset.





Commentary on Pediatric Obesity

Pediatric obesity is one of the most commonly faced medical conditions confronting members of the medical community caring for children and adolescents in the United States. The percent of overweight school age children 6-11 in the United States more than doubled between the late 1970s and 2002, increasing from 6.5% to 15.8%, while the percent of overweight adolescents ages 12- 19 tripled from 5.0% to 16.1%¹. Obese children and adolescents are at increased risk of developing medical and psychological problems such as high blood pressure, heart disease, elevated blood fats and cholesterol, stroke, diabetes, depression, self-image problems, and bone conditions to name a few of the problems. Medical management of the overweight child is a challenge. The cause of obesity is hard to embrace, is complex in its development, time intensive to treat, and demands persistent motivation.

The 2005 Consortium for Infant and Child Health (CINCH) Report on The Health of Children in Hampton Roads presents important information surrounding the epidemic nature of pediatric obesity facing our community, although state and local level data is very limited at this time. This report demonstrates the need for health professionals to work to develop creative and innovative ideas to assist families to decrease the number of overweight children within the Hampton Roads community, as well as to address the need for obesity prevention. This public health crisis needs to be addressed aggressively to secure the future health of our children.

Programs such as the Healthy You Program at Children's Hospital of The Kings Daughters, CINCH's Healthy Kids Kit for Food & Fitness, Bodies in Balance, and physical activity programs in schools and after school programs must continue to be funded to help to combat the problem of obesity. Programs that foster healthy eating, increase levels of activity, and work to enhance the self-image of our children are needed for all children within our community. Additionally, the continued work of community groups like CINCH's Obesity Prevention Work Group, Coalition for Obesity Prevention – Peninsula, and Suffolk Partnership for a Healthy Community - Eating & Fitness Task Force are critical to our community's development of a culture of health for our children

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Reference:

¹National Center for Health Statistics. Health, United States, 2004 with Chartbook on Trends in the Health of Americans. Table 70. Overweight children and adolescents 6-19 years of age, according to sex, age, race, and Hispanic Origin: United States, selected years 1963-65 through 1999-2002 [Internet]. [Hyattsville (MD)]: NCHS [cited 2005, Feb 10]. Available from [http://www.cdc.gov/nchs/data/04trend.pdf#070](http://www.cdc.gov/nchs/data/hus/04trend.pdf#070)

Commentary on Pediatric Obesity Prevalence Assessment

The Coalition for Obesity Prevention-Peninsula (COP-P) was formed in September 2003, in an effort to address the problems of overweight and obesity in the Peninsula Health District. Although national data suggested that overweight and obesity were prevalent throughout the country, no local data existed on these topics. The COP-P began a community assessment as its first project, in order to determine the magnitude of the problem on the Peninsula and discover what local resources currently existed.

The data presented here represent the results of the first component of this assessment -- a study of the Body Mass Index (BMI) status of Peninsula children. School nurses, physical education instructors, and volunteers collected heights and weights on children in kindergarten, third grade, fifth grade, seventh grade, and tenth grade in all four school districts. Measurements were collected on over 18,000 children. What we found was not surprising -- overweight and obesity in school children are significant problems on the Peninsula. Having local data, at the city, school, and even zip code level, has helped us to better address these problems by allowing us to focus our efforts on those areas most in need.

Lack of state and local data related to pediatric obesity continues to be a challenge to quantifying the degree to which our children are affected by overweight and obesity. This lack of rigorous data should be considered a call to action for our community, as this disparity in data collection and reporting significantly limits our region's ability to address a problem which we can not quantify, as well as impairs our ability to secure significant funding in which to create programs to address the issue. While some local areas have collected data, standardizing this process and participation by localities throughout the entire Hampton Roads region is greatly needed.

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Director, Peninsula Health District
Virginia Department of Health

Injury and Illness
Body Mass Index Local Data Table

Pediatric Body Mass Index Status of Peninsula Area Children 2003-2004 School Year										
School District	Newport News		Poquoson		Williamsburg-James City		York		Peninsula School District - Combined	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Kindergarten	2,270		150		573		725		3,718	
Overweight	376	16.60	14	9.30	73	12.70	83	11.40	546	14.70
At-Risk for Over Weight	354	15.60	26	17.30	89	15.50	103	14.20	572	15.50
Underweight	86	3.80	8	5.30	30	5.20	22	3.00	146	3.90
Healthy Weight	1454	64.10	102	68.00	381	66.50	517	71.30	2454	66.00
3rd Grade	2,316		170		637		860		3,983	
Overweight	473	20.40	28	16.50	125	19.60	126	14.70	752	18.90
At-Risk for Over Weight	385	16.60	35	20.60	106	16.60	146	17.00	672	16.90
Underweight	74	3.20	0	0.00	22	3.50	22	2.60	118	3.00
Healthy Weight	1384	59.80	107	62.90	384	60.30	566	65.80	2441	61.30
5th Grade	2,297		192		635		859		3,983	
Overweight	549	23.90	33	17.20	127	20.00	111	12.90	820	20.60
At-Risk for Over Weight	409	17.80	39	20.30	123	19.40	150	17.50	721	18.10
Underweight	48	2.10	4	2.10	12	1.90	23	2.70	87	2.20
Healthy Weight	1291	56.20	116	60.40	373	58.70	575	66.90	2355	59.10
7th Grade	2,176		188		381		623		3,368	
Overweight	494	22.70	31	16.50	79	20.70	57	9.10	661	19.60
At-Risk for Over Weight	449	20.60	39	20.70	74	19.40	87	14.00	649	19.30
Underweight	47	2.20	0	0	9	2.40	34	5.50	90	2.70
Healthy Weight	1186	54.50	118	62.80	219	57.50	445	71.40	1968	58.40
10th Grade	2,219		180		264		897		3,560	
Overweight	459	20.70	27	15	30	11.40	120	13.40	636	17.90
At-Risk for Over Weight	432	19.50	21	11.67	41	15.50	151	16.80	645	18.10
Underweight	24	1.10	2	1.11	11	4.20	10	1.10	2232	1.30
Healthy Weight	1304	58.80	130	72.22	182	68.90	616	68.70	47	62.70
All Grades Total	11,278		880		2,490		3,964		18,612	

(Important observation, source, and footnote information on next page)

Observation:

This data provides local level information that there are a significant number of children in our region that are overweight and at-risk for overweight. This information is concerning as the region appears to have a prevalence of obesity among children above that of the national prevalence.

Source:

Peninsula Health District/Coalition for the Prevention of Obesity-Peninsula, Community Pediatric Body Mass Index Status Assessment, 2004.

Footnotes:

¹Peninsula School District is defined as Williamsburg-James City County School System, Newport News School System, Poquoson School System, York County School System

²Raw height/weight data was compiled and analyzed by the Peninsula Health District Epidemiologist and plotted according to the Centers for Disease Control and Prevention BMI-For-Age-Percentiles charts. The height/weight data were compiled and analyzed by the Peninsula Health District's epidemiologist. Heights and weights were transformed into Body Mass Index (BMI) figures. The use of BMI differs between adults and children, although it is calculated the same way. There is not a specific cutoff number for overweight or obese for children as there is for adults. Instead, children's BMIs are plotted on gender-specific growth charts and weight status is classified according to the 2000 Centers for Disease Control and Prevention (CDC) system:

BMI \geq 95 th percentile	overweight
BMI \geq 85 th percentile and $<$ 95 th percentile	at risk for overweight
BMI \geq 5 th percentile and $<$ 85 th percentile	normal weight
BMI $<$ 5 th percentile	underweight

³The percentage of children on whom a BMI was reported was not consistent from system to system and data collection methods may have varied from school to school and system to system creating a potential bias in the data.

⁴Reported school census did not coincide with number of children on whom BMI information was collected due to 1) missed cases due to absence or other factors, and 2) minor inconsistencies between the reporting period for data collection versus school census. Contact the Peninsula Health District for more information and specific data related to this discrepancy.

Section 5: Illness and Injury
Body Mass Index Local Data Table

Pediatric Body Mass Index Status of Peninsula Area Children							
Prevalence of Overweight and at Risk of Overweight Combined by Gender and Locality							
Peninsula Health District Combined	Percent of Females	Overweight & At-Risk Females	Total Sample Females	Percent of Males	Overweight & At-Risk Males	Total Sample Males	Total Sample
Kindergarten	29.20	534	1826	30.90	584	1892	3718
3rd Grade	35.50	682	1919	35.90	742	2064	3983
5th Grade	39.60	767	1939	37.90	774	2044	3983
7th Grade	39.10	638	1630	38.70	672	1738	3368
10th Grade	34.30	596	1736	37.60	685	1824	3560
Newport News							
Kindergarten	32.20	366	1138	32.20	364	1132	2270
3rd Grade	37.10	419	1130	37.00	439	1186	2316
5th Grade	44.40	495	1116	39.20	463	1181	2297
7th Grade	45.40	485	1068	41.30	458	1108	2176
10th Grade	39.60	432	1090	40.70	459	1129	2219
Poquoson							
Kindergarten	15.30	9	59	34.10	31	91	150
3rd Grade	42.60	29	68	33.30	34	102	170
5th Grade	29.90	29	97	45.30	43	95	192
7th Grade	30.40	28	92	43.80	42	96	188
10th Grade	19.20	14	73	31.80	34	107	180
Williamsburg-James City County							
Kindergarten	27.80	80	288	28.80	82	285	573
3rd Grade	36.10	109	302	36.40	122	335	637
5th Grade	40.30	127	315	38.40	123	320	635
7th Grade	34.6**	64	184	45.2**	89	197	381
10th Grade	24.8**	36	145	29.4**	35	119	264
York County							
Kindergarten	23.20	79	341	27.90	107	384	725
3rd Grade	29.80	125	419	33.30	147	441	860
5th Grade	28.20	116	411	32.40	145	448	859
7th Grade	21.3**	61	286	24.6**	83	337	623
10th Grade	26.60	114	428	33.50	157	469	897

Observation:

This data provides local level information that there are a significant number of children in our region that are overweight and at-risk for overweight. Across the Peninsula District there is no significant variation between sexes. Individual school system data appears to vary between sexes, particularly in some grades. However some of this variation may be due to school size and/or response rate and should be interpreted with caution.

(Important source and footnote information on next page)

Section 5: Illness and Injury Body Mass Index Local Data Table

Source:

Peninsula Health District/Coalition for the Prevention of Obesity-Peninsula, Community Pediatric Community Body Mass Index Status Assessment, 2004.

Footnotes:

¹Peninsula School District is defined as Williamsburg-James City County School System, Newport News School System, Poquoson School System, York County School System

²Raw height/weight data was compiled and analyzed by the Peninsula Health District Epidemiologist and plotted according to the Centers for Disease Control and Prevention BMI-For-Age-Percentiles charts. The height/weight data were compiled and analyzed by the Peninsula Health District's epidemiologist. Heights and weights were transformed into Body Mass Index (BMI) figures. The use of BMI differs between adults and children, although it is calculated the same way. There is not a specific cutoff number for overweight or obese for children as there is for adults. Instead, children's BMIs are plotted on gender-specific growth charts and weight status is classified according to the 2000 Centers for Disease Control and Prevention (CDC) system:

BMI \geq 95 th percentile	overweight
BMI \geq 85 th percentile and $<$ 95 th percentile	at risk for overweight
BMI \geq 5 th percentile and $<$ 85 th percentile	normal weight
BMI $<$ 5 th percentile	underweight

³The percentage of children on whom a BMI was reported was not consistent from system to system and data collection methods may have varied from school to school and system to system creating a potential bias in the data.

⁴Reported school census did not coincide with number of children on whom BMI information was collected due to 1) missed cases due to absence or other factors, and 2) minor inconsistencies between the reporting period for data collection versus school census. Contact the Peninsula Health District for more information and specific data related to this discrepancy.

⁵Schools/Grades with a small rate of return are indicated by **.

Commentary on Unintentional Injury

Unintentional injuries are the leading cause of death in the United States for people aged 1 to 34, and US children under age 15 sustain more than 14 million serious injuries a year.^{1,2} Nearly 120,000 US children are permanently disabled from injuries each year, and injury is the number one cause for medical spending for children aged 5 to 14.² Sadly, it is estimated that 90% of unintentional injuries can be prevented with proper education and protective safety equipment.² Unlike many other public health problems (e.g., obesity, mental illness, etc.), the methods for preventing unintentional injuries are readily accessible.

However, there is some good news for southeastern Virginia. After failing to decline throughout the 1990s decade, the rate of unintentional injury-related hospital discharges among children in Hampton Roads and the region fluctuated between 1998 and 2003. There was a decline in the rate by 2003, and local and regional rates were consistently lower than those found at the state level. The rates of hospitalization discharge due to motor vehicle crashes decreased 44% in Urban Hampton Roads and 39% in the region, compared to 21% in Virginia. Accidental poisonings show an even steeper decline over the six years, with related hospitalization discharges decreasing 193% and 231% for the region and Urban Hampton Roads, respectively. The hospitalization discharge rates for accidental falls remained relatively constant in the region and Urban Hampton Roads between 1998 and 2003, with the exception of a temporary increase in 2002. Local and regional poisoning discharge rates were less than that of the state in 2003. There were relatively few accidents caused by fire that resulted in hospitalization discharge between 1998 and 2003, and local and regional rates were comparable to state levels.

These are promising outcomes for the greater Hampton Roads region, and local safety advocates should be applauded for their contributions to these trends. Unfortunately, state-level mortality trends are less encouraging. In Virginia, childhood unintentional injury mortality rates associated with motor vehicle crashes, accidental poisonings, and fire increased between 1999 and 2003. Statewide mortality rates fluctuated yearly or remained roughly the same for accidental falls, accidental drowning, and firearm-related childhood deaths. Motor vehicle crashes were the leading cause of unintentional injury deaths to Virginia's children aged 0-19, followed by drowning-related causes.

This Report serves as a valuable reference for unintentional injury trends in the Hampton Roads region and Virginia. Estimates of injury prevalence in Virginia are similar to national estimates, and it is evident from this report that unintentional injury also contributes appreciably to the regional overall burden of morbidity and mortality.

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¹ Centers for Disease Control and Prevention, 2003

² National Safe Kids Campaign, 2003

Section 5: Illness and Injury
Unintentional Injury – Motor Vehicle Accidents Table

**Unintentional Injuries in Children Ages 0-19 Years
Number and Discharge Rate per 100,000, 1998-2003**

Motor Vehicle Accidents (ICD-9 Codes E810-E825)													
	1998		1999		2000		2001		2002		2003		
	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate	
Southside													
Chesapeake	37	60	24	39	44	70	42	67	23	36	21	33	
Franklin City	3	124	1	43	1	43	2	87	3	133	2	88	
Isle of Wight	4	49	2	24	5	61	6	73	4	48	11	130	
Norfolk	56	87	26	41	37	55	30	45	29	42	24	34	
Portsmouth	18	62	20	70	14	48	21	73	12	42	7	24	
Suffolk	15	81	10	52	14	73	16	80	13	63	10	46	
Virginia Beach	69	52	46	35	59	46	40	31	39	30	54	41	
Peninsula													
Gloucester	9	88	9	87	6	61	2	20	6	61	9	90	
Hampton	10	26	16	42	13	32	14	35	8	20	10	25	
James City County	6	53	7	60	9	74	8	65	4	3	7	55	
Newport News	29	54	22	41	13	24	18	32	12	21	12	21	
Poquoson	2	59	1	29	1	30	0	0	0	0	1	32	
Williamsburg	1	30	0	0	0	0	0	0	0	0	0	0	
York County	8	45	6	33	1	6	5	28	6	33	4	22	
Eastern Shore													
Accomack	13	158	7	86	9	88	4	39	7	68	6	59	
Northampton	2	59	4	117	6	179	1	30	3	92	2	58	
Totals													
Urban Hampton Roads	234	59	164	41	194	48	181	45	136	33	138	33	
Region	282	61	201	43	232	49	209	44	169	35	180	37	
Virginia	1334	73	1307	67	1253	65	1269	65	1211	61	1156	58	

Observation:

Overall, the rates of hospitalization due to motor vehicle accidents for children in Virginia and the Region decreased considerably from 1998 to 2003. There was a 21% decrease in the rate of motor vehicle accidents in Virginia during this time. There was a greater decrease in these rates during this time in the Urban Hampton Roads area (44%) and the Region (39%).

Source:

Virginia Health Information, Statewide Patient-level Hospital Data, 1998-2003

Footnotes:

¹Discharge rates are calculated by dividing the number of discharges by the total population.

²The number of hospitalizations reported in the table are those in which the patient survived the hospital stay to discharge.

Section 5: Illness and Injury
Unintentional Injury – Accidental Poisonings Table

Unintentional Injuries in Children Ages 0-19 Years
Number and Discharge Rate per 100,000, 1998-2003

Accidental Poisonings (ICD-9 Codes E850-E869)													
	1998		1999		2000		2001		2002		2003		
	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate	
Southside													
Chesapeake	25	41	10	16	6	10	10	16	9	14	8	13	
Franklin City	0	0	2	87	0	0	0	0	0	0	0	0	
Isle of Wight	2	25	1	12	1	12	0	0	1	12	1	12	
Norfolk	72	112	32	50	15	22	11	16	8	12	9	13	
Portsmouth	24	83	17	59	5	17	7	24	5	17	6	21	
Suffolk	5	27	2	10	6	31	0	0	4	19	1	5	
Virginia Beach	29	22	24	18	9	7	6	5	5	4	14	11	
Peninsula													
Gloucester	0	0	2	19	1	10	2	20	1	10	0	0	
Hampton	4	10	6	16	5	12	2	5	1	2	6	15	
James City County	2	18	4	34	0	0	1	8	4	3	2	16	
Newport News	11	20	6	11	7	13	5	9	5	9	10	18	
Poquoson	1	29	0	0	0	0	0	0	0	0	0	0	
Williamsburg	0	0	0	0	0	0	0	0	0	0	0	0	
York County	3	17	2	11	0	0	2	11	0	0	0	0	
Eastern Shore													
Accomack	3	36	1	12	0	0	2	19	1	10	2	20	
Northampton	0	0	1	29	2	60	1	30	1	31	0	0	
Totals													
Urban Hampton Roads	170	43	97	24	53	13	41	10	37	9	54	13	
Region	181	39	110	24	57	12	49	10	45	9	59	12	
Virginia	521	28	354	18	280	14	273	14	238	12	281	14	

Observation:

In 1998, the rate of accidental poisonings in the Urban Hampton Roads area was 43 per 100,000 and in the region was 39 per 100,000. These rates were higher than that observed at the state level during that year (28 per 100,000). Over the next 6 years, there was a reduction in the rates of accidental poisonings, though the state decreased at a slower rate. There was a 231% decrease from 1998 to 2003 in the Urban Hampton Roads rate and a 193% decrease at the regional level placing both at a rate comparable to that of the state.

Source:

Virginia Health Information, Statewide Patient-level Hospital Data, 1998-2003

Footnotes:

¹ Discharge rates are calculated by dividing the number of discharges by the total population.

² The number of hospitalizations reported in the table are those in which the patient survived the hospital stay to discharge

Section 5: Illness and Injury
Unintentional Injury – Accidental Falls Table

Unintentional Injuries in Children Ages 0-19 Years
Number and Discharge Rate per 100,000, 1998-2003

Accidental Falls (ICD-9 Codes E880-E888)													
	1998		1999		2000		2001		2002		2003		
	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate	
Southside													
Chesapeake	19	31	18	29	26	42	22	35	49	77	22	34	
Franklin City	2	83	1	43	16	691	2	87	3	133	3	133	
Isle of Wight	1	12	2	24	1	12	3	37	9	108	1	12	
Norfolk	41	64	17	27	22	33	22	33	55	80	18	26	
Portsmouth	14	48	10	35	7	24	4	14	19	66	10	35	
Suffolk	4	22	2	10	4	21	5	25	15	72	13	60	
Virginia Beach	40	30	38	29	42	33	35	27	66	51	37	28	
Peninsula													
Gloucester	3	29	2	19	6	61	2	20	12	121	3	30	
Hampton	15	39	10	26	17	42	14	35	29	72	10	25	
James City County	8	70	6	51	7	58	10	82	14	11	4	31	
Newport News	12	22	12	22	26	47	16	29	25	45	12	21	
Poquoson	1	29	0	0	1	30	2	61	3	93	2	64	
Williamsburg	0	0	0	0	0	0	1	33	1	33	0	0	
York County	1	6	4	22	4	23	3	17	4	22	3	16	
Eastern Shore													
Accomack	1	12	5	61	1	10	3	29	19	184	4	39	
Northampton	1	29	0	0	1	30	0	0	8	246	0	0	
Totals													
Urban Hampton Roads	145	37	107	27	144	36	118	29	258	63	122	30	
Region	163	35	127	27	181	38	144	30	331	69	142	29	
Virginia	1033	56	1049	54	960	50	814	41	3170	160	835	42	

Observation:

The rates of accidental falls resulting in a hospitalization discharge at the regional and state level remained relatively constant from 1998 to 2001, than they experienced a significant increase in 2002. In 2003, the rates returned to a level similar to those seen before 2002. The rate of accidental falls in the Urban Hampton Roads area and the region during these 6 years was less than that of the state.

Source:

Virginia Health Information, Statewide Patient-level Hospital Data, 1998-2003

Footnotes:

¹ Discharge rates are calculated by dividing the number of hospitalizations by the total population.

² The number of hospitalizations reported in the table are those in which the patient survived the hospital stay to discharge.

Section 5: Illness and Injury
Unintentional Injury – Accidents by Fire Table

Unintentional Injuries in Children Ages 0-19 Years
Number and Discharge Rate per 100,000, 1998-2003

Accidents Caused by Fire (ICD-9 Codes E890-E899)													
	1998		1999		2000		2001		2002		2003		
	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate	
Southside													
Chesapeake	1	2	0	0	3	5	2	3	1	2	0	0	
Franklin City	1	41	0	0	2	86	1	44	1	44	0	0	
Isle of Wight	0	0	0	0	0	0	0	0	0	0	0	0	
Norfolk	1	2	3	5	2	3	1	1	2	3	2	3	
Portsmouth	1	3	0	0	1	3	1	3	0	0	1	3	
Suffolk	0	0	1	5	2	10	0	0	0	0	0	0	
Virginia Beach	3	2	1	1	5	4	2	2	2	2	0	0	
Peninsula													
Gloucester	0	0	0	0	0	0	0	0	1	10	0	0	
Hampton	0	0	0	0	2	5	0	0	2	5	1	2	
James City County	0	0	0	0	0	0	2	16	1	1	2	16	
Newport News	0	0	0	0	0	0	0	0	0	0	2	4	
Poquoson	0	0	0	0	0	0	0	0	0	0	0	0	
Williamsburg	0	0	0	0	0	0	0	0	0	0	0	0	
York County	0	0	0	0	0	0	0	0	1	5	0	0	
Eastern Shore													
Accomack	0	0	0	0	0	0	0	0	0	0	0	0	
Northampton	0	0	0	0	0	0	0	0	0	0	0	0	
Totals													
Urban Hampton Roads	6	2	5	1	15	4	6	1	7	2	6	1	
Region	7	2	5	1	17	4	9	2	11	2	8	2	
Virginia	46	3	39	2	51	3	42	2	35	2	45	2	

Observations:

From 1998 to 2003, there were relatively few accidents caused by fire that resulted in being discharged from the hospital at the state and regional level. Additionally, the rates were comparable between the Urban Hampton Roads area, the region and the state ranging from 1 to 4 per 100,000.

Source:

Virginia Health Information, Statewide Patient-level Hospital Data, 1998-2003

Footnotes:

¹ Discharge rates are calculated by dividing the number of hospitalizations by the total population.

² The number of hospitalizations reported in the table are those in which the patient survived the hospital stay to discharge.

Section 5: Illness and Injury
Unintentional Injury – All Injuries Table

Unintentional Injuries in Children Ages 0-19 Years
Number and Discharge Rate per 100,000, 1998-2003

All Unintentional Injuries (ICD-9 Codes E800-E999)												
	1998		1999		2000		2001		2002		2003	
	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate
Southside												
Chesapeake	175	285	109	175	156	250	168	266	192	303	148	232
Franklin City	10	413	12	519	38	1641	11	481	15	665	10	442
Isle of Wight	20	247	14	171	22	270	27	329	27	325	26	308
Norfolk	284	443	166	261	191	285	203	303	218	319	200	285
Portsmouth	120	415	102	356	101	349	109	380	104	360	88	304
Suffolk	61	330	27	141	54	281	51	255	60	289	64	297
Virginia Beach	291	221	230	174	224	175	257	199	303	234	290	221
Peninsula												
Gloucester	27	264	24	232	27	272	30	302	43	434	36	362
Hampton	102	266	100	261	84	206	93	230	103	255	89	218
James City County	40	351	39	333	43	356	46	376	60	48	38	296
Newport News	162	302	153	283	144	261	146	264	173	309	152	267
Poquoson	10	293	8	231	12	355	9	273	9	280	11	351
Williamsburg	1	30	0	0	0	0	1	33	1	33	0	0
York County	26	146	28	156	22	125	27	149	39	213	20	110
Eastern Shore												
Accomack	33	400	26	318	26	253	26	253	41	398	38	373
Northampton	12	351	14	408	13	387	7	211	21	646	8	233
Totals												
Urban Hampton Roads	1195	301	887	222	954	237	1027	254	1153	283	1031	249
Region	1374	295	1052	225	1157	245	1211	255	1409	294	1218	251
Virginia	6401	348	5712	292	5594	289	5500	280	7875	397	5546	277

Observation:

The rates of all unintentional injuries resulting in hospitalization discharge fluctuated between 1998 and 2003, though the Urban Hampton Roads area and the region consistently had lower rates than those found at the state level.

Source:

Virginia Health Information, Statewide Patient-level Hospital Data, 1998-2003

Footnotes:

¹ Discharge rates are calculated by dividing the number of discharges by the total population.

² The number of hospitalizations reported in the table are those in which the patient survived the hospital stay.

Section 5: Illness and Injury
Unintentional Injury Mortality Table

**Mortality Due to Unintentional Injuries in Children Ages 0-19 Years
Number and Percent of All Unintentional Injury Deaths
Virginia 1999-2003**

	1999		2000		2001		2002		2003	
	Number	%	Number	%	Number	%	Number	%	Number	%
Motor Vehicle Accidents	132	57.6	180	64.3	143	62.4	175	67.0	152	64.1
Accidental Poisonings	6	2.6	7	2.5	9	3.9	11	4.2	16	6.8
Accidental Falls	4	1.7	7	2.5	5	2.2	3	1.1	7	3.0
Accidental Exposure to Smoke, Fire and Flames	8	3.5	22	7.9	10	4.4	11	4.2	14	5.9
Accidental Drowning and Submersion	29	12.7	23	8.2	25	10.9	27	10.3	24	10.1
Accidental Discharge of Firearms	2	0.9	3	1.1	3	1.3	4	1.5	1	0.4
All Other Unintentional Injuries	48	21.0	38	13.6	34	14.8	30	11.5	23	9.7

Observation:

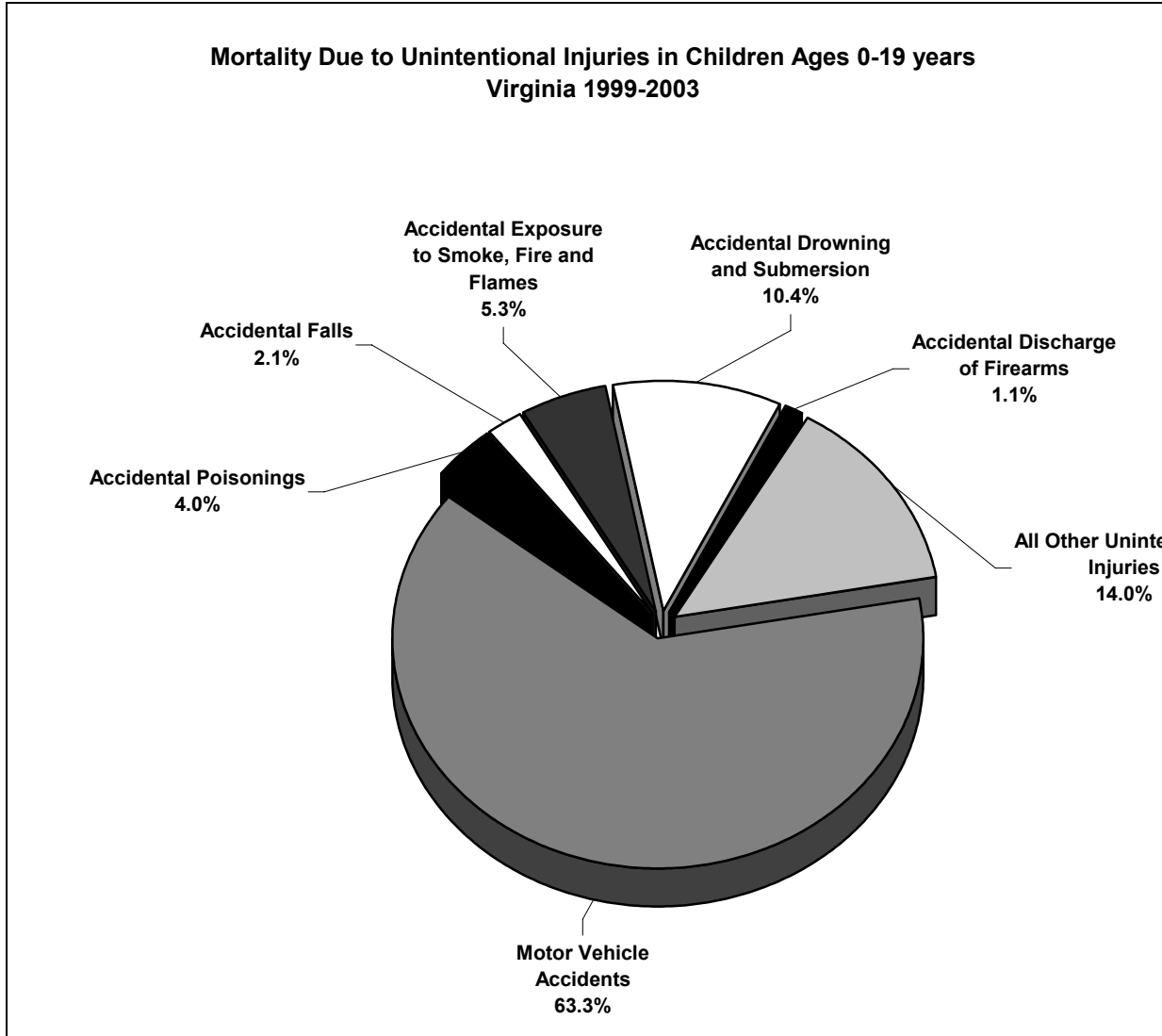
Motor vehicle accidents were the leading cause of unintentional injury death among children ages 0-19 years in Virginia from 1999-2003, followed by drowning.

Source:

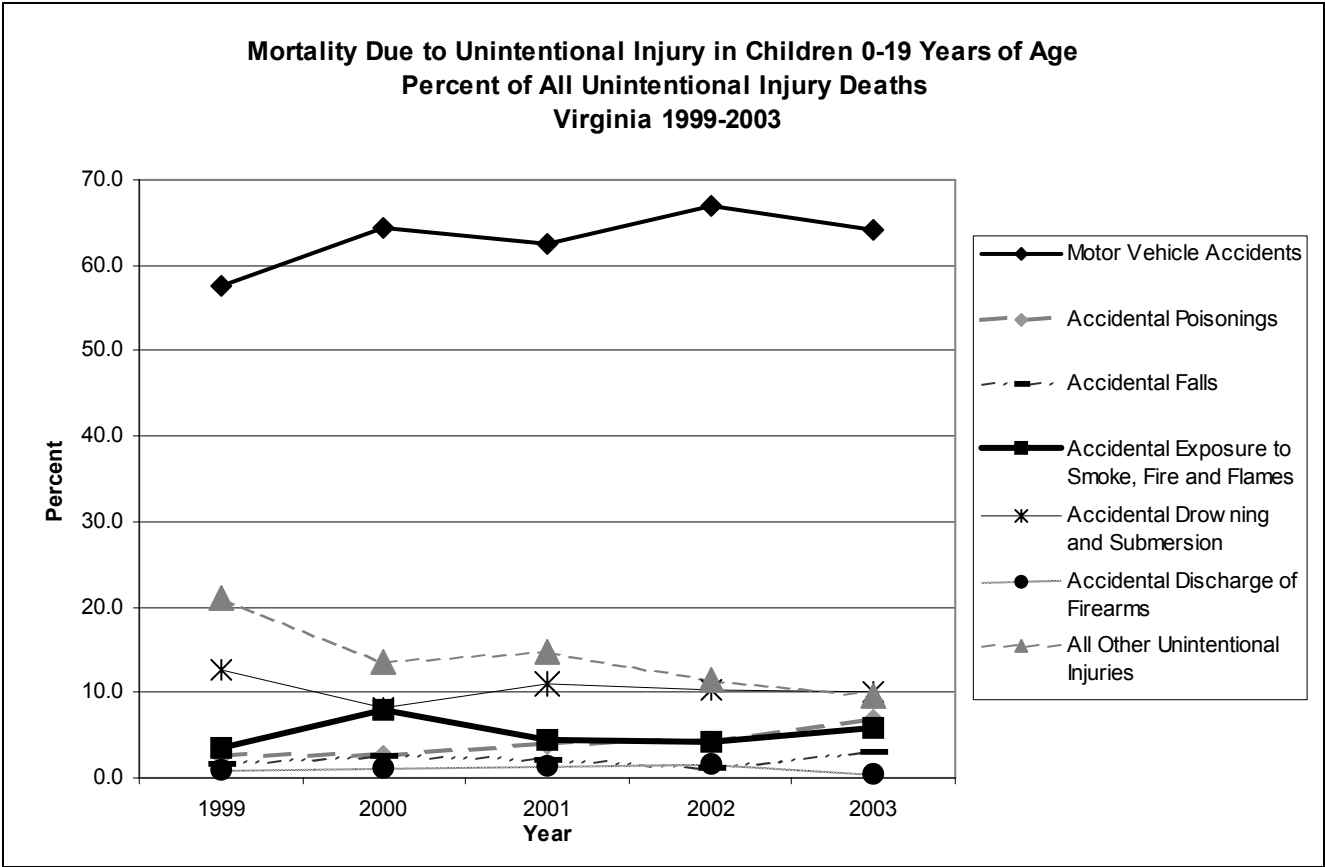
Virginia Health Statistics, Virginia Department of Health, Center for Health Statistics, 1999-2003.

Footnotes:

¹ Detailed categories of unintentional injury were not reported in 1998.



Section 5: Illness and Injury
 Unintentional Injury Mortality Graph



Commentary on Intentional Injury - Child Abuse and Neglect

The data on child abuse and neglect seem to reflect a general trend downwards for substantiated child abuse reports in our region. However, local social service agencies were transitioning into a new case classification system during the time frame examined in this report, so it is impossible to make comparisons or discern trends. It is clear that child abuse and neglect continue to occur in high numbers and constitute a serious community-wide concern.

Here in the Southeast region we continue to have a higher rate than that of the rest of the state for both child abuse and child abuse fatalities. Some of this increase may be accounted for by the transient population in our region, since family violence often occurs in settings where there is little social support. Some of this increase may simply reflect better reporting and documenting of child abuse in our region. We have a very active Child Abuse Program at the Children's Hospital of The King's Daughters, which coordinates multidisciplinary teams consisting of representatives from social services, law enforcement, and prosecutors. Teams such as these help to more accurately capture and categorize data on abused children. In addition, our region has an excellent Medical Examiner's Office and a fatality review team, allowing us to more accurately capture the true number of children who are fatally abused in our area. Teams such as these decrease the number of child abuse cases misidentified or misclassified as accidental injuries.

The results of this report should strengthen the resolve of both medical professionals and community agencies in our area to continue to strive to reduce child maltreatment. Obviously, Child Protective Services in our area needs continued support to deal with this ongoing crisis. However, additional gains can be reached through prevention projects aimed at reducing child physical abuse and neglect. Information and hands-on assistance to help families understand children's developmental milestones would be particularly effective in reducing child abuse. Programs to reduce the incidence of domestic violence and child abuse may also be effective, particularly among the military population. Research shows that the incidence of some types of child abuse are higher among military populations than that of the civilian population, making prevention programs particularly applicable to Hampton Roads, which has a significant number of military-affiliated residents^{1, 2}.

Just like many other childhood illnesses, abuse and neglect can be prevented. Effective community support for families will help to achieve our goal of decreasing the number of abused children in our region while improving of the health and welfare of all the children in Virginia.

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Children's Hospital of The King's Daughters

Betty Wade Coyle, M.A.

Executive Director
Prevent Child Abuse Hampton Roads

¹Gessner R, Runyan DK. The shaken infant: a military connection? Archives of Pediatric and Adolescent Medicine 1995; 149: 467-469.

²Keenan H, Runyan, D, Merton D, Sinal S. A population-based study of inflicted traumatic brain injury in young children. JAMA 2003; 290: 621-626

Section 5: Injury and Illness
Child Abuse and Neglect Table

Numbers of Abuse and Neglect and Rates per 1,000 Children Aged 0-17 Years										
	7/1/98 - 6/30/99		7/1/99 - 6/30/00		7/1/00 - 6/30/01		7/1/01 - 6/30/02		7/1/02 - 6/30/03	
	#	Rate ³	#	Rate	#	Rate	#	Rate	#	Rate ³
Southside										
Chesapeake	180		214	4	203	4	234	4	241	
Franklin City	2		0	0	0	0	3	2	4	
Isle of Wight	13		27	4	30	4	24	3	39	
Norfolk	460		644	11	470	8	499	9	409	
Portsmouth	105		166	6	112	4	142	6	105	
Suffolk	25		31	2	52	3	24	1	26	
Virginia Beach	890		1,056	9	968	8	944	8	965	
Peninsula										
Gloucester	33		60	7	41	5	20	2	43	
Hampton	154		167	5	216	6	177	5	157	
James City County	137		162	14	87	8	101	9	44	
Newport News	311		353	7	340	7	209	4	208	
Poquoson	6		2	1	3	1	3	1	9	
Williamsburg	7		10	9	13	11	7	7	7	
York County	60		24	2	25	2	46	3	64	
Eastern Shore										
Accomack	54		69	7	53	6	43	5	28	
Northampton	18		21	7	17	6	7	2	5	
Totals										
Urban Hampton Roads	2125		2631	7	2361	7	2229	6	2111	
Region	2455		3006	7	2630	6	2483	6	2354	
Virginia	8237		9730	6	8993	5	8388	5	6565	

Observation:

From July 1999 to June 2002, the Region had a higher rate of abuse and neglect among children 0-17 years than the state of Virginia. Both the Region and the State saw a decrease in the number of reported child abuse cases from July 1999 – June 2003.

Sources:

Virginia Department of Social Services, Child Protective Services (CPS) Statistics, 1998-2003 (<http://www.dss.state.va.us/family/cps/stats.html>)

Footnotes:

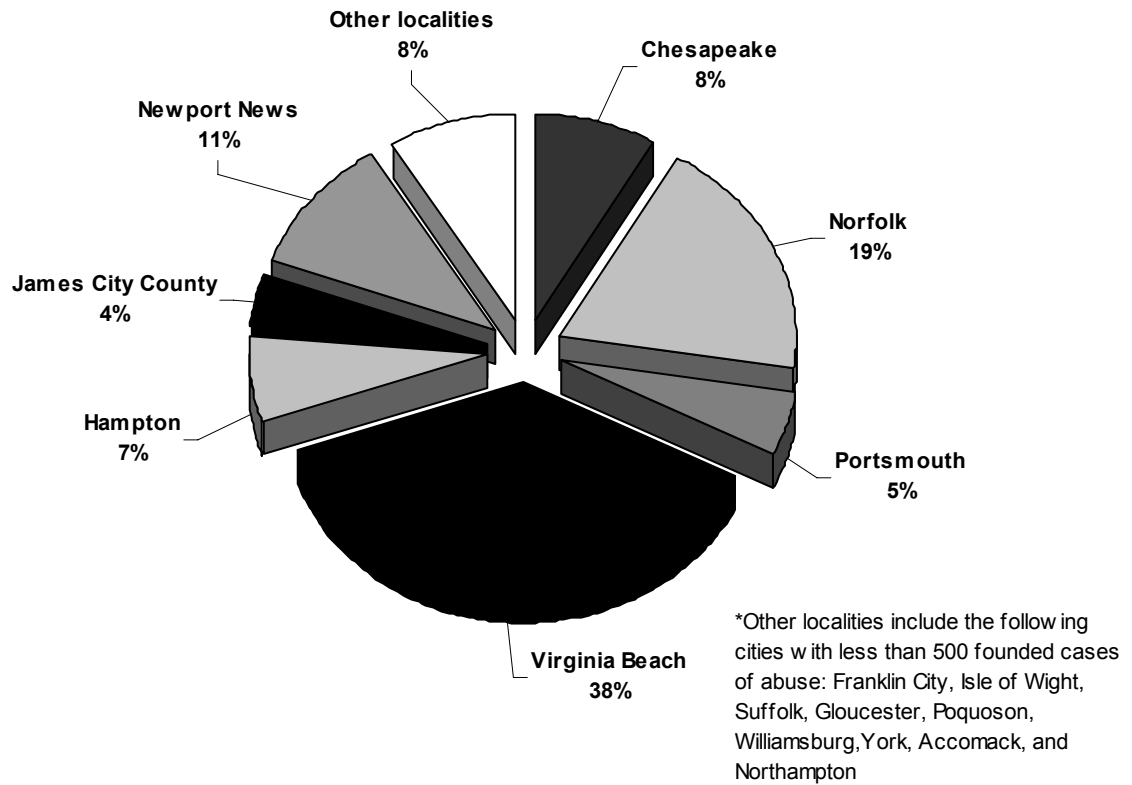
¹Urban Hampton Roads is defined as the area encompassing the following cities: Chesapeake, Norfolk, Portsmouth, Suffolk, Virginia Beach, Hampton, Newport News.

²Region is defined as the area encompassing all cities and counties included in the above table.

³Child Protective Services did not report rates of abuse from 7/1/98-6/30/99 and 7/1/02- 6/30/03.

Injury and Illness
Child Abuse and Neglect Cases Chart

**Founded Cases of Child Abuse and Neglect in Children 0-17 Years
Regional Percentage by Locality
1998-2003**



Injury and Illness
Child Abuse Fatalities Table

Abuse and Neglect Fatalities, Numbers and Rates per 1,000 Children Aged 0-17 Years										
	7/1/98 - 6/30/99		7/1/99 - 6/30/00		7/1/00 - 6/30/01		7/1/01 - 6/30/02		7/1/02 - 6/30/03	
	#	Rate ³	#	Rate	#	Rate	#	Rate	#	Rate ³
Southside										
Chesapeake	0		1	0	0	0	2	0	3	
Franklin City	0		0	0	0	0	0	0	0	
Isle of Wight	0		1	0	0	0	0	0	0	
Norfolk	1		3	0	1	0	3	0	8	
Portsmouth	1		2	0	2	0	2	0	0	
Suffolk	0		1	0		0	0	0	1	
Virginia Beach	4		4	0	4	0	3	0	4	
Peninsula										
Gloucester	0		0	0	0	0	0	0	1	
Hampton	1		1	0	1	0	1	0	1	
James City County	0		1	0	1	0	0	0	0	
Newport News	0		3	0	1	0	1	0	3	
Poquoson	0		0	0	0	0	0	0	0	
Williamsburg	0		0	0	0	0	0	0	0	
York County	1		0	0	0	0	0	0	0	
Eastern Shore										
Accomack	0		0	0	0	0	0	0	0	
Northampton	0		0	0	0	0	0	0	0	
Totals										
Urban Hampton Roads	7		15	0	9	0	12	0	20	
Region	8		17	0	10	0	12	0	21	
Virginia	35		37	0	31	0	28	0	31	

Observation:

Urban Hampton Roads and the Region have experienced up to 65% and 68% of the child abuse fatalities in Virginia, respectively. At least 23% of the child abuse fatalities in Virginia have occurred in Hampton Roads from July 1998 to June 2003. According to the U.S. Census taken in 2000, 24% of the state's children live in this region.

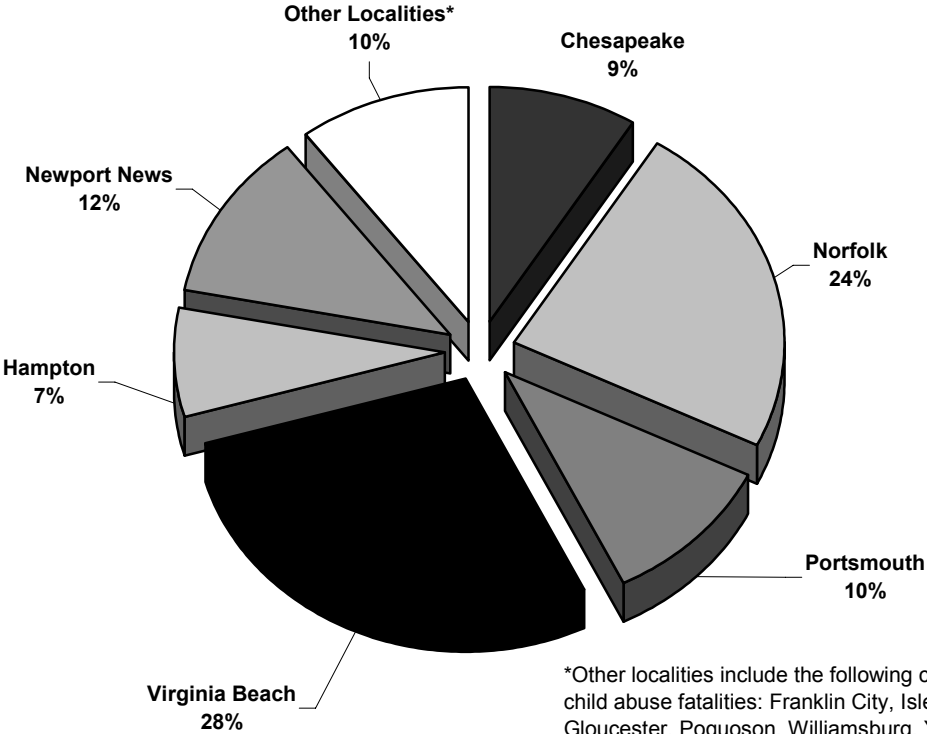
Sources:

Virginia Department of Social Services, Child Protective Services Statistics (CPS), 1998-2003 (<http://www.dss.state.va.us/family/cps/stats.html>)

Footnotes:

- ¹ Urban Hampton Roads is defined as the area encompassing the following cities: Chesapeake, Norfolk, Portsmouth, Suffolk, Virginia Beach, Hampton, Newport News.
- ² Region is defined as the area encompassing all cities and counties included in the above table.
- ³ Child Protective Services did not report rates of abuse from 7/1/98-6/30/99 and 7/1/02- 6/30/03.
- ⁴ Some of the differences reflect local classification changes as a result of the implementation of the Differential Response System (DRS), which was implemented by localities on or before May 2002.

**Child Abuse and Neglect Fatalities in Children 0-17 Years
Regional Percentage by Locality
July 1998-June 2003**



Section 5: Illness and Injury
Intentional Injuries - Self-Inflicted Injuries Table

Self-Inflicted Injuries in Children Ages 0-19 Years (ICD-9 Codes E950-E959) Number and Hospital Discharge Rate per 100,000, 1998 - 2003												
	1998		1999		2000		2001		2002		2003	
	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate
Southside												
Chesapeake	12	20	6	10	9	14	14	22	14	22	20	31
Franklin City	0	0	0	0	0	0	2	87	1	44	1	44
Isle of Wight	0	0	1	12	2	25	1	12	2	24	1	12
Norfolk	20	31	11	17	12	18	12	18	19	28	10	14
Portsmouth	18	62	10	35	6	21	5	17	10	35	7	24
Suffolk	8	43	2	10	5	26	3	15	5	24	6	28
Virginia Beach	32	24	18	14	10	8	26	20	12	9	14	11
Peninsula												
Gloucester	2	20	3	29	1	10	2	20	2	20	1	10
Hampton	8	21	3	8	3	7	2	5	3	7	8	20
James City County	6	53	3	26	5	41	3	25	3	24	7	55
Newport News	7	13	5	9	3	5	7	13	7	13	5	9
Poquoson	1	29	0	0	0	0	0	0	1	31	0	0
Williamsburg	1	30	0	0	0	0	0	0	1	33	0	0
York County	3	17	1	6	3	17	4	22	1	5	3	16
Eastern Shore												
Accomack	3	36	3	37	2	19	1	10	2	19	1	10
Northampton	0	0	1	29	1	30	0	0	0	0	0	0
Totals												
Urban Hampton Roads	105	26	55	14	48	12	69	17	70	17	70	17
Region	121	26	67	14	62	13	82	17	83	17	84	17
Virginia	779	42	687	35	689	36	678	35	700	35	723	36

Observation:

The Region had lower rates of hospitalizations due to self-inflicted injuries from 1998-2003 when compared to the State. The rates in the Region began to decline in 1999 and 2000, but then increased in 2001 and remained stable. The State rate decreased by 17% in 1999 and has remained fairly stable.

Source:

Virginia Health Information, Statewide Patient-level Hospital Data, 1998-2003

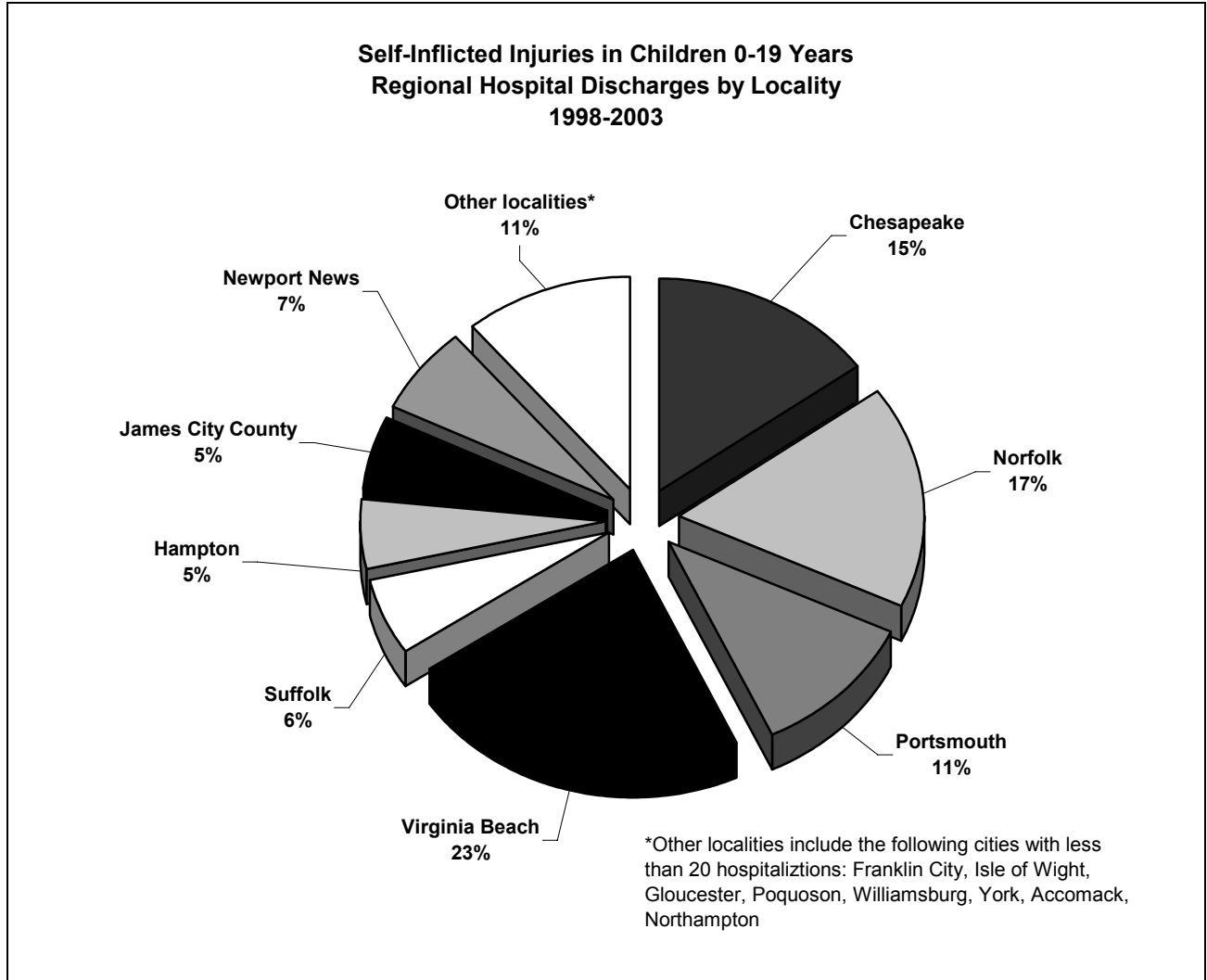
Footnotes:

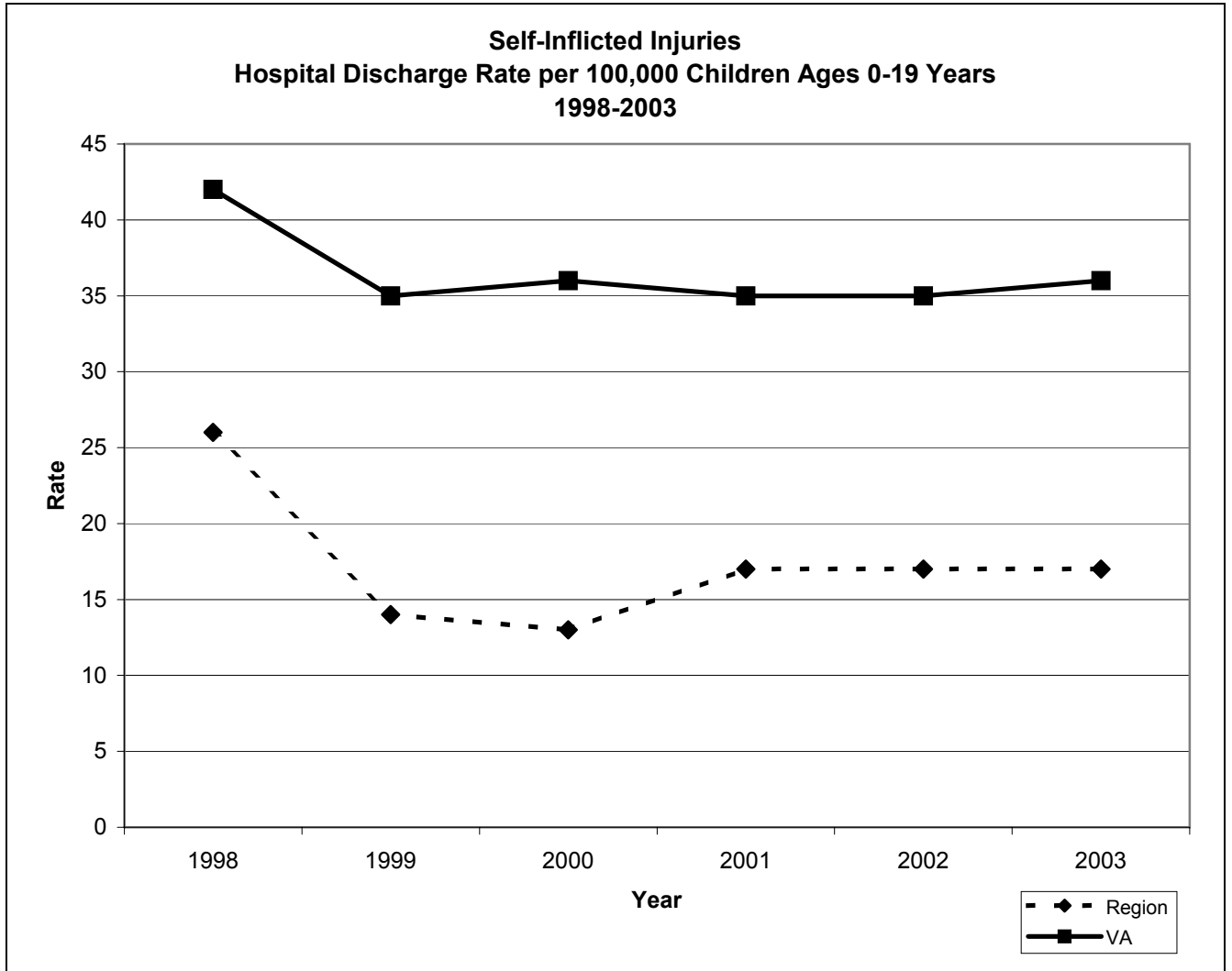
¹Urban Hampton Roads is defined as the area encompassing the following cities: Chesapeake, Norfolk, Portsmouth, Suffolk, Virginia Beach, Hampton, Newport News.

²Region is defined as the area encompassing all cities and counties included in the table above.

³Discharge rates are calculated by dividing the number of discharges by the total population.

⁴The number of hospitalizations reported in the table are those in which the patient survived the hospital stay to discharge.





Section 5: Illness and Injury
Intentional Injuries - Injuries Purposely Inflicted by Other Persons Table

Injuries Purposely Inflicted by Other Persons in Children Ages 0-19 Years (ICD-9 Codes E960-969) Number and Hospital Discharge Rate per 100,000, 1998-2003												
	1998		1999		2000		2001		2002		2003	
	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate
Southside												
Chesapeake	12	20	9	14	8	13	9	14	4	6	12	19
Franklin City	0	0	0	0	0	0	0	0	0	0	0	0
Isle of Wight	2	25	0	0	0	0	2	24	0	0	2	24
Norfolk	43	67	13	20	24	36	21	31	13	19	28	40
Portsmouth	14	48	12	42	16	55	11	38	16	55	6	21
Suffolk	4	22	2	10	5	26	2	10	3	14	6	28
Virginia Beach	15	11	11	8	8	6	14	11	6	5	22	17
Peninsula												
Gloucester	0	0	0	0	2	20	0	0	0	0	0	0
Hampton	9	23	6	16	10	24	5	12	8	20	8	20
James City County	1	9	4	34	0	0	0	0	1	8	2	16
Newport News	6	11	6	11	9	16	13	23	13	23	9	16
Poquoson	0	0	0	0	0	0	0	0	0	0	0	0
Williamsburg	0	0	0	0	0	0	0	0	0	0	0	0
York County	1	6	2	11	0	0	0	0	2	11	1	5
Eastern Shore												
Accomack	0	0	2	24	1	10	2	19	2	19	0	0
Northampton	1	29	0	0	2	60	3	90	1	31	0	0
Totals												
Urban Hampton Roads	103	26	59	15	80	20	75	19	63	15	91	22
Region	108	23	67	14	85	18	82	17	69	14	96	20
Virginia	305	17	243	12	257	13	295	15	254	13	317	16

Observation:

The State has a lower rate of hospitalizations due to injuries purposely inflicted by other people than the Region or Urban Hampton Roads. The State had a 29% decrease in its rate in 1999, which remained stable until a 23% increase occurred in 2003. The Region had a similar pattern; experiencing a 39% decrease in rate in 1999 and remaining stable until a 43% increase occurred in 2003.

Source:

Virginia Health Information, Statewide Patient-level Hospital Data, 1998-2003

Footnotes:

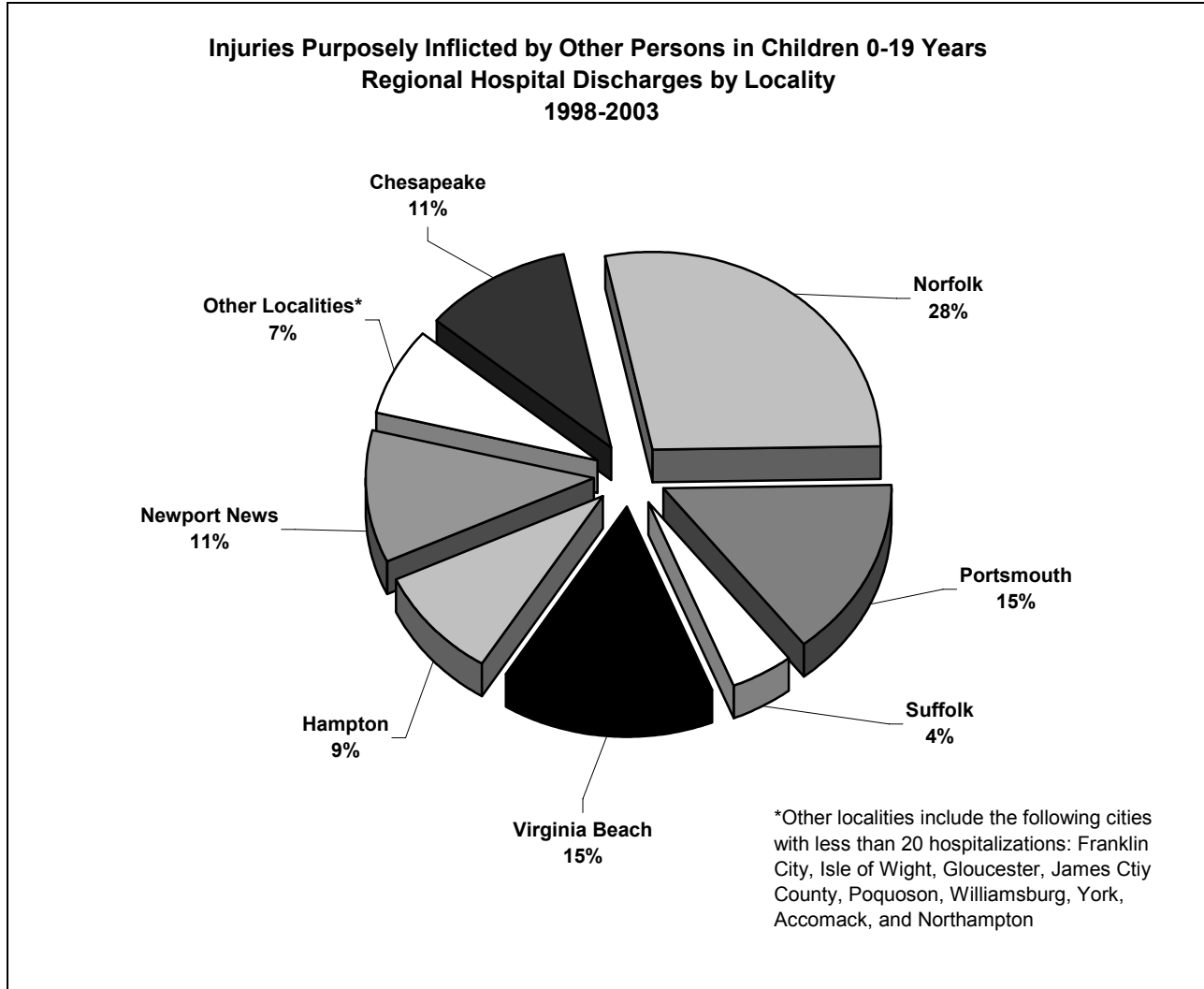
¹Urban Hampton Roads is defined as the area encompassing the following cities: Chesapeake, Norfolk, Portsmouth, Suffolk, Virginia Beach, Hampton, Newport News.

²Region is defined as the area encompassing all cities and counties included in the table above.

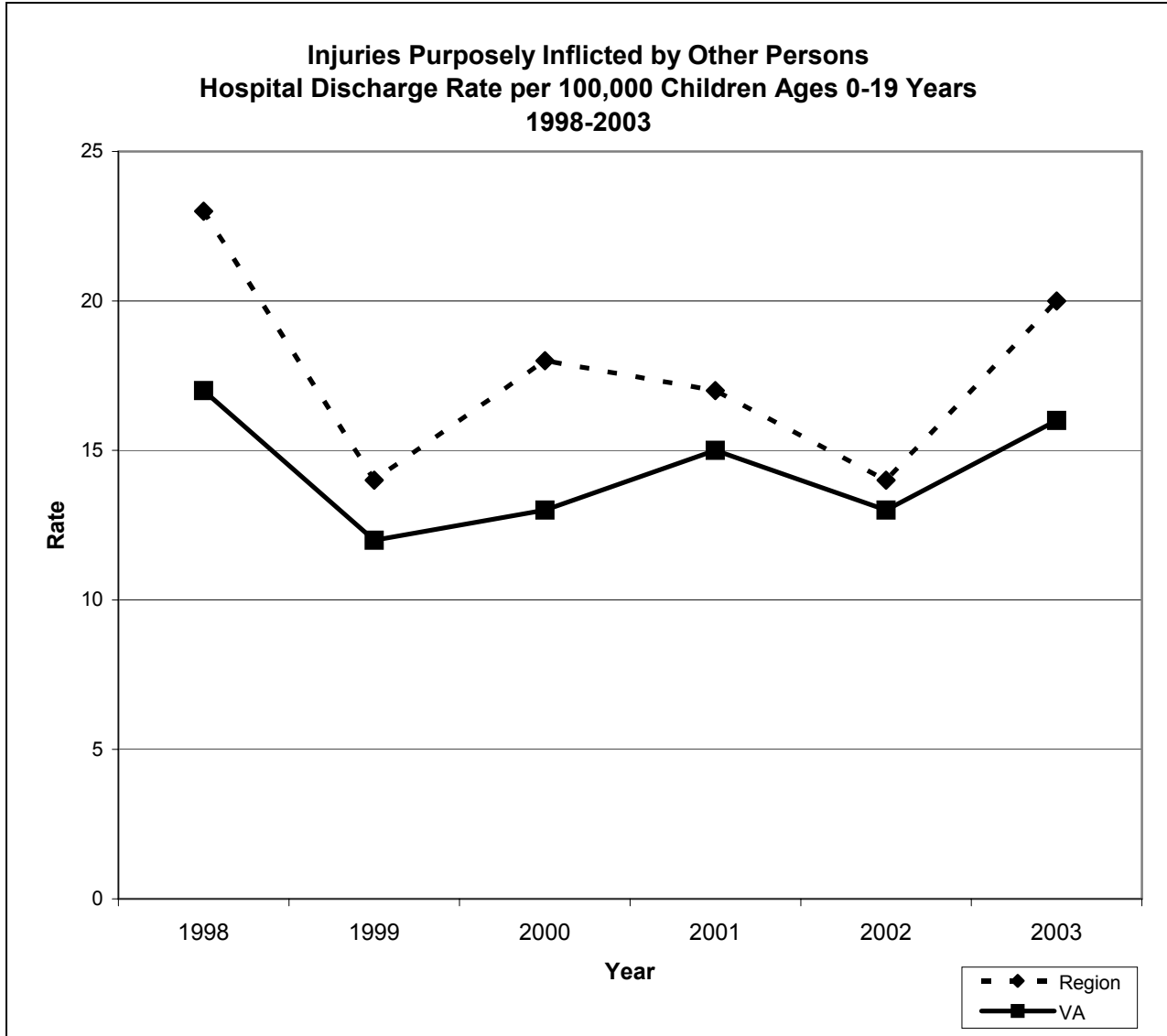
³Discharge rates are calculated by dividing the number of discharges by the total population.

⁴The number of hospitalizations reported in the table are those in which the patient survived the hospital stay to discharge.

Section 5: Illness and Injury
Intentional Injuries - Injuries Purposely Inflicted by Other Persons Chart



Section 5: Illness and Injury
Intentional Injuries - Injuries Purposely Inflicted by Other Persons Graph



Section 5: Illness and Injury
Mortality Due to Intentional Injuries Table

Mortality Due to Intentional Injuries in Children Ages 0-19 Years Number and Percent of All Intentional Injury Deaths Virginia 1998-2003												
	1998		1999		2000		2001		2002		2003	
	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%
Suicide	58	44.3	52	40.0	51	42.9	42	35.3	39	36.8	46	34.6
Homicide¹	73	55.7	78	60.0	67	56.3	76	63.9	67	63.2	87	65.4
Total number of intentional injury deaths²	131		130		119		119		106		133	

Observation:

There has been a 33% overall decrease in suicides among children 0-19 years from 1998-2002. But, in 2003, the State saw an 18% increase from 2002. The number of homicides has fluctuated during this time period. However, homicides account for the majority of intentional injury deaths each year from 1998-2003.

Source:

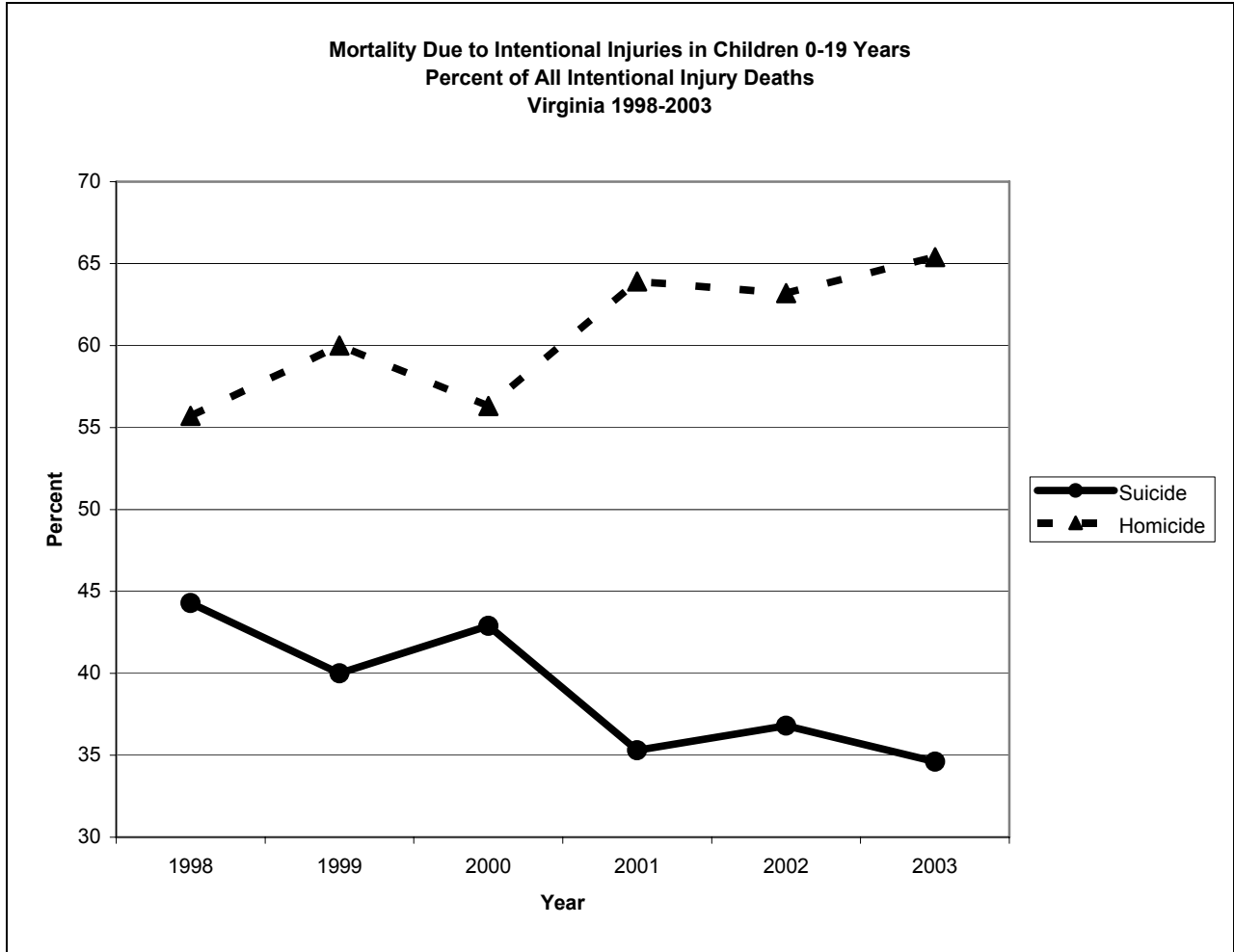
Virginia Health Statistics, Virginia Department of Health, Center for Health Statistics, 1998-2003.

Footnotes:

¹ The Center for Health Statistics included deaths due to legal intervention in the homicide category in 1998 and did not separate those two causes of intentional injury death. In 1999-2003, deaths from homicide due to assault and deaths due to legal intervention were reported separately. The homicide numbers presented in the above table from 1999-2003 are for homicides due to assault only and does not include legal intervention mortality.

² The total number of intentional injury deaths from 1998-2003 includes those deaths caused by legal intervention.

Section 5: Illness and Injury
Mortality Due to Intentional Injuries Graph



Mental Health

(Self-Inflicted Intentional Injury reported in Section 5: Illness and Injury)

Commentary on Mental Health

This Report provides an invaluable community resource. Many individuals in leadership positions in both public and private agencies will find this report useful in terms of providing the types of data needed to make informed policy decisions in addressing mental health issues and areas of need. Researchers and project managers will find these data crucial in terms of providing the necessary background for successful grant funding requests in attempts to provide more information on the mental health needs of children in our community, as well as increased treatment services. Academicians will undoubtedly find these data useful in teaching undergraduate and graduate students about the mental health needs specific to the Hampton Roads area.

Hospitalization data provided in this report indicate that the statewide and regional number of hospitalizations for children and adolescents for the period from 1998 to 2003 has been reasonably consistent and level at a rate that varies 500 to 650 per 100,000 children. Further, interesting differences may be noted in the rate of hospitalization between Hampton Roads communities. The report also provides more specific information concerning the treatment of child and adolescent mood disorders, development disorders, and disorders related to ADHD. Hospitalizations related to mood disorders appear to occur at a slightly lower rate for the region in comparison with overall state statistics, and has generally occurred within a range of 280 to 390 per 100,000 children (ages 0-19). Developmental disorders appear to account for a substantially lower rate of hospitalizations in both the region and Commonwealth, and generally reflect a hospitalization rate of 70 to 75 per 100,000 for the period from 1999 to the present. Data presented for the rate of hospitalization and discharges for children and adolescents for the diagnosis of ADHD find rates in the Urban Hampton Roads and Eastern Virginia Region roughly comparable to those found statewide for the same time period.

The mental health needs of children and adolescents in the region should be a priority that cuts across political affiliations, professional disciplines, and distinctions between public and private agencies. The type of data provided in this report serves as an invaluable index in gaining a fuller understanding of where service needs currently exist, and where these needs may be headed in the future. It would be expected that effective prevention and treatment programs should be able to affect outcomes such as those reflected in the current hospitalization admission and discharge data. It will be important to continue to monitor these types of data across time, as well as to analyze within region differences, in order to better understand and identify children's mental health needs for our community.

Robert P. Archer, Ph.D.

Frank Harrell Redwood Distinguished Professor
Department of Psychiatry and Behavioral Sciences
Eastern Virginia Medical School

Section 6: Mental Health
All Mental Health Conditions Table

All Mental Health Conditions in Children Ages 0 - 19 Years Number and Hospital Discharge Rate per 100,000, 1998 - 2003												
	1998		1999		2000		2001		2002		2003	
	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate
Southside												
Chesapeake	350	570	300	481	316	506	315	499	343	541	337	528
Franklin City	21	868	19	822	21	907	20	874	15	665	18	796
Isle of Wight	42	518	42	513	31	380	38	464	41	494	53	628
Norfolk	495	772	408	640	472	704	447	667	501	732	478	681
Portsmouth	249	861	190	663	242	835	217	756	230	796	189	652
Suffolk	119	643	93	486	102	532	117	584	127	611	123	570
Virginia Beach	747	567	487	368	658	514	633	490	725	559	722	551
Peninsula												
Gloucester	54	529	50	483	35	353	58	583	57	575	56	563
Hampton	253	659	203	529	190	465	196	484	202	500	202	495
James City County	90	790	84	718	84	695	91	744	74	595	80	623
Newport News	374	696	338	625	266	482	250	451	292	522	277	486
Poquoson	15	440	6	173	10	296	13	395	7	218	10	319
Williamsburg	5	152	2	60	4	126	2	65	1	33	1	33
York County	52	293	38	212	53	300	66	364	54	295	48	264
Eastern Shore												
Accomack	84	1,019	86	1,052	58	565	68	663	51	495	55	539
Northampton	37	1,083	25	729	28	833	20	603	23	708	16	466
Totals												
Urban Hampton Roads	2,587	652	2,019	506	2,246	559	2,175	538	2,420	594	2,328	563
Region	2,987	642	2,371	507	2,570	544	2,551	537	2,743	573	2,665	550
Virginia	12,019	654	11,374	581	11,657	602	12,389	631	12,563	634	12,626	630

Observation:

Each year from 1998 to 2003, the Region has had a lower rate of hospital discharges due to mental health conditions than the State. The Region has comprised at least 20% of the State's mental health hospital discharges during this time period.

Source:

Virginia Health Information, Statewide Patient-level Hospital Data, 1998-2003

Footnotes:

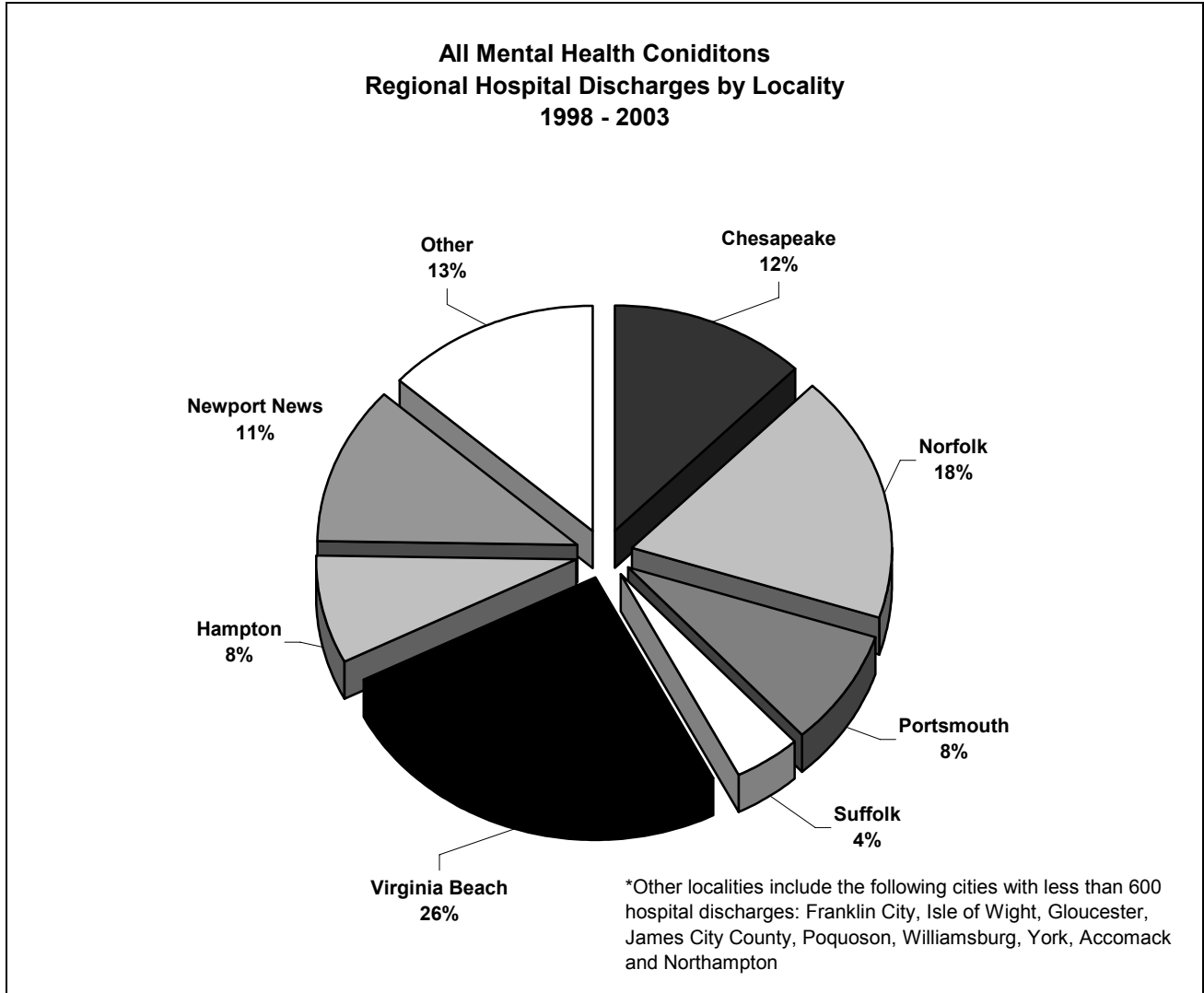
¹Urban Hampton Roads is defined as the area encompassing the following cities: Chesapeake, Norfolk, Portsmouth, Suffolk, Virginia Beach, Hampton, Newport News.

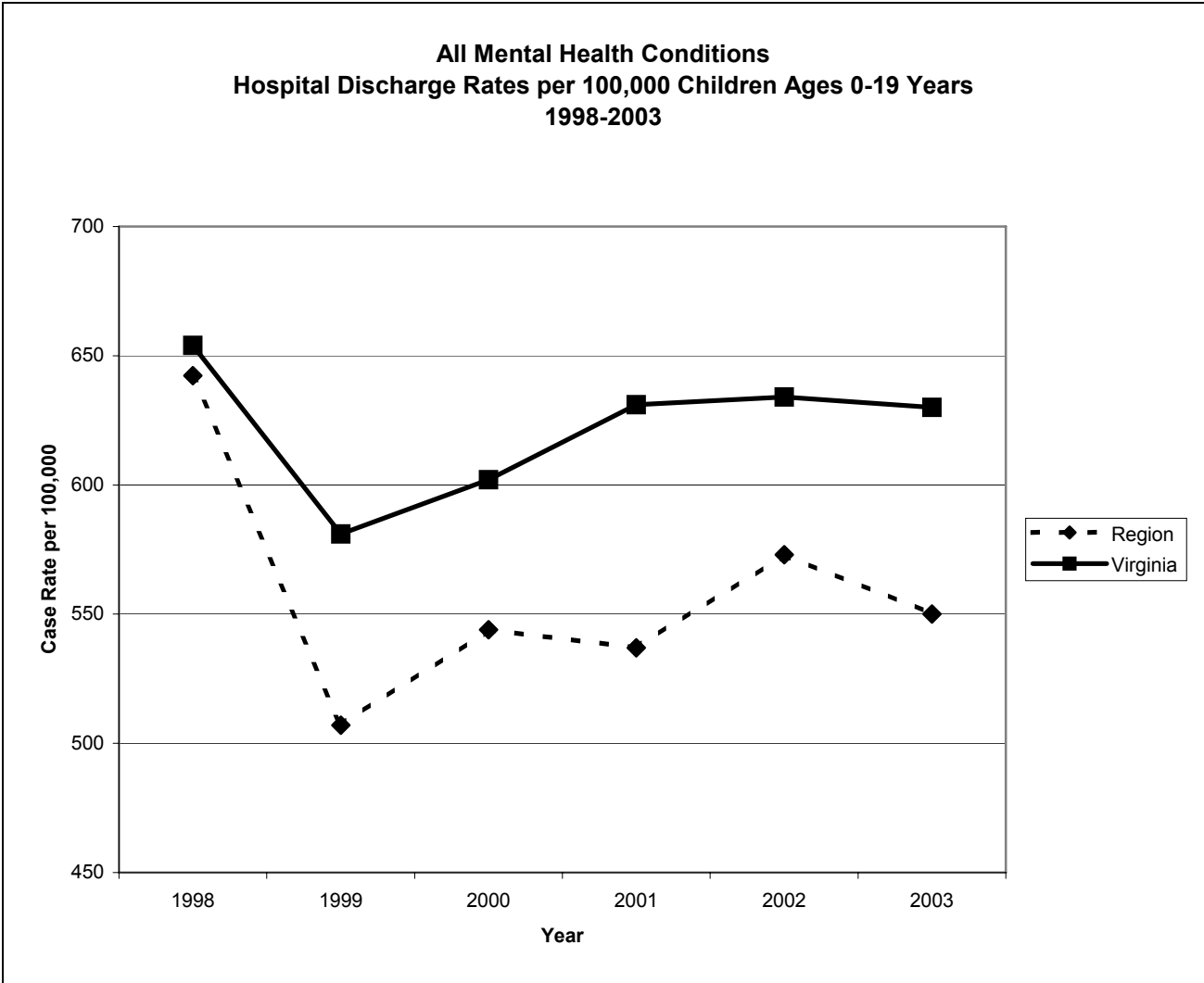
²Region is defined as the area encompassing all cities and counties included in the table above.

³Discharge rates are calculated by dividing the number of discharges by the total population.

⁴The number of hospitalizations reported in the table are those in which the patient survived the hospital stay to discharge.

⁵The ICD-9 codes used to select the hospitalizations are 290.00 – 319.00. Observations were selected if these codes appeared in any of the 9 diagnosis fields in the VHI patient-level dataset.





Section 6: Mental Health
Behavior Disorders Table

Behavior Disorders in Children Ages 0 - 19 Years Number and Hospital Discharge Rate per 100,000, 1998 - 2003												
	1998		1999		2000		2001		2002		2003	
	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate
Southside												
Chesapeake	127	207	124	199	137	219	128	203	103	162	111	174
Franklin City	8	331	5	216	5	216	5	218	4	177	6	265
Isle of Wight	14	173	17	208	4	49	17	207	16	193	18	213
Norfolk	196	306	163	256	178	265	177	264	206	301	155	221
Portsmouth	82	284	59	206	76	262	82	286	85	294	84	290
Suffolk	44	238	32	167	34	177	43	215	41	197	48	223
Virginia Beach	327	248	196	148	337	263	302	234	327	252	348	266
Peninsula												
Gloucester	14	137	27	261	17	171	19	191	15	151	16	161
Hampton	79	206	68	177	73	179	60	148	50	124	57	140
James City County	22	193	29	248	31	256	37	303	22	177	20	156
Newport News	128	238	147	272	85	154	93	168	93	166	86	151
Poquoson	6	176	2	58	3	89	4	122	1	31	4	128
Williamsburg	1	30	0	0	1	32	0	0	0	0	1	33
York County	19	107	13	73	9	51	28	155	13	71	13	71
Eastern Shore												
Accomack	36	437	40	489	31	302	37	360	18	175	26	255
Northampton	22	644	9	262	12	357	7	211	14	431	7	204
Totals												
Urban Hampton Roads	983	248	789	198	920	229	885	219	905	222	889	215
Region	1,125	242	931	199	1,033	219	1,039	219	1,008	211	1,000	206
Virginia	3,251	177	3,335	170	3,259	168	3,483	177	3,282	166	3,235	161

Observation:

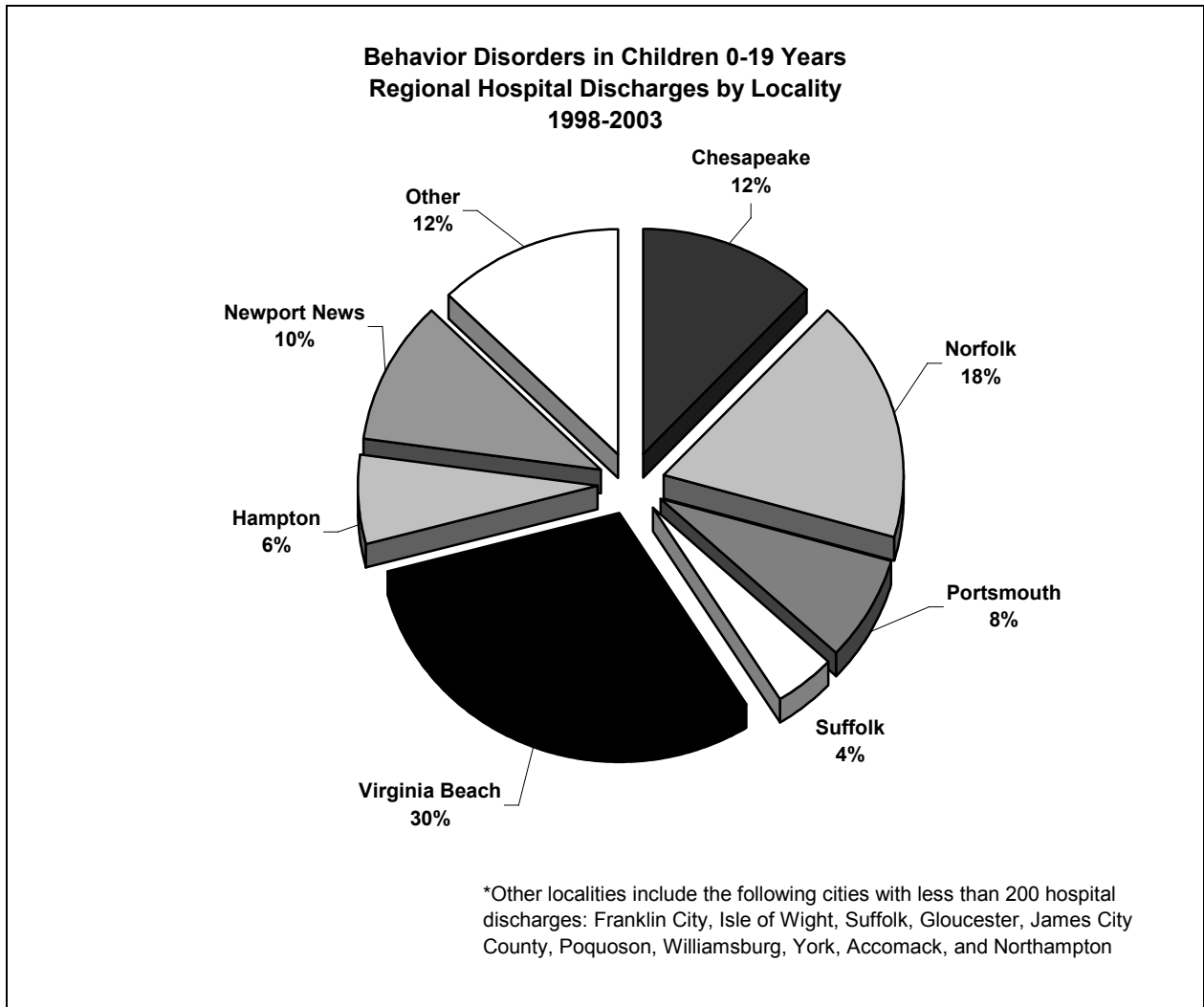
From 1998 to 2003, the Regional rates of hospitalization with a behavioral disorder discharge diagnosis were on average 22% higher than the State rates. The Regional rate per 100,000 dropped 15% from 242 in 1998 to 206 in 2003.

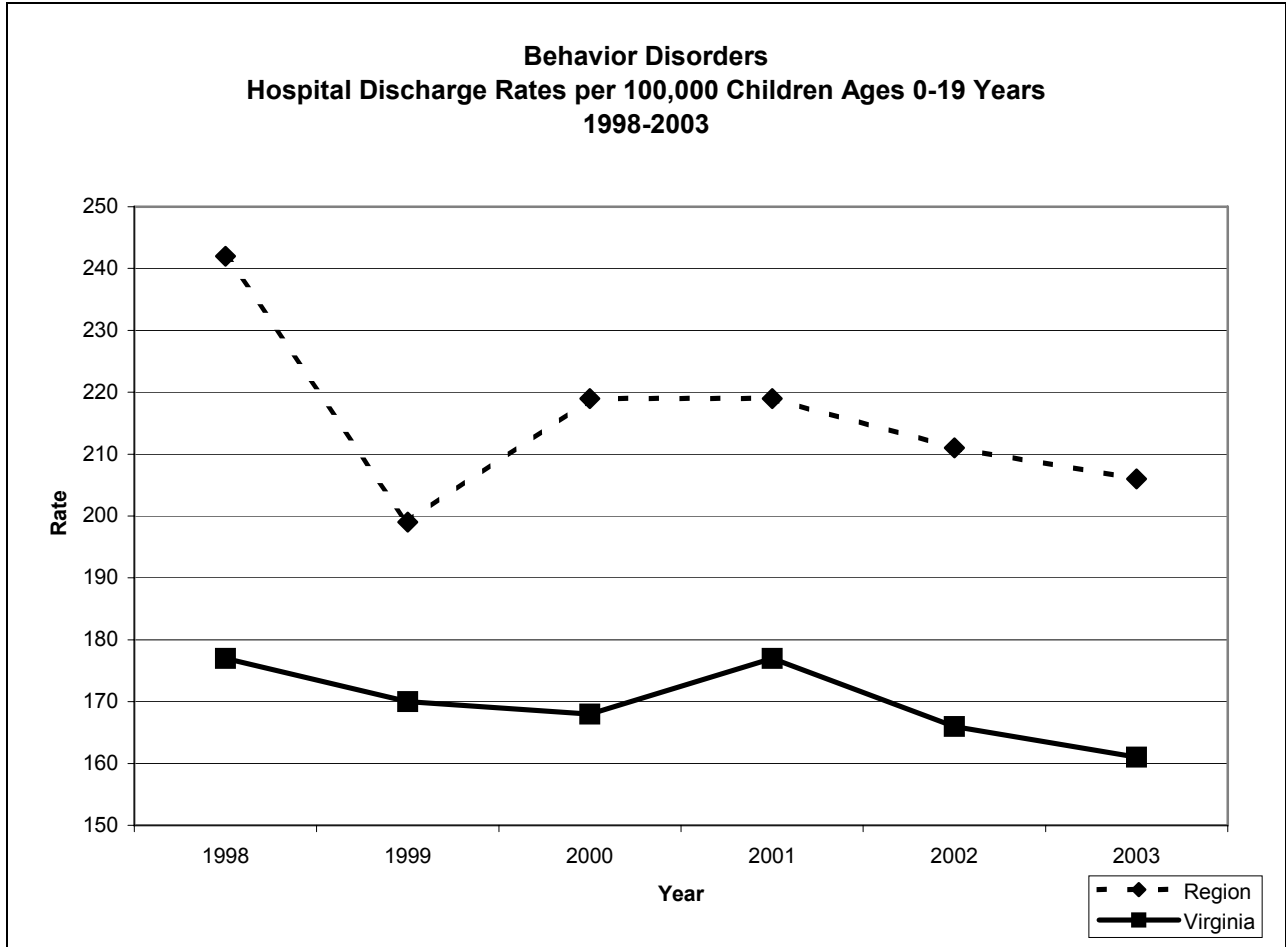
Source:

Virginia Health Information, Statewide Patient-level Hospital Data, 1998-2003

Footnotes:

- ¹Urban Hampton Roads is defined as the area encompassing the following cities: Chesapeake, Norfolk, Portsmouth, Suffolk, Virginia Beach, Hampton, Newport News.
- ²Region is defined as the area encompassing all cities and counties included in the table above.
- ³Discharge rates are calculated by dividing the number of discharges by the total population.
- ⁴The number of hospitalizations reported in the table are those in which the patient survived the hospital stay to discharge.
- ⁵The ICD-9 codes used to select the hospitalizations are 312, 312.30-312.34, 312.39, 313.81, and 314.00-314.90. Observations were selected if these codes appeared in any of the 9 diagnosis fields in the VHI patient-level dataset.





Section 6: Mental Health
Developmental Disorders Table

Developmental Disorders in Children Ages 0 - 19 Years Number and Hospital Discharge Rate per 100,000, 1998 - 2003													
	1998		1999		2000		2001		2002		2003		
	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate	
Southside													
Chesapeake	56	91	49	79	40	64	48	76	40	63	38	60	
Franklin City	1	41	5	216	3	130	6	262	4	177	4	177	
Isle of Wight	3	37	2	24	2	25	5	61	4	48	5	59	
Norfolk	116	181	94	148	125	186	94	140	113	165	116	165	
Portsmouth	46	159	30	105	36	124	32	112	41	142	27	93	
Suffolk	14	76	9	47	12	63	13	65	15	72	12	56	
Virginia Beach	101	77	69	52	65	51	60	46	62	48	73	56	
Peninsula													
Gloucester	7	69	7	68	5	50	9	91	8	81	4	40	
Hampton	29	76	16	42	19	46	19	47	17	42	19	47	
James City County	8	70	6	51	4	33	5	41	14	113	8	62	
Newport News	49	91	53	98	32	58	22	40	30	54	33	58	
Poquoson	1	29	0	0	1	30	4	122	0	0	2	64	
Williamsburg	0	0	0	0	0	0	0	0	0	0	0	0	
York County	4	23	2	11	1	6	5	28	6	33	4	22	
Eastern Shore													
Accomack	5	61	8	98	5	49	9	88	3	29	7	69	
Northampton	8	234	0	0	4	119	7	211	2	62	0	0	
Totals													
Urban Hampton Roads	411	104	320	80	329	82	288	71	318	78	318	77	
Region	448	96	350	75	354	75	338	71	359	75	352	73	
Virginia	1,410	77	1,374	70	1,349	70	1,448	74	1,385	70	1,378	69	

Observation:

In 1998, the Regional rate of developmental disorder related hospital discharges was 20% higher than the State rate. Over the next 5 years, there was a 24% drop at the Regional level, making it comparable to the rate of the State.

Source:

Virginia Health Information, Statewide Patient-level Hospital Data, 1998-2003

Footnotes:

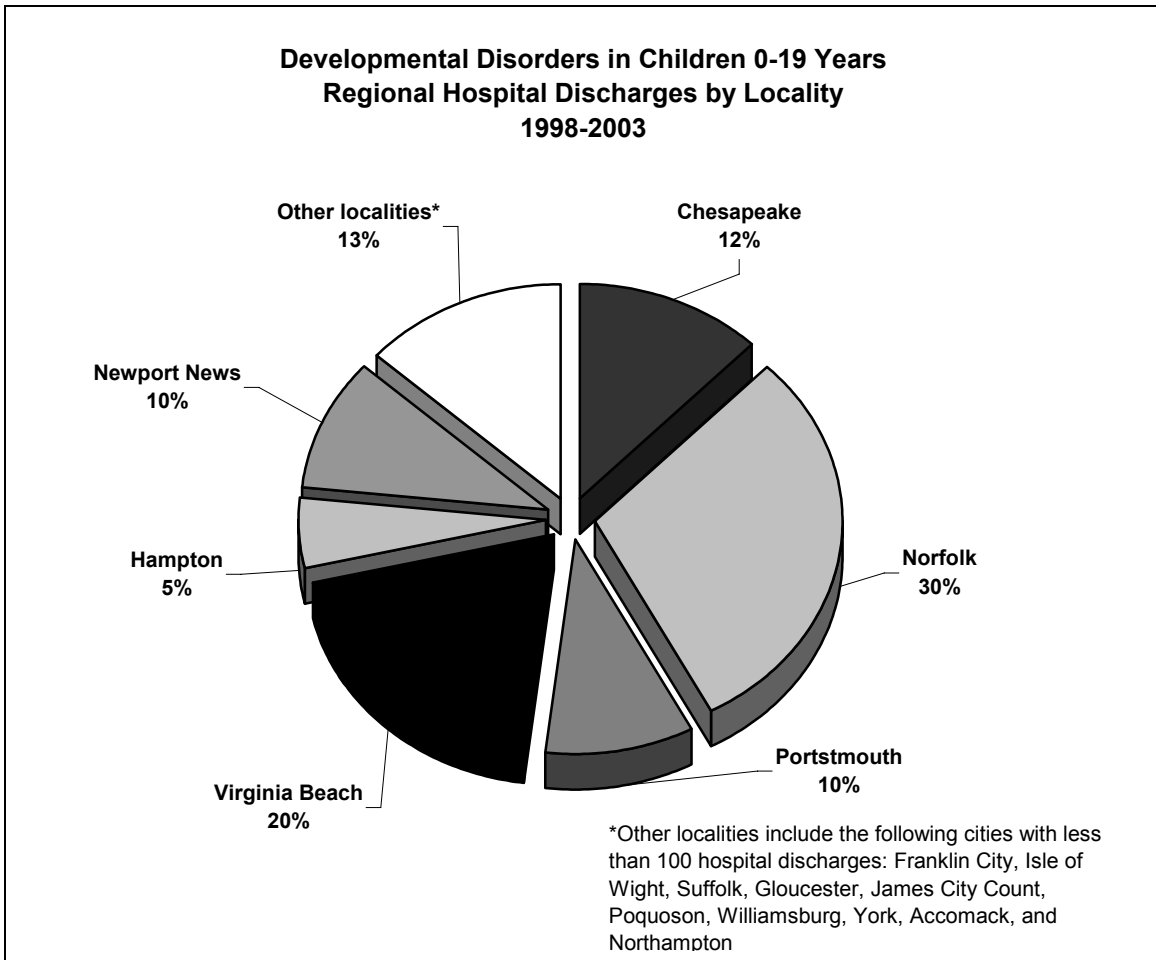
¹Urban Hampton Roads is defined as the area encompassing the following cities: Chesapeake, Norfolk, Portsmouth, Suffolk, Virginia Beach, Hampton, Newport News.

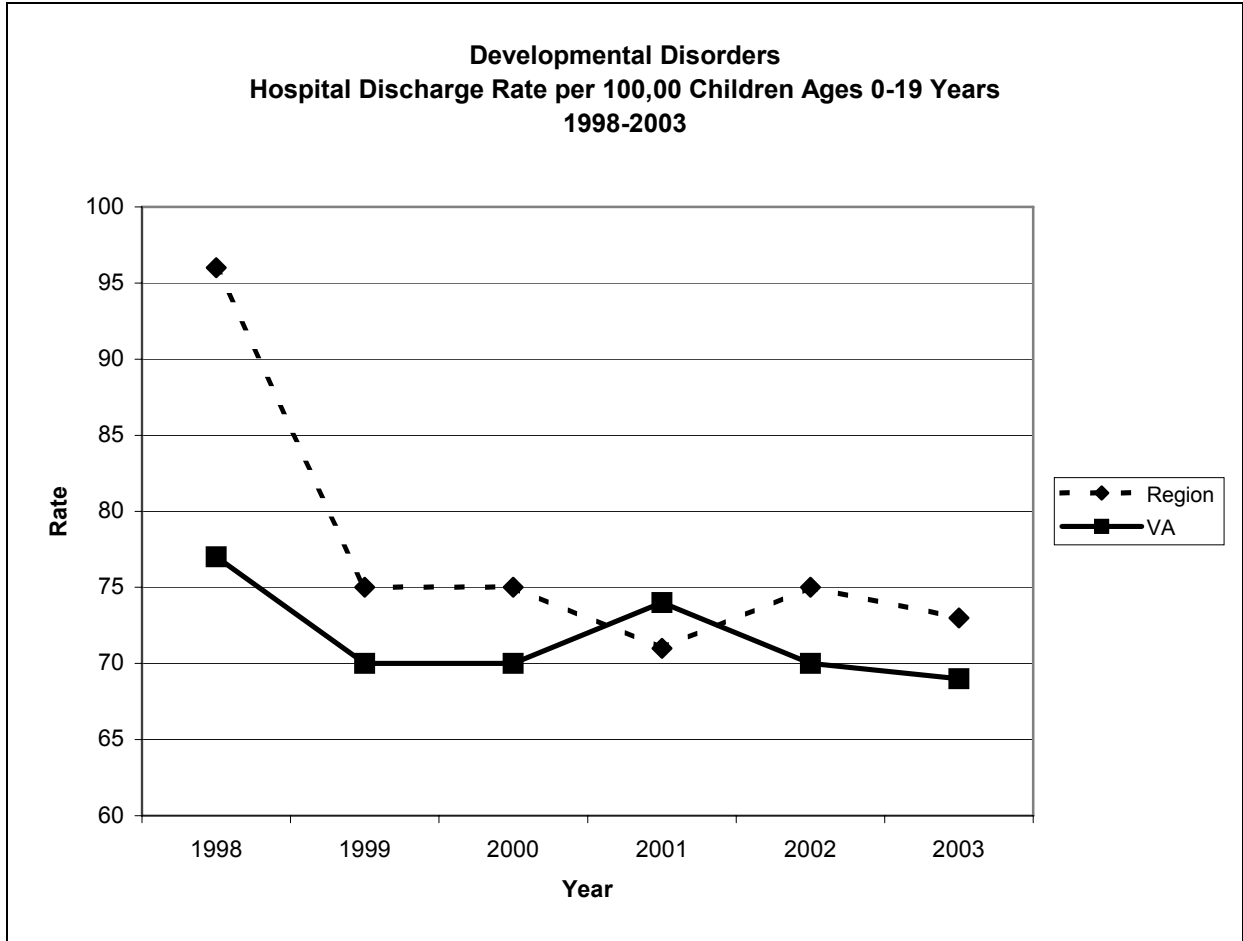
²Region is defined as the area encompassing all cities and counties included in the table above.

³ Discharge rates are calculated by dividing the number of discharges by the total population.

⁴The number of hospitalizations reported in the table are those in which the patient survived the hospital stay to discharge.

⁵The ICD-9 codes used to select the hospitalizations are 299.00, 307.0, 307.9, 315.00-315.9, 317, 318.0-318.2, 319, V62.89, and V62.3. Observations were selected if these codes appeared in any of the 9 diagnosis fields in the VHI patient-level dataset.





Section 6: Mental Health
Mood Disorders Table

Mood Disorders in Children Ages 0 - 19 Years Number and Hospital Discharge Rate per 100,000, 1998 - 2003													
	1998		1999		2000		2001		2002		2003		
	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate	
Southside													
Chesapeake	204	332	174	279	191	306	181	287	218	344	218	342	
Franklin City	16	661	6	260	9	389	7	306	8	355	9	398	
Isle of Wight	20	247	30	366	20	245	23	281	30	361	34	403	
Norfolk	258	402	199	312	219	327	243	363	279	408	222	316	
Portsmouth	150	519	113	394	127	438	125	436	132	457	121	417	
Suffolk	72	389	54	282	59	308	66	330	75	361	73	339	
Virginia Beach	462	351	267	202	425	332	431	334	503	388	495	378	
Peninsula													
Gloucester	34	333	37	357	17	171	30	302	44	444	37	372	
Hampton	161	419	128	333	136	333	136	336	136	336	124	304	
James City County	57	500	46	393	51	422	61	499	39	314	52	405	
Newport News	256	477	186	344	179	324	166	300	210	375	179	314	
Poquoson	11	323	3	87	9	267	6	182	6	187	2	64	
Williamsburg	4	122	1	30	2	63	0	0	1	33	0	0	
York County	35	197	26	145	39	221	52	287	35	191	33	181	
Eastern Shore													
Accomack	61	740	46	563	37	360	48	468	37	359	36	353	
Northampton	24	702	11	321	12	357	11	332	16	492	9	262	
Totals													
Urban Hampton Roads	1,563	394	1,121	281	1,336	332	1,348	334	1,553	381	1,432	346	
Region	1,825	392	1,327	284	1,532	324	1,586	334	1,769	370	1,644	339	
Virginia	7,444	405	6,892	352	7,218	373	7,728	394	8,174	412	8,080	403	

Observation:

From 1998 to 2003, the Region had a lower rate of hospitalizations with a mood disorder discharge diagnosis when compared to the State. During this time, the Region accounted for approximately 20% of the entire state's hospitalizations due to mood disorders.

Source:

Virginia Health Information, Statewide Patient-level Hospital Data, 1998-2003

Footnotes:

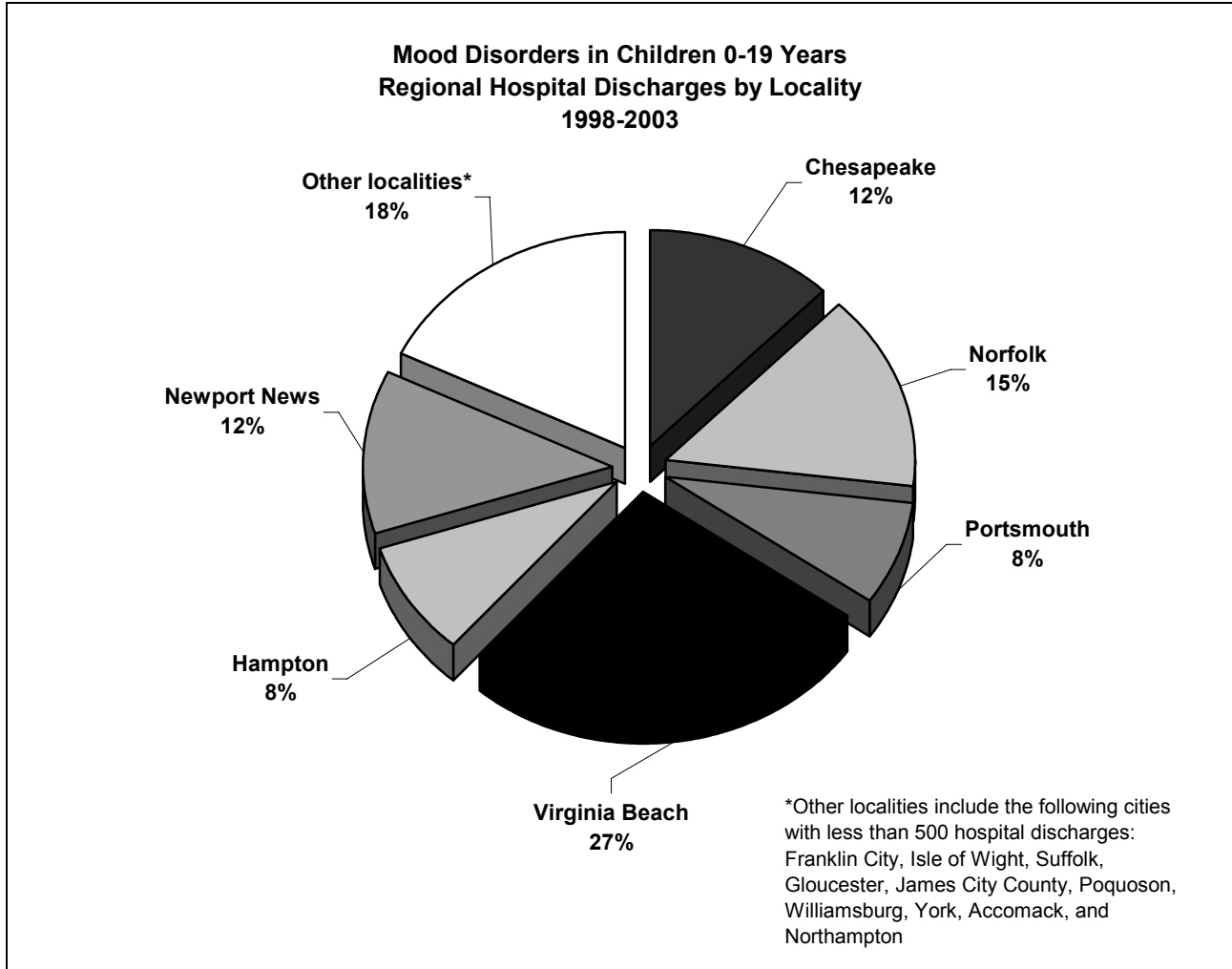
¹Urban Hampton Roads is defined as the area encompassing the following cities: Chesapeake, Norfolk, Portsmouth, Suffolk, Virginia Beach, Hampton, Newport News.

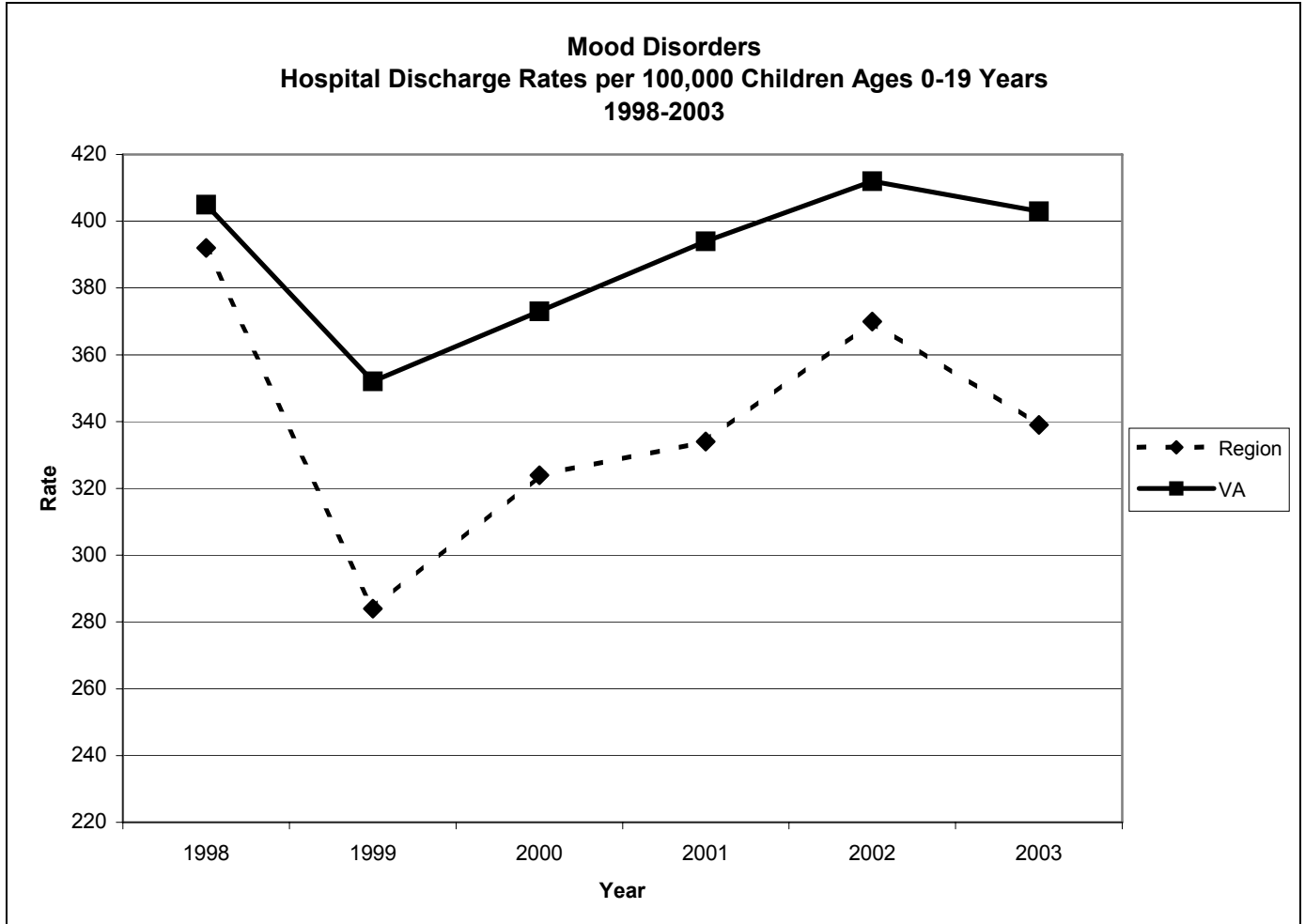
²Region is defined as the area encompassing all cities and counties included in the table above.

³Discharge rates are calculated by dividing the number of discharges by the total population.

⁴The numbers of hospitalizations reported in the table are those in which the patient survived the hospital stay to discharge.

⁵The ICD-9 codes used to select the discharges due to mood disorder include 293.83, 296.00-296.99, 300.4, 301.13, and 311. Observations were selected if these codes appeared in any of the 9 diagnosis fields in the VHI patient-level dataset.





Section 6: Mental Health
ADHD Hospital Discharge Table

ADHD in Children Ages 0 - 19 Years Number and Hospital Discharge Rate per 100,000, 1998 - 2003													
	1998		1999		2000		2001		2002		2003		
	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate	
Southside													
Chesapeake	94	153	85	136	95	151	104	163	74	117	70	110	
Franklin City	7	289	4	173	3	131	3	133	4	177	3	133	
Isle of Wight	13	160	9	110	4	49	14	166	13	157	12	142	
Norfolk	137	214	114	179	119	178	121	172	132	193	88	125	
Portsmouth	62	214	42	147	52	181	56	193	57	197	57	197	
Suffolk	33	178	19	99	23	115	32	148	31	149	31	144	
Virginia Beach	223	169	144	109	260	201	210	160	261	201	294	224	
Peninsula													
Gloucester	13	127	26	251	12	121	14	141	12	121	13	131	
Hampton	55	143	44	115	44	109	38	93	34	84	38	93	
James City County	19	167	18	154	11	90	24	187	20	161	14	109	
Newport News	99	184	107	198	55	99	62	109	56	100	55	97	
Poquoson	4	117	0	0	3	91	3	96	1	31	4	128	
Williamsburg	1	30	0	0	1	33	0	0	0	0	1	33	
York County	14	79	7	39	4	22	16	88	10	55	12	66	
Eastern Shore													
Accomack	23	279	19	232	21	205	30	294	10	97	17	167	
Northampton	17	498	4	117	9	271	4	116	10	308	5	146	
Totals													
Urban Hampton Roads	703	177	555	139	648	160	623	151	645	158	633	153	
Region	814	175	642	137	716	151	731	151	725	151	714	147	
Virginia	2,265	123	2,323	119	2,328	119	2,539	127	2,457	124	2,429	121	

Observation:

Each year from 1998 to 2003, the Region has a higher rate of hospital discharges due to Attention Deficit Hyperactivity Disorder than the State. The Region comprised at least 30% of the State's ADHD hospital discharges during this time period. The State discharge rate has remained fairly stable, while the Region experienced a 22% decrease in rate from 1998 to 1999, and then a 10% increase the following year.

Source:

Virginia Health Information, Statewide Patient-level Hospital Data, 1998-2003

Footnotes:

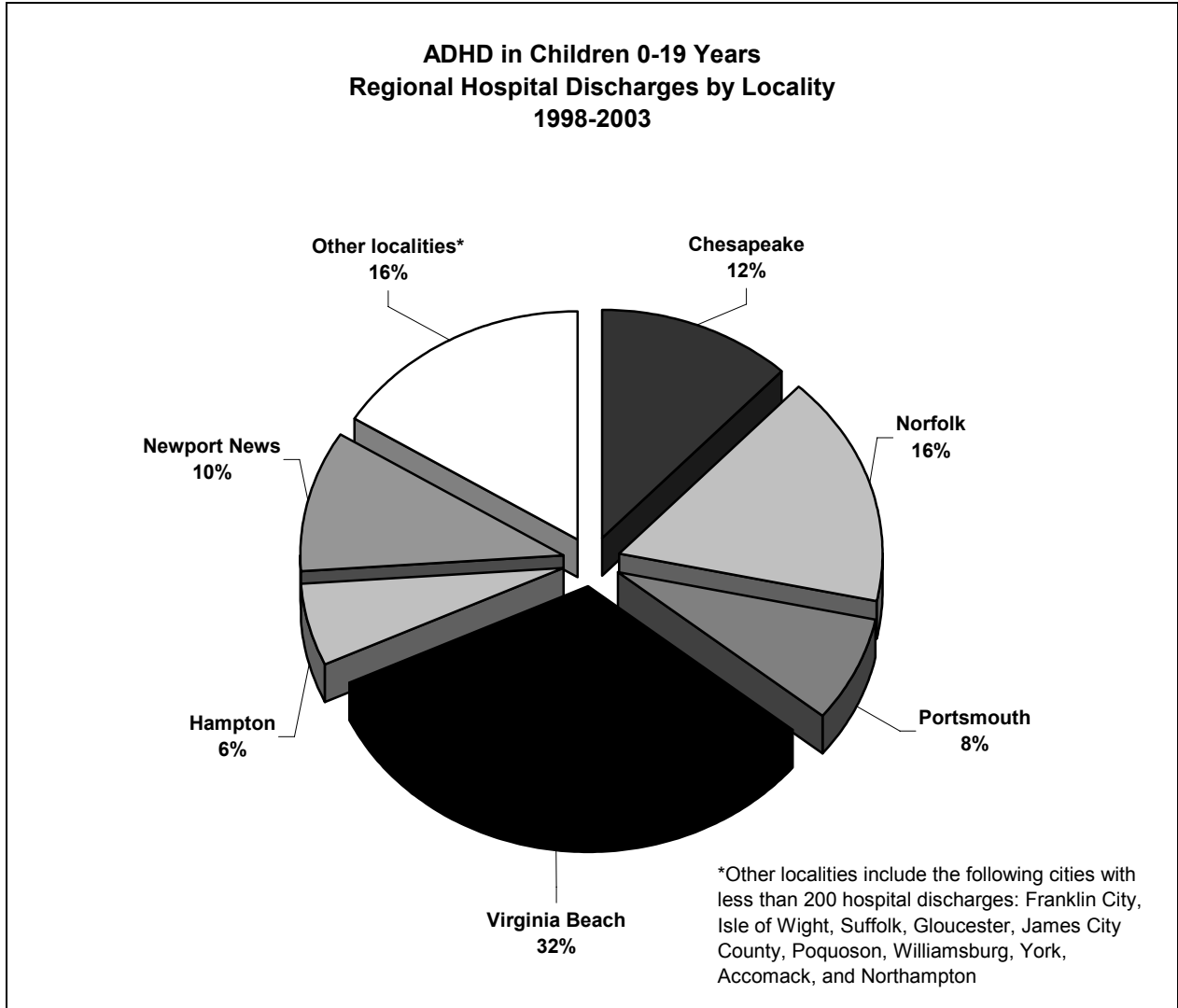
¹Urban Hampton Roads is defined as the area encompassing the following cities: Chesapeake, Norfolk, Portsmouth, Suffolk, Virginia Beach, Hampton, Newport News.

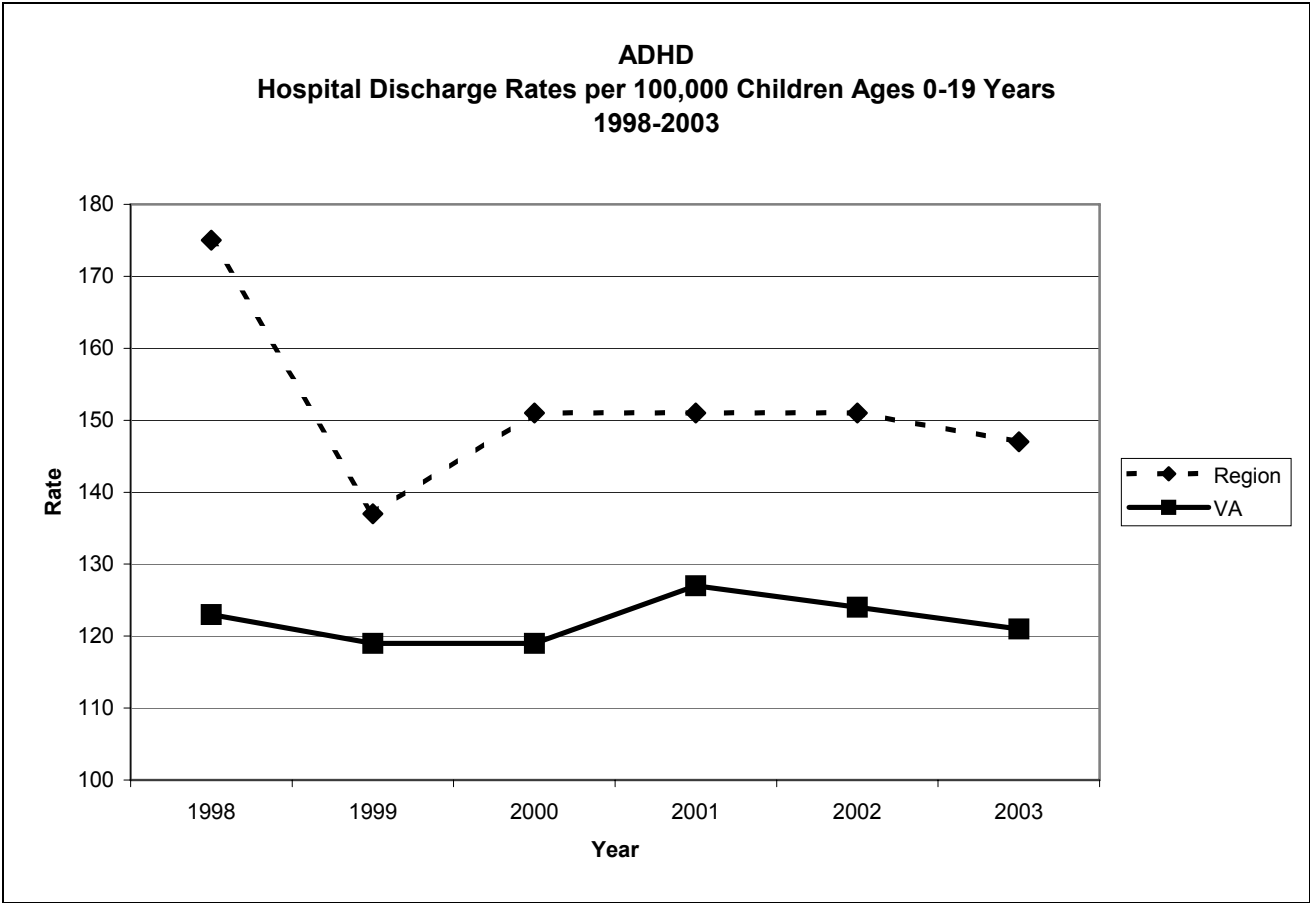
²Region is defined as the area encompassing all cities and counties included in the table above.

³ Discharge rates are calculated by dividing the number of discharges by the total population.

⁴The number of hospitalizations reported in the table are those in which the patient survived the hospital stay to discharge.

⁵The ICD-9 codes used to select the hospitalizations are 314.00 – 314.9. Observations were selected if these codes appeared in any of the 9 diagnosis fields in the VHI patient-level dataset.





Section 6: Mental Health
ADHD as Primary Diagnosis Table

ADHD as Primary Diagnosis for Hospitalization in Children Ages 0-19, Number and Hospital Discharge Rate per 100,000, 1998 - 2003												
	1998		1999		2000		2001		2002		2003	
	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate
Southside												
Chesapeake	8	13	12	19	10	16	13	20	5	8	1	2
Franklin City	1	41	2	87	1	44	0	0	0	0	0	0
Isle of Wight	2	25	1	12	0	0	0	0	1	12	1	12
Norfolk	20	31	17	27	9	13	15	21	17	25	11	16
Portsmouth	7	24	4	14	1	3	3	10	1	3	1	3
Suffolk	6	32	0	0	1	5	1	5	1	5	3	14
Virginia Beach	41	31	31	23	40	31	27	21	41	32	26	20
Peninsula												
Gloucester	0	0	0	0	1	10	1	10	1	10	1	10
Hampton	5	13	0	0	5	12	2	5	1	2	3	7
James City County	2	18	0	0	2	16	1	8	1	8	0	0
Newport News	11	20	1	2	4	7	5	9	6	11	3	5
Poquoson	0	0	0	0	0	0	0	0	0	0	1	32
Williamsburg	0	0	0	0	0	0	0	0	0	0	0	0
York County	1	6	0	0	0	0	0	0	0	0	2	11
Eastern Shore												
Accomack	5	61	3	37	1	10	1	10	2	19	0	0
Northampton	1	29	0	0	3	90	0	0	2	62	0	0
Totals												
Urban Hampton Roads	98	25	65	16	70	17	66	16	72	18	48	12
Region	110	24	71	15	78	16	69	14	79	17	53	11
Virginia	345	19	251	13	281	14	265	13	294	15	262	13

Observation:

Each year from 1998 to 2003, the Region and State had comparable rates of hospital discharges where ADHD was the primary cause. The Region and State followed the same pattern during this time period, where the rate decreased and then increased again each year.

Source:

Virginia Health Information, Statewide Patient-level Hospital Data, 1998-2003

Footnotes:

¹Urban Hampton Roads is defined as the area encompassing the following cities: Chesapeake, Norfolk, Portsmouth, Suffolk, Virginia Beach, Hampton, Newport News.

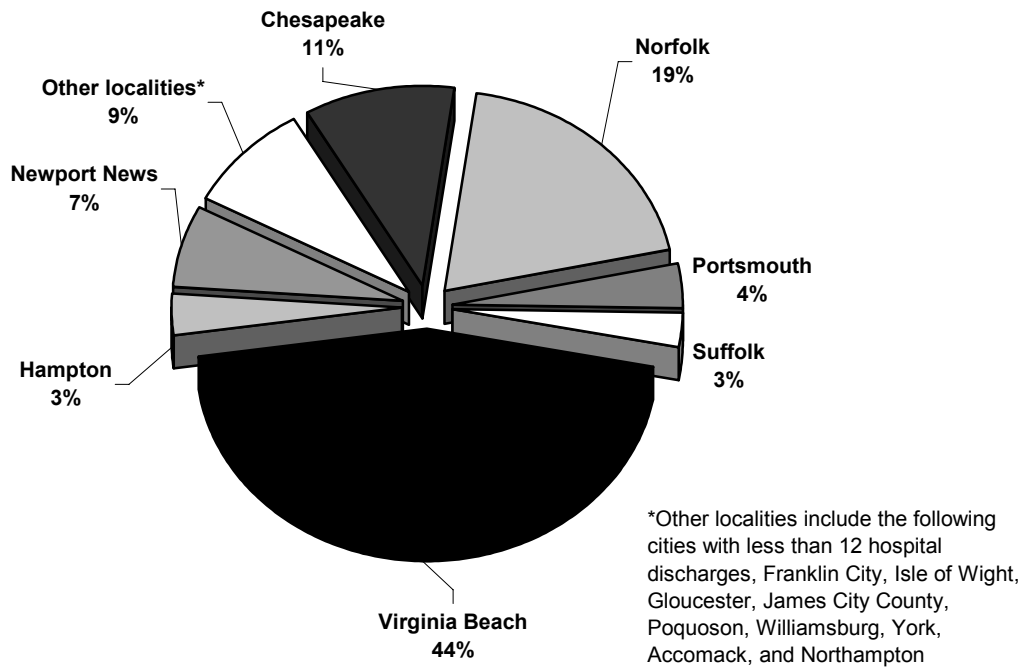
²Region is defined as the area encompassing all cities and counties included in the table above.

³Discharge rates are calculated by dividing the number of discharges by the total population.

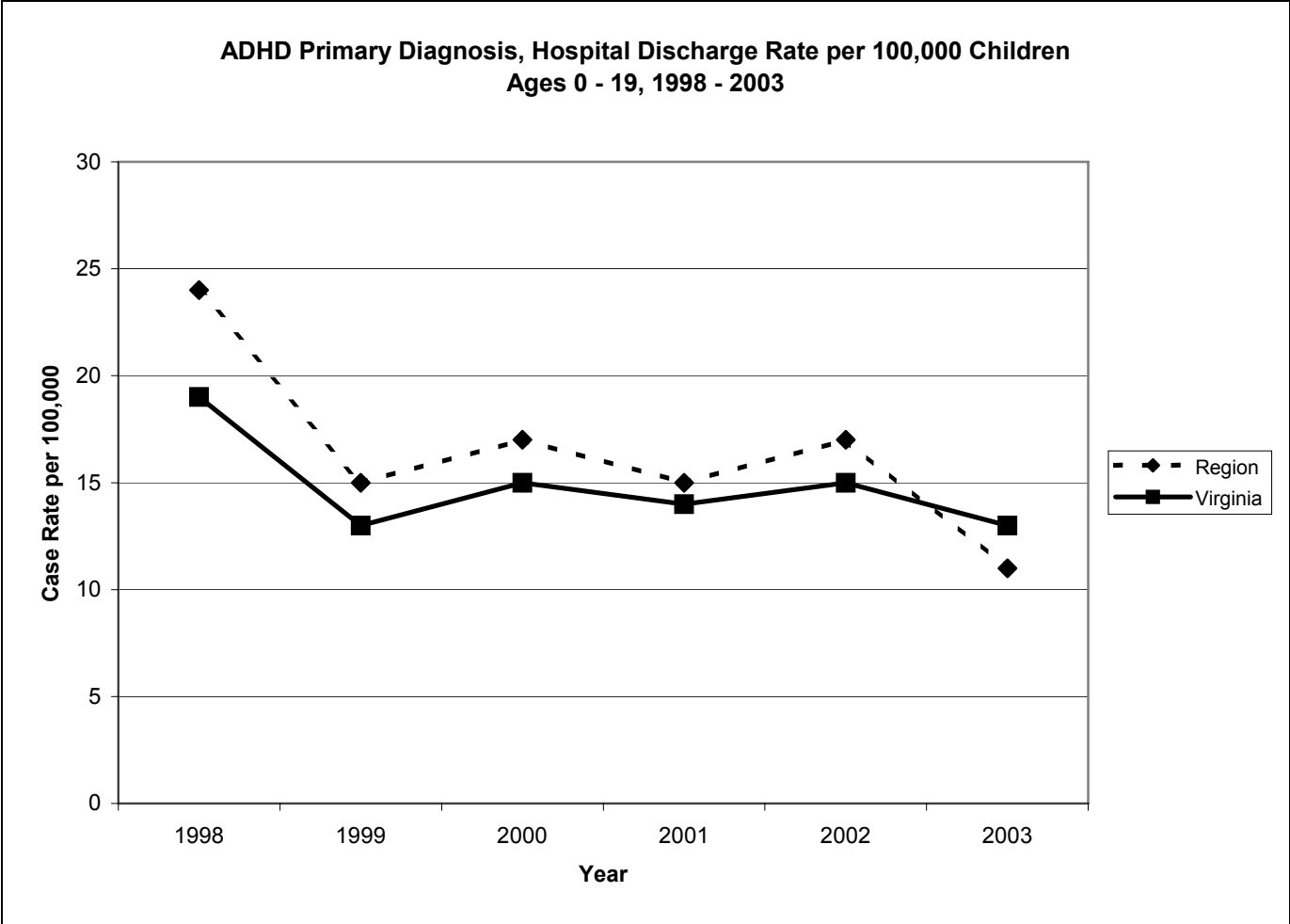
⁴The number of hospitalizations reported in the table are those in which the patient survived the hospital stay to discharge.

⁵The ICD-9 codes used to select the ADHD hospitalizations are 314.00 – 314.9. Observations were selected if these codes appeared in the first diagnosis field in the VHI patient-level dataset.

**ADHD as Primary Diagnosis for Hospitalization in Children 0-19 Years
Regional Hospital Discharges by Locality
1998 - 2003**



Section 6: Mental Health
ADHD as Primary Diagnosis Graph



Section 6: Mental Health
Psychotic Disorders Table

Psychotic Disorders in Children Ages 0 - 19 Years Number and Hospital Discharge Rate per 100,000, 1998 - 2003												
	1998		1999		2000		2001		2002		2003	
	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate
Southside												
Chesapeake	36	59	20	32	18	29	22	35	25	39	29	45
Franklin City	3	124	4	173	5	216	1	44	2	89	2	88
Isle of Wight	3	37	1	12	2	25	2	24	0	0	2	24
Norfolk	43	67	37	58	77	115	44	66	45	66	85	121
Portsmouth	24	83	18	63	21	72	28	98	18	62	15	52
Suffolk	8	43	11	58	9	47	18	90	8	38	10	46
Virginia Beach	57	43	45	34	54	42	55	43	73	56	53	40
Peninsula												
Gloucester	2	20	3	29	2	20	3	30	2	20	3	30
Hampton	22	57	23	60	13	32	21	52	10	25	16	39
James City County	8	70	7	60	4	33	8	65	4	32	1	8
Newport News	25	47	40	74	17	31	19	34	19	34	9	16
Poquoson	0	0	0	0	0	0	1	30	0	0	0	0
Williamsburg	0	0	0	0	1	32	0	0	0	0	0	0
York County	4	23	5	28	1	6	2	11	3	16	4	22
Eastern Shore												
Accomack	3	36	3	37	2	19	4	39	2	19	3	29
Northampton	3	88	1	29	1	30	3	90	4	123	2	58
Totals												
Urban Hampton Roads	215	54	194	49	209	52	207	51	198	49	217	53
Region	241	52	218	47	227	48	231	49	215	45	234	48
Virginia	847	46	878	45	864	45	936	48	856	43	854	43

Observation:

From 1998 to 2003, the Region had a slightly higher rate of hospitalizations with a psychotic discharge diagnosis when compared to the State. In the state during this time, one-quarter of all hospitalizations with a psychotic discharge diagnosis happened in our Region.

Source:

Virginia Health Information, Statewide Patient-level Hospital Data, 1998-2003

Footnotes:

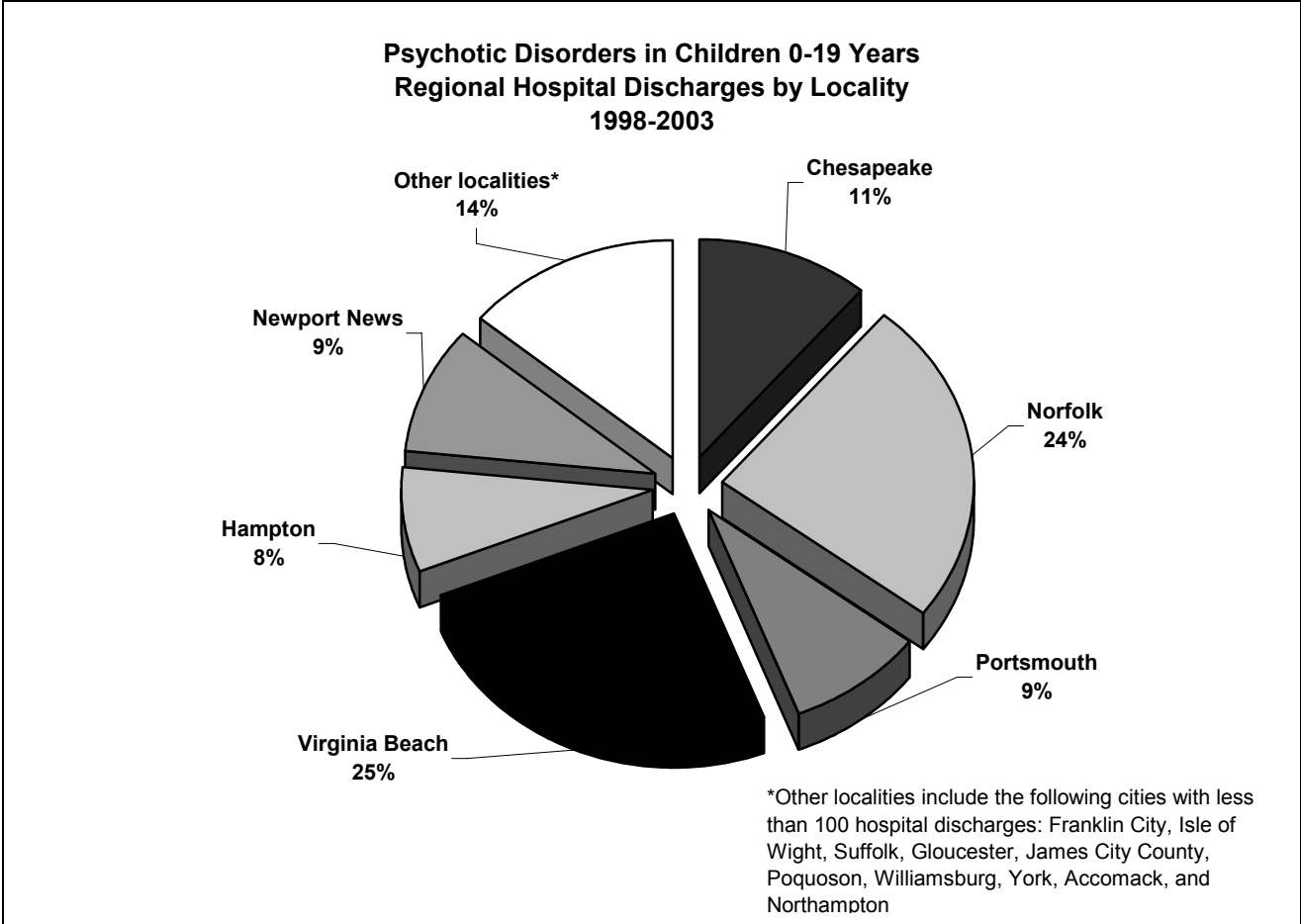
¹Urban Hampton Roads is defined as the area encompassing the following cities: Chesapeake, Norfolk, Portsmouth, Suffolk, Virginia Beach, Hampton, Newport News.

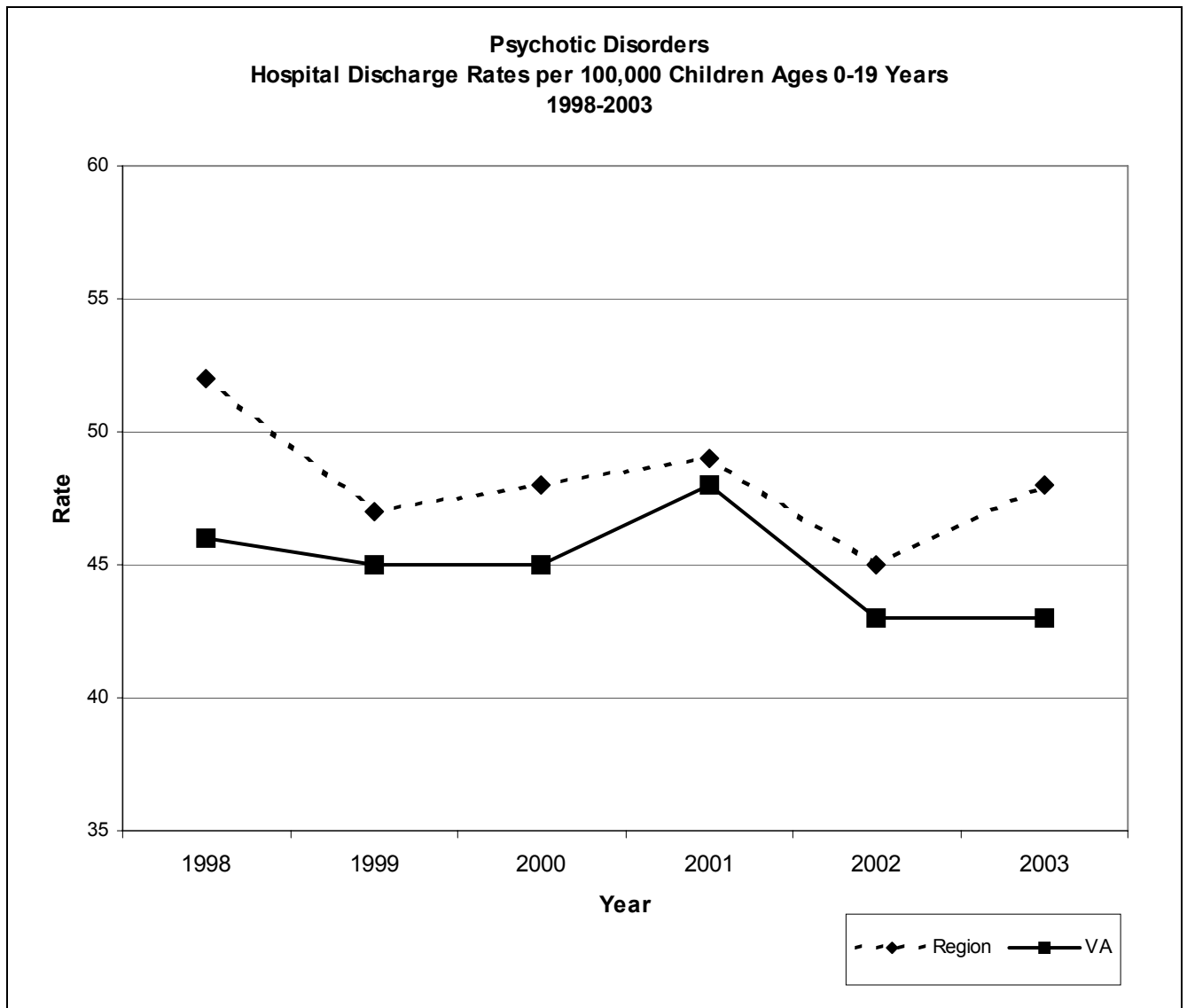
²Region is defined as the area encompassing all cities and counties included in the table above.

³ Discharge rates are calculated by dividing the number of discharges by the total population.

⁴The number of hospitalizations reported in the table are those in which the patient survived the hospital stay to discharge.

⁵The ICD-9 codes used to select the hospitalizations are 293.81, 293.82, 295.00-295.90, 297.1, 297.3, 298.8, 298.9. Observations were selected if these codes appeared in any of the 9 diagnosis fields in the VHI patient-level dataset.





Section 6: Mental Health
Substance Abuse Table

Substance Abuse in Children Ages 0 – 19 Years Number and Hospital Discharge Rate per 100,000, 1998 - 2003													
	1998		1999		2000		2001		2002		2003		
	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate	
Southside													
Chesapeake	93	151	75	120	77	123	74	117	102	161	90	141	
Franklin City	5	207	2	87	3	130	6	262	4	177	8	354	
Isle of Wight	11	136	5	61	5	61	11	134	10	120	15	178	
Norfolk	104	162	86	135	88	131	101	151	113	165	114	162	
Portsmouth	61	211	48	167	71	245	59	206	58	201	39	135	
Suffolk	28	151	21	110	31	162	34	170	30	144	45	209	
Virginia Beach	185	140	129	97	155	121	155	120	168	130	183	140	
Peninsula													
Gloucester	14	137	6	58	7	71	15	151	14	141	10	100	
Hampton	48	125	39	102	35	86	35	86	48	119	37	91	
James City County	16	140	18	154	21	174	23	188	21	169	19	148	
Newport News	67	125	57	105	32	58	48	87	69	123	65	114	
Poquoson	2	59	3	87	2	59	2	61	2	62	2	64	
Williamsburg	1	30	1	30	3	95	2	65	0	0	0	0	
York County	14	79	4	22	12	68	21	116	11	60	8	44	
Eastern Shore													
Accomack	28	340	35	428	21	204	13	127	18	175	12	118	
Northampton	3	88	14	408	4	119	1	30	2	62	2	58	
Totals													
Urban Hampton Roads	586	148	455	114	489	122	506	125	588	144	573	139	
Region	680	146	543	116	567	120	600	126	670	140	649	134	
Virginia	2,441	133	2,481	127	2,769	143	3,136	160	3,126	158	3,062	153	

Observation:

In 1998, the Region had a higher rate of substance abuse hospital discharges when compared with the State. Over the next four year, this Regional rate dropped below that of the State. Though there was slight fluctuations over the 6 year period, there was an 8% decrease at the Regional level from 1998 to 2003, while the State experienced a 15% increase.

Source:

Virginia Health Information, Statewide Patient-level Hospital Data, 1998-2003

Footnotes:

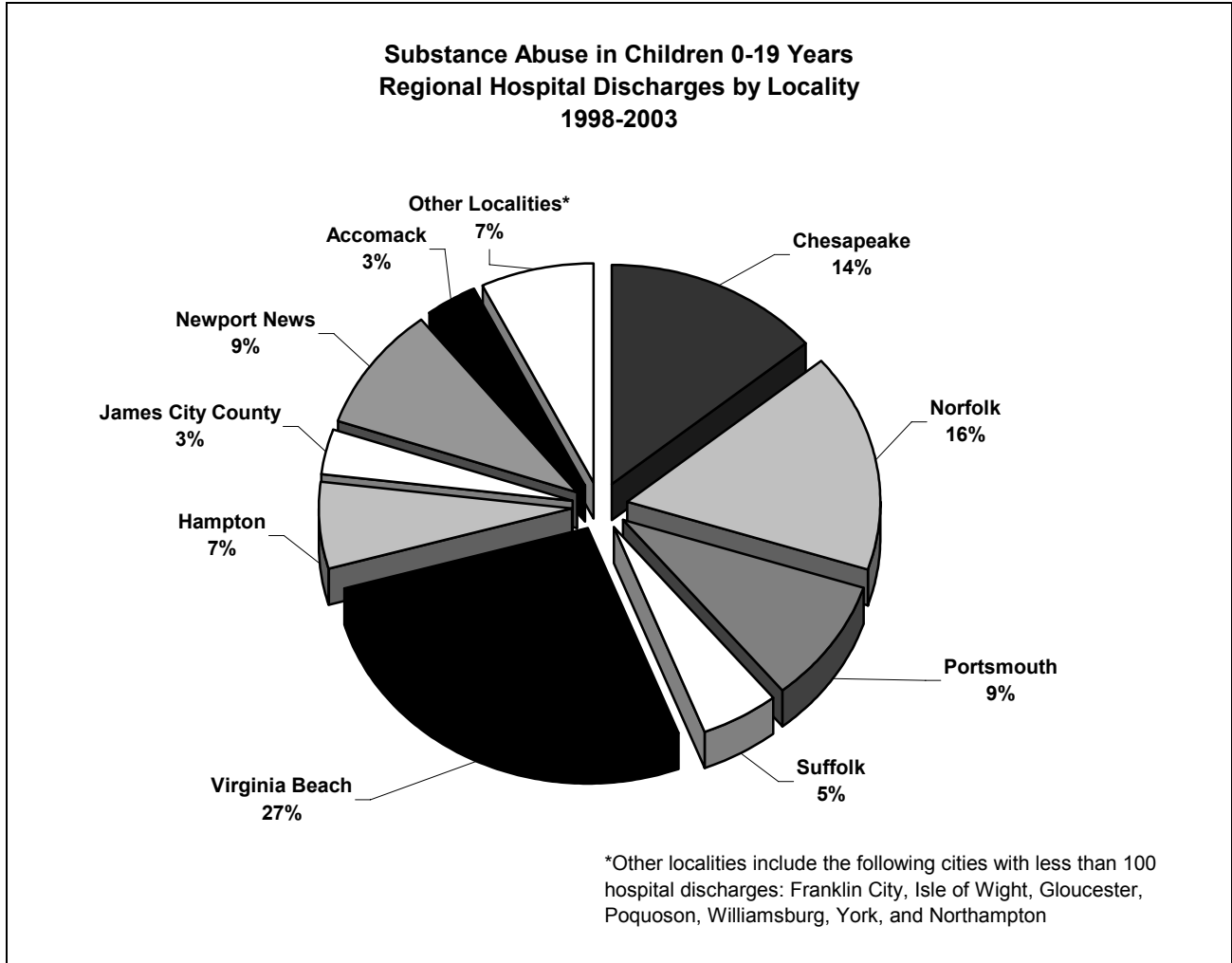
¹Urban Hampton Roads is defined as the area encompassing the following cities: Chesapeake, Norfolk, Portsmouth, Suffolk, Virginia Beach, Hampton, Newport News.

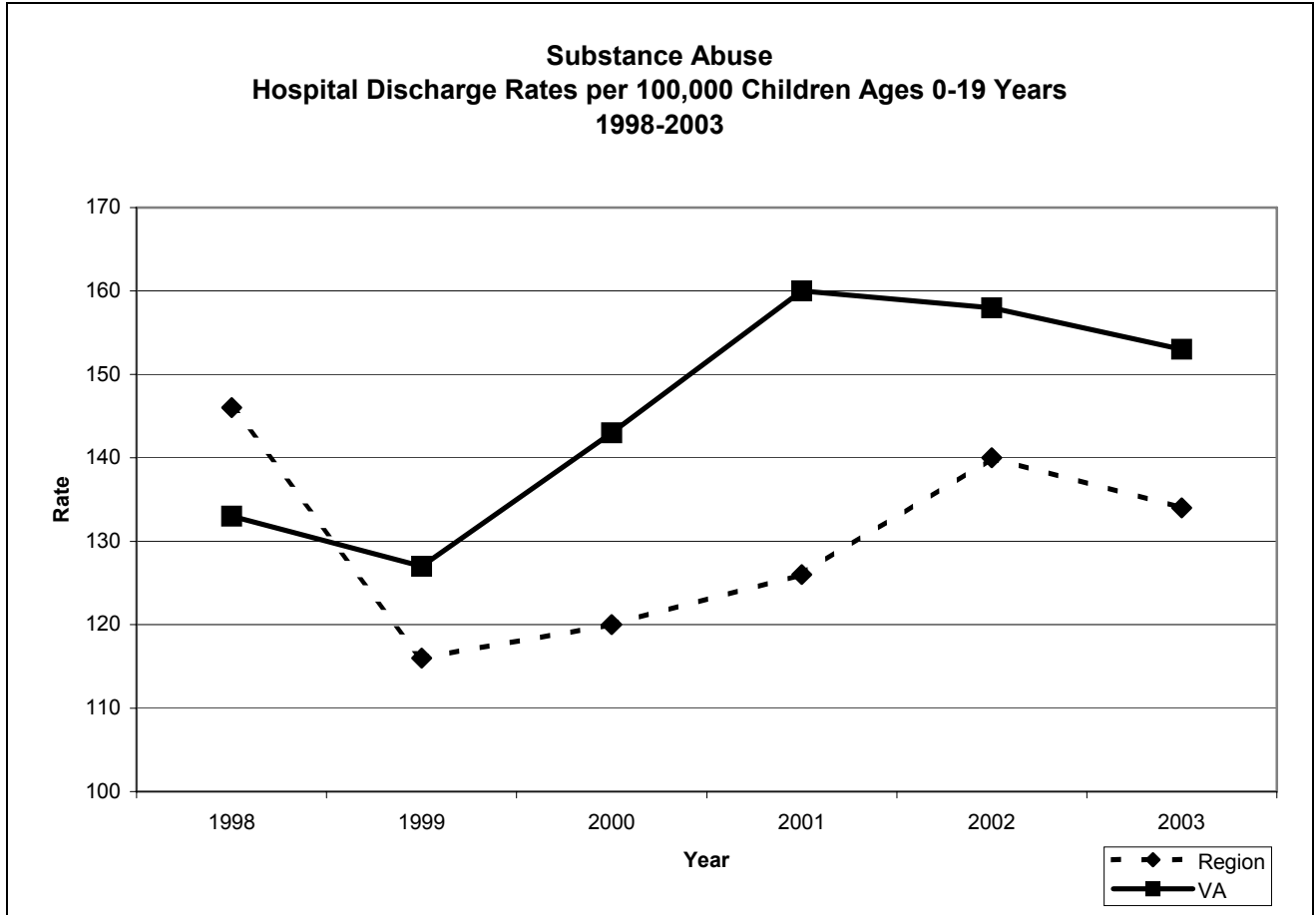
²Region is defined as the area encompassing all cities and counties included in the table above.

³ Discharge rates are calculated by dividing the number of discharges by the total population.

⁴The number of hospitalizations reported in the table are those in which the patient survived the hospital stay to discharge.

⁵The ICD-9 codes used to select the hospitalizations are 291.00-291.9, 292.0-292.9, 303.00, 303.90, 304.00-304.90, 305.00-305.90. Observations were selected if these codes appeared in any of the 9 diagnosis fields in the VHI patient-level dataset.





Goals and Disparities

Commentary on Health Disparities

In reporting on the health of children in Hampton Roads, it is important to acknowledge health disparities that exist in the region. The numerous causes of health disparities in the Hampton Roads area mirror that of the United States. In fact, disparities have been documented in the areas of health care delivery and systems, obesity and disease in Hampton Roads. These disparities are in the forefront of our approach and implementation of interventions and programs to increase the health status of our children. Available data reveal that:

- Black and American Indian children are nearly twice as likely to have low birth weight infants.
- Black children are twice as likely as white children to die within the first year of life.
- Black children are more likely to be overweight than other racial/ethnic groups in Virginia
- Black children are more likely to be hospitalized than white children

Efforts to eliminate health disparities must address issues such as: social and cultural aspects; behaviors, attitudes, beliefs and practices; provider knowledge and attitudes; health care delivery and systems; and structural barriers. The current data book is a valuable asset and tool towards understanding health status among children in Hampton Roads. The multiple source data that was utilized in this report does not allow a uniform break down of information and issues by race. We acknowledge this weakness in the report that must be addressed in future editions and seek to advocate for the availability of this information at the local level for all data sources. The prioritization of the necessity and ability of organizations to compile, analyze and disseminate this type of information in the near future is critical to our region's ability to identify and address health disparities within the broader health issues affecting the general child population.

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References:

Virginia Department of Health, Center for Health Statistics "2002 Minority Health Report" (December 2004)
Virginia Health Statistics Annual Report
CDC Health Disparities in the U.S. Report, 2003

Selected Relevant Healthy People 2010 Goals

Goal	U.S. Baseline	2010 Target
Increase the proportion of pregnant women who receive early and adequate prenatal care. a. beginning in first trimester of pregnancy b. early and adequate prenatal care	83 % of live births 74 % of live births	90 % of live births 90 % of live births
Reduction in low birth weight (LBW)	7.6 % of live births	5.0 % of live births
Increase the proportion of mothers who breastfeed their babies. a. in early postpartum period b. at 6 months c. at 1 year	64 % 29 % 16 %	75 % 50 % 25 %
Immunization coverage for children aged 19 to 35 months with all DTaP, polio, MMR, Hib, and Hep B vaccines	73 %	80 %

Section 7: Goals & Future Directions
Healthy People 2010 Goals

Goal	U.S. Baseline	2010 Target
Reduce maltreatment of children	13.9 cases per 1,000 children under age 18 years	11.1 cases per 1,000 children under age 18 years
Reduce asthma deaths a. children under age 5 b. children aged 5 to 14 c. adolescents and adults aged 15 to 34	6.7 per million 3.2 per million 6.8 per million	1.0 per million 1.0 per million 3.0 per million
Reduce asthma hospitalizations a. children under age 5 b. children and adults aged 15 to 64	60.9 per 10,000 13.8 per 10,000	25 per 10,000 8 per 10,000
Reduce the rate of suicide attempts by adolescents	2.6 % of adolescents in grades 9 through 12	1 % of adolescents in grades 9 through 12
Reduce pregnancies among adolescent females	72 per 1000 females aged 15 to 17	46 per 1000 females aged 15 to 17

Source:

U.S. Department of Health and Human Services. Healthy People 2010 (Conference Edition, in Two volumes). Washington, DC: January 2000.

Footnotes:

The U.S. baseline uses 1995 to 1998 data.