



2007

Annual Report

Serving Virginians

Everywhere. Everyday.

VDH Goals

- Provide strong leadership and operational support for Virginia's public health system.
- Prevent and control the transmission of communicable diseases.
- Collaborate with partners in the health care and human services system to assure access to quality health care and human services.
- Promote systems, policies and practices that facilitate improved health for all Virginians.
- Collect, maintain and disseminate accurate, timely, and understandable public health information.
- Respond in a timely manner to any emergency impacting public health through preparation, collaboration, education and rapid intervention.
- Maintain an effective and efficient system for the investigation of unexplained or suspicious deaths of public interest.
- Assure provision of clean and safe drinking water supplies.
- Assure provision of safe food at restaurants and other places where food is served to the public.
- Prevent and control exposure to toxic substances and radiation.

From the State Health Commissioner Robert B. Stroube, M.D., M.P.H.

Over the past year I visited several local health departments throughout the state and had the opportunity to learn about the public health issues that are important to our constituents. I learned, for example, that many residents welcomed the information we distributed alerting them to measures they can take to safeguard their health against pandemic and seasonal influenza. Others said they were extremely happy to receive information from



VDH alerting them to the recall of certain unsafe foods, such as spinach contaminated with E.coli and peanut butter tainted with salmonella. In addition, parents of school age children mentioned state mandated immunizations, such as the HPV vaccine that reduces the risk of cervical cancer among school age girls, and vaccines that guard against communicable diseases, as being among the issues that increased their understanding of the role of the local health department in protecting their health.

Currently, the risk of a pandemic influenza outbreak in Virginia is low. Nevertheless, VDH regularly updates its Pandemic Influenza Plan, and in October 2006, hosted a statewide pandemic influenza exercise that evaluated the abilities of the public health system, health care providers and state and local governments to coordinate response efforts and share critical information. The lessons we learned will improve Virginia's response capacity in the event of an outbreak.

Perhaps the greatest public health challenge is the chronic disease epidemic facing Virginia. One chronic disease, cardiovascular disease, claims more Virginia lives than the next three causes of death combined. The Division of Chronic Disease Prevention and Control manages six prevention programs that focus on specific chronic diseases. In April 2007, the Division sponsored a conference in Richmond. Called "Health Across the Lifespan: It's Everyone's Responsibility," it focused on, among other things, how chronic disease prevention plays a role at every state of life.

Obesity, the leading risk factor for cardiovascular disease, diabetes, hypertension and arthritis, is the second leading cause of preventable death in the U.S. The CHAMPION Program plans to train communities in the use of various programs that will help reduce obesity rates at the local level.

We are sensitive to the state's changing public health climate and the information needs of our citizens, and endeavor daily to protect the health of all Virginians and provide them with the tools they need to make good health decisions.

Next year marks the 100th anniversary of the Virginia Department of Health and we are proud of our long history of serving Virginians everywhere, everyday. As promoters and protectors of the public's health we build on past experiences and adopt improved methods of safeguarding individuals and communities. We plan to build upon this strong legacy for the next hundred years.

Sincerely,

Prouse B. Stronde

From the Chairman of the State Board of Health Jack O. Lanier, Dr. P.H., MHA, FACHE

It has again been my honor to serve as chairman of the State Board of Health and share this report with you.

In 2007, the Board dedicated leaders and staff of the Virginia Department of Health (VDH) together continued to demonstrate their readiness to meet both the routine and emergency public health



needs of the Commonwealth. These efforts often put Virginia in the national spotlight. Commissioner Robert B. Stroube, M.D., M.P.H., was elected president of the Association of State and Territorial Health Officials. Then following the tragic shootings at Virginia Tech, State Chief Medical Examiner, Marcella Fierro, M.D. and the VDH leadership team responded to the largest mass fatality on a college campus in U. S. history.

Along the way, there were many lessons learned. We started the year with a visit to the annual Mission of Mercy/Remote Area Medical clinic in Southwest Virginia to demonstrate the Board's commitment to improve access to care for all residents. VDH continues to earn high marks for its readiness to meet public health needs during an emergency such as pandemic influenza. Under the auspices of Governor Timothy M. Kaine's Health Reform Commission, the year ended with several statewide healthcare forums where private citizens and healthcare advocates provided meaningful input to the Commission's proposed solutions to improve the health of Virginians. Once complete, the findings will help to guide VDH's work in the coming years.

The Board continued its emphasis on the fight against chronic disease. A General Assembly measure (HB 2214/SB 974), introduced at the request of the governor, expanded the reach of the health department to youth and their families. This legislation requires the state health commissioner and the superintendent of public instruction to work together to combat childhood obesity and other chronic conditions that affect school age children. As the result of a grant from the National Governor's Association in 2007, VDH and Department of Education will partner on an initiative in local schools to reduce obesity among school age children.

In Virginia, safe food and drinking water, proper sewage treatment and disposal, disease prevention and health promotion and control, emergency preparedness and response to disasters are important to maintain a high quality of life in Virginia. Local and state health departments are at work to lead the way.

On the heels of the 400th anniversary of the founding of Jamestown, the ground work is now being laid for the 2008 observance of VDH's centennial anniversary. It will be a time to reflect on the past to better prepare for our future.

I look forward next year to reporting to you about the successful implementation of VDH's centennial anniversary plans.

Sincerely,

Jack Lame

State Board of Health Members - 2007

Jack O. Lanier, Dr. P.H.,MHA, FACHE
Chairman
Consumer
Richmond

Craig A. Reed, D.V.M.
Virginia Veterinary Medical Association
Marshall

Barbara A. Favola Local Government Arlington

Bennie Marshall, R.N., Ed.D. Virginia Nurses' Association Chesapeake

David M. Summers

Managed Care Health Insurance Plans

Chesterfield

W. Scott Burnette Hospital Industry South Hill

Ed D. Spearbeck
Virginia Pharmacists Association
Arlington

Bhushan Pandya, M.D. Medical Society of Virginia Danville

Katherine Elliott Nursing Home Industry Roanoke

Charles K. Johnson, D.D.S. Virginia Dental Association Richmond

James H. Edmondson, Jr. Consumer McLean

Julie L. Beales, M.D. Medical Society of Virginia Richmond

Frederick J. Hannett
Corporate Purchaser of Health Care
Arlington

2007 Highlights

- Received 31,530 onsite sewage system applications and 22,688 applications to build private wells.
- Clients served: 488,781
- Client visits: 976,965



Remote Area Medical Clinics rely on local health departments to provide vital services to rural Virginians.

Serving Virginians

Ms. P recently moved to a community with her husband and two year old daughter. She is pregnant with her second child and is enrolled in a Medicaid HMO. She visited her local health department for prenatal care and was startled to learn that the community hospital will not accept her insurance, and the hospital in a neighboring community no longer provides obstetrical care. The closest hospital that will accept her insurance is 50 miles away. The nurse practitioner caring for Ms. P contacted the Department of Medical Assistance Services, the HMO provider, and the local hospital, and arranged for Ms. P to deliver at the closest hospital and be covered by Medicaid. Local health department staff throughout the state goes the "extra mile" everyday to help improve the health of individuals and communities.

Local Health Department Services

Local health departments serve every city and county in the Commonwealth. They assess the health status of their communities and assure the delivery of quality health services including prenatal care, immunizations and communicable disease prevention and control. Restaurant inspections protect the dining public and environmental health specialists ensure the safe onsite disposal of sewage to protect groundwater, the source of drinking water for more than one million Virginians.

In 2007, VDH leadership launched a number of efforts that relate directly to the agency's strategic plan and address areas of needed improvement.

Reducing the number of infants who die in their first year was a primary focus in 2007. More than two babies die every day in Virginia, and this is more than the national average. Fifty-two percent of all infant deaths in Virginia between 2001 and 2005 occurred in 10 cities and counties. These localities received funds to promote good preconception health, early and regular prenatal care and closer management of high risk pregnancies. Each community has a target number of infant deaths it seeks to prevent. Efforts are underway to sponsor community-wide "summits" to raise public awareness and gain community-wide support to assist in reducing infant deaths.

A second effort uses a fund created by the Governor and General Assembly that earmarks \$2 from each birth certificate fee to support health care services. In keeping with the Board of Health's priorities, 13 health districts received grants based on proposals of innovative and evidence-based programs to reduce the burden of chronic diseases. Projects involve reducing risk factors such as smoking, obesity and poor nutrition. Early results are promising and will be shared with all districts to promote more effective interventions. Additional financial support came from the Preventive Health and Health Services Block managed by the Office of Family Health Services.

A third focus involves the uniform application of a community needs assessment and performance management tool called MAPP (Mobilizing for Action through Planning and Partnership). It identifies needed public health services and existing gaps. Results from the MAPP assessments, underway in 13 health districts, will help health departments share successful programs and help all sectors of the community collaborate more strategically to improve the public's health.

Access to dental care has concerned VDH leadership for many years. Using funds appropriated specifically for this purpose, VDH modernized dental equipment and replaced outdated "trailer style" mobile units. VDH purchased a motor-home sized mobile unit, featuring two dental operatories, and two smaller vans, each with one operatory, to serve isolated or underserved communities. These new mobile units can be deployed for mass dental care events, such as Missions of Mercy and the Remote Area Medical expeditions. These upgrades improve patient care and leverage VDH's ability to recruit and retain public health dentists.

Office of Family Health Services

Fighting Infant Mortality

The leading causes of infant mortality are low birth weight, birth defects and Sudden Infant Death Syndrome. The goal of the Loving Steps Program is to eliminate health disparities that contribute to infant mortality and low birth weight. It operates in Norfolk, Petersburg and Westmoreland County, areas with high infant mortality rates. Data from 2002-2004 show the program's success. The percentage of low birth weight infants for all births to African-Americans in the three localities was 13.4. However, for African-Americans participating in Loving Steps the percentage dropped to 11.2.

VDH urges women to take daily doses of folic acid, which reduces the risk of spina bifida and anencephaly, the two most common neural tube birth defects, by 70 percent. To date more than 70,000 100-pill bottles have been distributed free to VDH clients.

Seven Regional Perinatal Councils work directly with health care providers to achieve healthier infant outcomes. In FY 2007, the councils trained more than 6,600 providers in the care of pregnant women and newborns, and promoted the "Back to Sleep" program to help reduce the incidence of Sudden Infant Death Syndrome.

The Pregnancy Risk Assessment Monitoring System (PRAMS) began in May 2007 to survey 100 mothers of newborns each month to learn why some babies are born healthy and some are not. Their answers will help VDH further understand causes of preventable deaths, and work with mothers to improve birth outcomes. The first results are expected by the fall of 2008.

Reducing the Burden of Chronic Disease

Chronic diseases affect an estimated 2.2 million Virginians and account for about \$24.6 billion a year in medical costs according to "Chronic Disease in Virginia: A Comprehensive Data Report." It outlines the impact of chronic diseases that are the subjects of funded projects within VDH. These include heart disease, stroke, cancer, asthma, diabetes and arthritis. The report provides a detailed look at the burden of chronic disease in Virginia, and will help inform planners and policy makers in efforts to reduce the incidence, death and disability from these major chronic diseases.

The Office of Family Health Services also produced Virginia's first comprehensive asthma data report. It showed that asthma is a problem of increasing public health concern. Asthma sufferers in Virginia total more than 412,000 adults and 152,000 children. The report includes a break down of asthma cases in each of VDH's health districts.

From June through August, reducing high blood pressure and cholesterol, major risk factors for heart disease and stroke, was the subject of a mass media campaign in Portsmouth and the Crater Health District centered in Petersburg. "What You Don't Feel is Killing You," was the theme of the campaign, which used radio and outdoor advertising, physician outreach, the Internet and other means to encourage African-Americans to get checked regularly and follow their doctors' orders to control these deadly diseases.

2007 Highlights

- More than 1,800 Virginians called Quit Now Virginia!, VDH's tobacco cessation telephone quitline.
- An increase in state funds enabled the Every Woman's Life Program to screen an additional 1,108 women for breast and cervical cancer. EWL diagnosed 40 cases of precancerous cervical conditions, 1 case of invasive cervical cancer and 21 cases of breast cancer.



Virginia's infant mortality rate dropped to 7.4 in 2005 from 12.9 in 1982.

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The single 25-year old woman lived alone in Norfolk and knew nothing about staying healthy during pregnancy and raising a child. Staff in VDH's Loving Steps Program first screened her for numerous risks - such as health, environmental and economic factors - that affect pregnancy outcome. Next they developed a plan of care and connected her to the services she needed. These case management and post pregnancy follow up services resulted in a healthy mother and healthy baby boy that enjoy healthy lifestyles and bright futures.

2007 Highlights

- Responded to 233 norovirus outbreaks between November and May
- Provided 3,331 clients with HIV medications through the AIDS Drug Assistance Program
- Reported animal rabies cases totaled 690



The OE entered 1.4 million client records containing 850,000 immunization histories with information on 5.5 million vaccine doses administered into the Virginia Immunization Information System.

Serving Virginians

A father, his wife and four daughters arrived in the U.S. in 2005 from Liberia where war and persecution forced him to leave his career as a teacher. Several family members were discovered to have latent tuberculosis. They were treated with antibiotics through the Division of Disease Prevention's Newcomer Health Program and now lead healthy, productive lives. Today the man works two jobs and his wife gave birth to another daughter in January. Two of his daughters also have started families this past year, making him a grandfather and a new father! He is proud to have been able to purchase a home after living in Hampton Roads only 19 months, and has recently brought his mother to live with his family.

Office of Epidemiology

The Office of Epidemiology (OE) investigates outbreaks of disease and provides disease prevention recommendations. With other offices, agencies and organizations the OE educates Virginians about disease prevention while preparing for disasters and responding to current needs.

Responding to Health Threats

The Division of Surveillance and Investigation responded to numerous outbreaks this year including two high-profile multi-state food borne outbreaks investigated by the Centers for Disease Control and Prevention. E. coli O157:H7 associated with spinach included two cases in Virginia, and an outbreak of Salmonella Tennessee associated with peanut butter infected 27 Virginians.

As a result of contamination, fish consumption advisories were issued for Harrison and Chickahominy lakes and parts of the James and Maury rivers by the Public Health Toxicology Program.

Taking Action to Avert Tragedy

Localities were encouraged by the Indoor Radon Program to adopt radon reduction techniques in new residential construction as outlined in the State Building Code. Pharmacy Services and the Tuberculosis Program purchased and stored TB medications to replace medications that may become lost or inaccessible to TB patients in a disaster.

Advancements in Technology

The Electronic Surveillance System for the Early Notification of Community-based Epidemics (ESSENCE) added data from 18 additional facilities and expanded coverage to the Southwest Region. The National Electronic Disease Surveillance System (NEDSS) expanded to incorporate all of VDH's 35 health districts.

The Division of Immunization piloted the Virginia Immunization Information System this year. Partnerships between VDH and the Department of Medical Assistance Services, private providers, hospitals and emergency departments, other state registries, public health and health insurers were strengthened as pilot sites were enrolled, allowing the sharing of electronic immunization data, which will be used to assist with the accurate and timely administration of immunizations.

Partnerships and Public Education

The Division of Environmental Epidemiology expanded its research and public education efforts by partnering with VDH's Asthma Control Project. Together they investigated work-related asthma and were able to gain an understanding of relationships between occupation and asthma triggers.

Public information efforts this year included the Division of Disease Prevention's Every Newborn Can be HIV Free and syphilis elimination campaigns. The number of hits to the syphilis Web page rose 233 percent in May and an additional 79 percent in June, totaling 2,620 hits during those two months.

Grant Funded Initiatives

The OE furthers its services through various grant-funded projects. CDC funds are helping the Division of Radiological Health replace the Mobile Radiation Laboratory that was lost in Hurricane Gaston, with a Mobile Incident Command vehicle. In addition, Virginia has been selected as one of six national sexually transmitted disease sentinel sites, receiving an STD Surveillance Network grant through CDC.

Emergency Preparedness and Response Programs

Emergency Preparedness and Response Programs (EP&R) takes an all hazards approach in fulfilling its mission to develop plans that prepare VDH and its public and private sector partners to respond effectively to any emergency that threatens the public's health such as acts of terrorism, infectious disease outbreaks and natural disasters.

Practice Makes Perfect

In April, VDH conducted the second of two statewide exercises. Vertex '07 dealt with the preparation, response and recovery from a major hurricane. Among the exercise's many positive outcomes were proactive public information efforts including the early dissemination of fact sheets and safety information.

EP&R coordinated 44 local and regional preparedness exercises. EP&R monitored the exercises and reviewed after action reports identifying best practices. These were shared with others and improved the agency's overall capabilities.

Virginia Hospitals are Prepared

EP&R continued its partnership with the Virginia Hospital and Healthcare Association to improve hospitals' ability to handle mass casualities during a public health crisis. VDH administers federal grant funding and provides guidance that allows Virginia's 94 hospitals to identify gaps in preparedness, train staff and buy equipment to improve their medical surge capacity and capability to meet the inevitable increased demand for beds and services in case of an emergency. Regional hospital and healthcare planning has resulted in coordinated planning and response, demonstrated by the well organized EMS and medical response to the Virginia Tech shootings. During training exercises and real-life emergencies, VDH monitors the resources hospitals need and facilitates requests to the Emergency Operations Center to locate those resources.

Public Information

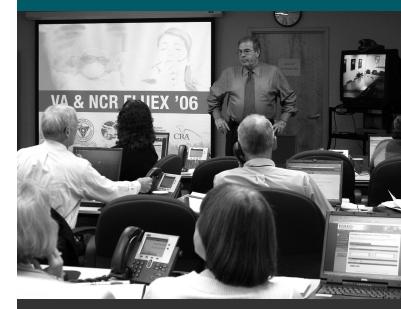
VDH expanded its capacity to communicate health messages to diverse populations by developing a series of posters, each using a well known fable from a different culture to remind people to protect themselves against influenza. These posters are available in English, low-literacy English, Spanish, Farsi, Russian, Tagalog and Native American.

Cities Readiness Initiative

EP&R continued its work to establish the Cities Readiness Initiative (CRI) program in the Northern and Eastern regions of Virginia and the Richmond metropolitan area. CRI helps metropolitan areas increase their capacity to deliver medicine and medical supplies quickly during a large-scale public health emergency. CRI's goal is to minimize loss of life during a catastrophe by providing needed drugs to 100 percent of an area's population within 48 hours.

Training

EP&R facilitates a broad range of training programs to prepare public health and community leaders to respond to and recover from emergencies. Topics of recent programs include isolation and quarantine training for city and county attorneys, emergency planning and services for special needs populations, and terrorism and security awareness training for state employees. EP&R supports TRAIN, a learning management system, which allows Virginia's responders access to the wealth of courses offered by 23 other states, the CDC and other organizations.



The Emergency Operations Center (EOC) functions as the VDH hub for responding to drills and real time emergencies.

Serving Virginians

In October, VDH conducted FLUEX '06, a statewide exercise to evaluate the state's ability to respond to and recover from a pandemic of influenza. VDH assessed its preparedness plans, its communications abilities and its ability to coordinate efforts throughout the various levels of government. The exercise was a success and validated VDH's commitment to improving its and the state's preparedness and response capabilities. The results showed continued improvement over past exercises. Evaluators noted that VDH employees have vastly enhanced their ability to respond to an outbreak and protect the health of Virginia's residents.

Virginia's EMS System

- 34,027 Certified EMS Providers
- 593 EMT Instructors
- 721 Licensed EMS Agencies
- 3,858 Permitted EMS Vehicles
- 11 Regional EMS Councils
- 13 Trauma Centers
- 3 Poison Control Centers



The SimBaby helps train EMS workers to respond to life threatening emergencies involving infants.

Serving Virginians

This past January an emergency medical dispatcher (EMD) in Campbell County answered a 911 call for a 14-month-old infant who was not breathing. The EMD walked the parents through CPR, and when the ambulance arrived the infant was breathing again. Not all dispatchers are EMDs, and when a panicked mother calls because her child is not breathing, they cannot help. That is why the Office of EMS is working with 911 centers across the state to educate them on the value of EMD accreditation, ways to implement it and the funding that is available through the Rescue Squad Assistance Fund Grants to help meet their goals. Campbell County is one of only 16 OEMS-accredited EMD 911 centers in Virginia.

Office of Emergency Medical Services

Health & Medical Emergency Response Team at Jamestown

The Office of Emergency Medical Services (OEMS) Health and Medical Emergency Response Team (HMERT) participated in planning, preparation and response activities in support of James City County's and other local agencies' EMS response to the Jamestown 400th Anniversary Celebration. OEMS Emergency Operations staff worked with HMERT resources deployed to the scene, including three task forces, one Dog Therapy Strike Team, one Bike Strike Team and one Coordination Team. Participating in activities like this helps the HMERT prepare to respond to disaster situations, and helps localities better understand the resources that are available to them.

Emergency Operations Training

The Division of Emergency Operations provided a variety of trainings to EMS agencies and personnel across the state. The trainings included Mass Casualty Incident Management (MCIM), which is a valuable resource for agencies and providers. The MCIM curriculum was put to the test during the response to the emergency at Virginia Tech. The Virginia Tech Rescue Squad was trained in MCIM, and when the tragic events unfolded they demonstrated the training and knowledge the course provided.

Emergency Medical Services for Children Comes to OEMS

The transfer of the EMS for Children (EMSC) Program to the OEMS became official on March 1, 2007, with the award of the Health Resources and Services Administration EMS Partnership Federal Grant. The EMSC program works to assure that the pediatric population is well represented in all matters of emergency medical care. The EMSC program partners with the many disciplines that provide pediatric emergency care, such as EMS agencies, hospitals, law enforcement agencies and others to prevent illness and injury, and when they are not preventable, EMSC seeks to ensure that adequate pediatric equipment and training are available to those caring for children.

SimBaby™

In addition to disbursing more than \$800,000 in grant monies to the field for advanced life support training, OEMS also distributed Laerdal SimBaby™ patient simulators to 23 EMS-accredited training sites statewide.

SimBaby™ is the portable advanced infant patient simulator that has realistic anatomy and clinical functionality that enables simulation training.

The benefits of SimBaby™ include:

- Educational effectiveness provides highly realistic patient simulation training experiences for the practice of teamwork, leadership and communication skills.
- Cost efficient durable and dependable for long term use and cost efficiency.
- **Practice infrequently occurring scenarios** prepare the learners for the unusual cases the learner may face in real life.
- **Anatomically realistic** enables a wide range of emergency medical interventions to be practiced.

Office of Environmental Health

Restaurant Inspection Web Site Gets 80,000 Visitors a Month

Local health departments throughout Virginia conduct more than 60,000 unannounced restaurant inspections a year to ensure that food service establishments comply with food safety regulations. Health inspectors keep restaurants informed of updates to state food regulations, which are periodically revised to reflect updates to the USDA Model Food Code. Consumers can access the inspection reports from these visits on the VDH Restaurant Inspection Web site.

The Web site has received a lot of attention since it launched in 2003. In its first month, the site received almost 8.5 million hits and almost a half-million visits. Nearly five years later, the site still registers high traffic volume. Every month, approximately 80,000 visitors come to the site seeking the latest inspection results for their favorite eatery or their child's school lunchroom.

While VDH continues to receive positive feedback from the public about the site, improvements are made periodically to keep the site a useful resource for everyone.

Assessing Impact of Viruses on Shellfish Growing Waters in Hampton Roads

VDH's Division of Shellfish Sanitation successfully competed for funds from the Virginia Marine Resource Commission to continue work with the Virginia Institute of Marine Science in assessing the impact of viruses upon the shellfish growing waters of Hampton Roads. Viruses are released by major sewage treatment facilities in the area, but until now the analysis for these viruses via a monitoring program has not been possible. The Hampton Roads area contains valuable clamming grounds, but much of it has been closed since 1926 for the direct harvest to market of shellfish due to water contamination. VDH hopes to be able to safely open part of this area in 2009.

2007 Highlights

- Issued 26,000 restaurant permits
- Conducted 58,000 restaurant inspections

Serving Virginians

Despite the advancements of the 21st century, nearly 20,000 homes in Virginia lack indoor plumbing. Failing and inadequate systems lead to the possibility of exposure to untreated or inadequately treated sewage, which can spread disease.

VDH partners with citizens, government agencies and non-profit organizations to assist communities with site conditions considered poor for conventional septic systems.

In 2002, the Charles City County pilot project was the Commonwealth's first success story. To date, that project has provided facilities to approximately 45 families with failed, inadequate or no systems.

VDH also coordinated with the Dawn community in Caroline County to construct systems using site and soil conditions that otherwise would not be considered suitable for onsite systems. Property owners are not responsible for maintaining a decentralized, or onsite, wastewater system. Instead they pay a monthly fee to the county as if they were connected to a "conventional" public sewage system.

Hurricane Isabel devastated much of the Claremont community in 2003. Wind gusts and flooding destroyed approximately 40 homes and other structures in this riverside community. When the owners sought building permits to repair or replace the homes, several could not be approved for permits because of unsafe or inadequate sewage systems. VDH offered citizens an opportunity to plan a decentralized system. Construction of Virginia's third decentralized wastewater project in Virginia is expected to begin in fall 2007.



ODW helps ensure safe drinking water for Virginians through inspections, operation permits and complaint investigation.

2007 Highlights

- Issued 148 waterworks operation permits
- Conducted 2,280 sanitary surveys at waterworks
- Issued 1,740 violation notices
- Investigated 116 drinking water complaints
- Funded 15 projects totaling nearly \$10 million from the Drinking Water State Revolving Fund
- Funded 23 projects totaling nearly \$2.4 million from the Water Supply Assistance Grant Fund

Office of Drinking Water

State Drinking Water Revolving Fund Improves Virginia Water Systems

State and federal funds are awarded through loans and grants provided by the Drinking Water State Revolving Fund (DWSRF) to water supplies through the state program. VDH is designated by the federal government to administer and distribute the funds. Staff in the ODW manage the funding for these projects and coordinate with other organizations to help communities expand and upgrade their water systems.

Since the DWSRF program's first award in 1998, VDH has awarded slightly more than \$156 million for 153 drinking water improvement projects. More than 110,000 Virginians benefited from the DWSRF program by the end of fiscal year 2007.

Serving Virginians

Last June seemed hotter than usual for many the residents of the town of Goshen. For nearly two weeks, approximately 450 people were without access to drinking water due to a number of leaks in the town's system. The Virginia Department of Health (VDH), the town and others responded immediately. VDH's Office of Drinking Water (ODW) issued a Boil Water Advisory to all the residents and coordinated with contractor crews from the town, Rockbridge County and the Virginia Rural Water Association to find and repair the leaks.

While VDH continued to work on restoring the system, a local emergency was declared in Goshen. VDH staff worked on-site supporting the local response and recovery efforts and helped manage media relations and public outreach during the water shortage. Volunteers and state agency personnel delivered water to the residents throughout the operation.

Once tests confirmed that the water was safe to drink, VDH lifted the Boil Water Advisory. Although Goshen's water system was functioning normally again, engineers with the ODW cautioned that the system was still fragile and recommended that the town replace about two miles of 6-inch, cast-iron water main pipe dating to 1936 at an estimated cost of \$1.5 to \$1.7 million. VDH met with the Goshen Town Council and outlined potential funding options, including the State Drinking Water Revolving Fund, which could assist with the replacement of the aging water system.

Office of Minority Health and Public Health Policy

Reframing Its Mission

A bill passed by the 2007 General Assembly, introduced by the Governor, required the commissioner to designate a senior staff member of VDH, who must be a licensed physician, to oversee the department's minority health efforts. The mission of the Office of Minority Health and Public Health policy is to remove the inequities in health care that affect various minority and low-income groups in Virginia. The new minority health director took office in May and will lead efforts to promote strategies that focus on the social determinants of health, and assess the root causes of health inequities, promote social justice, influence policy, establish partnerships, provide resources and promote good health practices.

CLAS Act

CLAS Act develops resources related to culturally and linguistically appropriate public health services (CLAS). The cornerstone project of the Initiative is the www.CLASActVirginia.org website: an online cultural competence resource for both health providers and clients. Today VDH makes it a practice to produce materials in several languages including Spanish, Tagalog, Russian and Farsi.

The Healthcare Workforce

Recruiting and retaining a trained health care work force in Virginia is a primary function of the office. To help accomplish this goal, the office awarded 10 scholarships through its new Virginia Nursing Scholarship Program, which seeks to increase the number of nursing faculty by providing financial support to graduate nursing students. In this way the program helps Virginia nursing schools recruit and retain new nursing faculty, which in turn enables the schools to increase enrollment. Further, the office addressed healthcare needs on a national basis by providing leadership in planning the 12th annual conference of the national Rural Recruitment and Retention Network, which was held in Richmond.

Also new this year was the first ever Commissioner's Healthcare Workforce Recognition Awards that honored individuals and organizations who used the most innovative and successful methods to recruit and retain health care professionals. The five award winners were recognized at the annual meeting of VDH's Health Workforce Advisory Committee.

2007 Highlights

- Issued 25 loan repayment awards totaling \$932,000 to physicians, physician assistants and nurse practitioners
- Provided funds to 24 hospitals through the Small Rural Hospital Improvement Grant Program
- The CLAS Act Initiative won an Association of State and Territorial Health Officials Vision Award, which honors outstanding state health department programs.

Serving Virginians

The Virginia Telehealth Network (VTN), which focuses primarily on serving rural and medically underserved communities, is one of the programs that assists the Office of Minority Health and Public Health Policy in its mission to address health inequities. The VTN provides the collaborative and responsive environment needed to ensure the successful use of technology by health care professionals to provide medical diagnosis and recommended treatment to Virginians who may not otherwise receive medical attention. Telehealth applications have led to timely and often life saving care for thousands of people.

In a recent example doctors diagnosed a two-day old infant as experiencing respiratory distress, as well as having a heart murmur. Although a cardiologist was able to diagnose a hole in the baby's heart, he did not recognize a rare and otherwise fatal congenital heart defect because his expertise was in adult care rather than pediatric care. Thanks to Telehealth technologies, a doctor with the University of Virginia Health System was able to request that the child's cardiac ultrasound be sent using a broad band communications network. The UVA doctor was able to immediately diagnose the problem and prescribe treatment that ultimately stabilized the child for transport to a hospital for surgery. According to the doctor, the baby may not have survived had the he traveled without being stabilized.

2007 Highlights*

- * Deaths investigated by OCME in 2005 (the latest available)
- 39 percent were accidents
- 37 percent were natural causes
- 15 percent were suicides
- 8 percent were homicides
- 1 percent were undetermined



All Virginians are indebted to Chief Medical Examiner Dr. Marcella Fierro for her leadership in response to the shootings at Virginia Tech. As Dr. Fierro approaches retirement at the end of the year, she leaves behind a legacy that includes increased compassion for families of the deceased.

Serving Virginians

The Office of the Chief Medical Examiner is responsible for determining the cause and manner of deaths that occur under certain circumstances. Every case has a human side that involves the emotional and practical issues faced by family members. By the nature of their work, the medical examiner's staff has become especially sensitive to the needs of families. Each staff member is committed to providing the respect families deserve, and the detailed scientific information demanded by the legal community. The medical examiner's office recently overhauled its Web site to ensure ready access to helpful, easy-to-understand information about the medical examiner's processes and the medical and legal requirements of the office. It was a conscious effort to make it easy for families and others to learn the steps they should follow when and if the need arises.

Office Of The Chief Medical Examiner

Investigating Deaths

In Virginia, the medical examiner system supports key state functions. The Office Of The Chief Medical Examiner (OCME) investigates and examines deaths that are sudden, suspicious, unexpected or violent, as well as other deaths that might present a risk to the public health. State of the art death investigations that produce definitive answers about how people die are a fundamental public service for families and friends of decedents. The OCME collaborates with law enforcement and prosecutors during death investigations to support public safety and justice for citizens. In the public health arena, the OCME plans for thorough death investigations following mass disasters and bioterrorist events. This involves consultation with personnel from human services, emergency response, epidemiology and medicine. Finally, the OCME educates prevention partners and policymakers about trends in fatal violence and injury through fatality team review and surveillance of death events as core public health functions that support programs, law and public policy.

Chief Medical Examiner to Retire

Dr. Marcella F. Fierro, Virginia's chief medical examiner, is retiring at the end of this year, following 30 years of service. She has served many years as a forensic pathologist and was a pioneer in establishing fatality review and death surveillance programs in the areas of child fatalities, maternal deaths and deaths attributed to elder abuse and domestic violence. Her commitment to data-driven approaches to violence and injury reduction exemplifies her belief that all violent deaths are premature and therefore preventable. When asked about her experiences after the Virginia Tech murder-suicide, she replied, "It was a privilege for me to assist these families of these very, very young victims with answers." She also expressed a collective sense of loss for all Virginians, compassion and empathy for the victims and their families, and gratitude to all who assisted with this tragically violent event.

Dr. Fierro came to Virginia as an assistant chief medical examiner in 1973. From 1992-1994, she served as professor of pathology at East Carolina School of Medicine. She returned to Virginia in 1994 when she was appointed chief medical examiner. She serves on the board of directors of the Virginia Institute of Forensic Science and Medicine, chairs the Department of Legal Medicine at Virginia Commonwealth University and is professor of forensic pathology in the Virginia Commonwealth University's Department of Pathology. She is world renowned for her work in forensic pathology.

Dr. Fierro has made a difference in Virginia. Remarkably hopeful and optimistic, she spends her work days among the dead and uses the knowledge gained there to create safer and healthier communities for the living.

Medical Examiner Report on the Web

The OCME investigates approximately one in 10 Virginia deaths, or about 6,000 cases each year. The most current information can be found in the OCME annual report, which details analysis of OCME cases. The report provides a statistical picture of deaths from accidents and natural causes, which constitute the majority of deaths accepted for investigation by OCME. Suicides and homicides are less common. The report also documents additional details of violent, suspicious and sudden deaths. It is available at the OCME Web site at www.vdh.virginia.gov/medexam. See also the "Quick Stats" at: www.vdh.state.va.us/medexam.

Office of Licensure and Certification

Inspection Programs

The staff in the Office of Licensure and Certification (OLC) is committed to ensuring that the quality of healthcare Virginians receive from health care facilities is safe, cost effective and compliant with all state and federal laws. They work to increase appropriate access to health care services and to promote the quality of life for all patients. A major part of their work involves the licensing of hospitals, outpatient surgical hospitals, nursing facilities, home care organizations and hospice programs. The most visible of OLC activities are its inspection programs, which are used to satisfy both state licensure requirements and Medicare/Medicaid requirements.

Certificate of Public Need

OLC administers the Certificate of Public Need (COPN) program, which seeks to avoid unnecessary duplication of medical care facilities and ensure access to health care for all Virginians at a reasonable cost. In FY 2007, OLC staff provided technical support to the House Health, Welfare and Institutions Committee's COPN Task Force in evaluating the program and assisted individual members of the House of Delegates in drafting legislation to improve COPN.

State Medical Facilities Plan Updated

OLC assembled a committee of industry and community stakeholders to update the State Medical Facilities Plan, the first comprehensive revision of the plan in 15 years. The result has been a generally accepted revision of the criteria used in evaluating projects seeking Certificate of Public Need authorization. These new criteria are now ready for public comment and presentation to the Board of Health for approval.

Complaint Unit Reorganized

A specially qualified unit investigates consumer complaints about the quality of health care services. The inspectors are health care professionals themselves and include physicians, registered nurses, dietitians, social workers and laboratory medical technologists. The complaint unit was reorganized and now features dedicated intake analysts. This move improves the consistency of complaint intake procedures and ensures sufficient staff to conduct administrative investigations of complaints against hospitals that do not meet the criteria for an onsite investigation. Improved instigative protocols, enhanced surveyor knowledge and more selective hiring practices have combined to increase the number of long term care complaints that result in a regulatory citation from 20 percent in 2006 to 40 percent in 2007.

Advancing Excellence

The OLC is a member of the Advancing Excellence in America's Nursing Homes campaign and participate via the Local Area Network for Excellence (LANE) sponsored by the Virginia Health Quality Center. This is a two-year effort by long-term care providers, caregivers, medical and quality improvement specialists, government agencies and consumers to improve the quality of care and quality of life for nursing home residents. Providers choose three or more of eight goals to work on during the two-year period. The goal most chosen by Virginia providers is pressure sore reduction.

2007 Highlights

- Conducted 162 administrative investigations of hospitals
- Conducted 446 surveys of nursing facilities
- Inspected 1,200 hospitals, outpatient, laboratory and home health agencies



State licensing programs administered by OLC ensure the safe treatment of patients in Virginia.

Serving Virginians

Inspectors from the Office of Licensure and Certification increased their surveillance of an end stage renal dialysis facility in Eastern Virginia after one client died and several others experienced unexpected adverse outcomes from their treatments. The inspectors confirmed that a key staff member there lacked proper credentials and was not properly trained to perform assigned tasks. To protect current and future clients, the facility was shut down and not allowed to reopen until all patient care measures were addressed satisfactorily.



The skill and training of the Communications Team leverages media relationships to disseminate crucial public health messages.

Serving Virginians

Grocery stores and restaurants across the nation began clearing spinach from their shelves and menus when it was linked with a national outbreak of E. coli. When cases of E. coli were confirmed in Virginia, the VDH Communications Team played a critical role in informing Virginia residents on ways to protect themselves through hand washing, safe food handling and preparation and more. The communications effort required numerous updates to the Web site, interviews with news reporters from across the state by communications and epidemiology experts, and a constant flow of information to the health districts for regional communication efforts.

Office of Communications

From strategic communications planning, media relations, spokesperson and risk communications training to coalition building and outreach, the Communications Team is essential to VDH's mission to promote and protect the health of Virginians.

Strategic Public Relations

Planning is critical to the success of any communications program. The Communications Team anticipated reporters' need for fresh information and packaged several timely public health messages into a reporter's notebook, which was produced in both English and Spanish. The effort generated several news stories.

To motivate family decision makers to incorporate flu prevention measures in their daily lives, the Communications Team launched the Value Health: Protect Against Influenza campaign as flu season began in November 2006. The campaign's multi-pronged approach included outreach to community opinion leaders, including members of the Virginia Pandemic Flu Advisory Committee, to champion these public health messages. In addition to comprehensive toolkits for community partners, the team also developed a series of 14- by 23-inch "talking posters" based on fables and folklore from a variety of cultural traditions represented across the state.

The Division of Injury and Violence Prevention's acclaimed, "Isn't She a Little Young?" campaign continued to grab the public's attention with its message against older men engaging in sexual relationships with underage girls. The campaign included the Fotonovella, Gracias Papa, which received national recognition and won a Gracie award.

As national syphilis rates increased, VDH mobilized to educate citizens about the symptoms of the disease, the importance of testing and how simply the disease can be treated. With the Office of Epidemiology the Communications Team crafted messages and implemented a comprehensive broadcast, mass transit, Internet and print campaign that generated a 233 percent increase in visits to the campaign's Web site in one month alone.

Risk Communications

Unfortunately, even the best preparations cannot prevent the unfore-seeable from happening. Working closely with VDH's Office of the Chief Medical Examiner, Communications Team members were among on-site responders during the Virginia Tech shootings, and managed media and public information needs related to the identification of victims and causes of death.

While local, county and state emergency managers struggled to get the water back on in the town of Goshen, the VDH Communications Team worked elbow to elbow on-site with the Office of Drinking Water to deliver public health messages to the community. Morning drinking water updates were delivered to citizens by the Virginia National Guard and later posted to the town's Web site.

The Communications Team continues to prepare to respond to emergency situations like these through participation in exercises like FLUEX 06 and the state hurricane exercise VERTEX 07. It is through exercises, training and experience that the Communications Team is able to quickly and efficiently respond to emergencies and keep Virginians informed on how to stay safe and healthy.

Division of Vital Records

The Division of Vital Records (DVR) issues more than 448,000 vital records annually. These important documents allow individuals to enroll in school or obtain a Social Security card, driver's license, passport or employment. In response to 2006 federal legislation mandating that Medicaid recipients and applicants show proof of citizenship, the Department of Medical Assistant Services (DMAS) and the Department of Social Services (DSS) requested that DVR help them and their clients gather the information. To date, DVR has responded to nearly 62,000 requests from DSS and DMAS.

2007 Highlights

Certified vital records issued include:

- 424,362 Birth Certificates
- 9,013 Marriage Records
- 1.906 Divorce Records

Division of Health Statistics

The Division of Health Statistics (DHS) collects, compiles and reports data on births, deaths, natural fetal deaths and induced terminations of pregnancies. It also formats population data from the National Center for Health Statistics and the Census Bureau into reports by age, race, sex and ethnicity.

In addition, DHS provides statistics that are widely used by federal and state government. The staff also provides information to the private sector for parties to analyze current and historical patterns and to forecast future needs.

2007 Highlights

Final 2005 Virginia vital statistics (the latest available)

- 104,488 Resident Births
- 57,642 Resident Deaths
- 7,567,465State Population

Serving Virginians

While the Division of Vital Records serves Virginia residents here at home, it also extends a helping hand to Virginians throughout the world. On a regular basis the department receives requests from people who may have exhausted every effort in obtaining a birth, death, marriage or divorce certificate. Recently, the Vital Records staff responded to an urgent request for the birth certificate of a woman born in Norfolk. She was stranded with her child in Canada. Working with the U.S. Passport office and the American Consulate General in Canada, DVR was able to prove the mother's U.S. citizenship. An emergency passport was granted to the mother and she and the child were able to return to the United States. The Consulate wrote, "Wow, thanks for the quick response and help, the mother and child are traveling today."

Serving Virginians

The Division of Health Statistics has taken the study and compilation of statistical data related to births and deaths to another level. In recent months the division has been recognized by the National Center for Health Statistics for having one of the most accurate teams of nosologists in the United States. Nosologists are responsible for coding and entering causes of deaths from death certificates into a VDH health statistics data base.

Fiscal Year 2006 - 2007 Expenditures

Services to Individuals (49.6%) Women's and Infants' Health and Family Planning \$33,378,871 Maternal and Child Health 62,738,848 Support to Individuals 163,873,480 Total 259,991,199 Support Services (1.99%) Health Planning and Certificate of Public Need 3,156,469 Investigation of Accidental and Suspicious 7,279,724 Total 10,436,193 Administration (2.49%) Administration Costs 13,086,775

Services to Communities (46.06%)

Control of Communicable Diseases/Environmental Health/	
Emergency Preparedness	132,031,747
Health Education and Information	13,153,996
Planning and Regulation of EMS,	
Hospitals and Nursing Homes	43,608,594
Environmental Health Hazards Control	7,479,427
Vital Records and Health Statistics	5,397,456
Scholarships	1,747,959
Community Human Service Organizations	11,513,743
Water Supply and Sewage	27,171,380
Total	242,104,302
TOTAL	\$525,618,468

Local Health Districts

Alexandria Health District Charles Konigsberg, M.D., M.P.H. District Director 4480 King Street. Alexandria, VA 22302 (703) 838-4400

Alleghany Health District Stephanie L. Harper, M.D. District Director Academy Street, PO Box 220 Fincastle, VA 24090 (540) 473-8240

Arlington Health District Reuben Varghese, M.D. District Director 800 S. Walter Reed Drive Arlington, VA 22204 (703) 228-5580

Central Shenandoah Health District G. Douglas Larsen, M.D. District Director 1414 North Augusta Street Staunton, VA 24402-2126 (540) 332-7830

Central Virginia Health District Katherine V. Nichols, M.D. District Director 1900 Thomson Drive Lynchburg, VA 24505 (434) 947-6777

Chesapeake Health District Nancy Welch, M.D., M.H.A., M.B.A. District Director 748 Battlefield Blvd., North Chesapeake, VA 23320 (757) 382-8600

Chesterfield Health District William R. Nelson, M.D., M.P.H. District Director 9501 Lucy Corr Circle Chesterfield, VA 23832 (804) 748-1743

Chickahominy Health District W. Ted Tweel, M.D., M.P.H. District Director 12312 Washington Hwy. Ashland, VA 23005 (804) 365-4313

Crater Health District Kathryn Rankin, M.D., M.P.H. District Director 301 Halifax Street Petersburg, VA 23804 (804) 863-1652 Cumberland Plateau Health District John J. Dreyzehner, M.D., M.P.H. District Director 155 Rogers Street Lebanon, VA 24266 (276) 889-7621

Eastern Shore Health District Michael Margolius, M.D., M.P.H. District Director 23191 Front Street Accomac, VA 23301-0177 (757) 787-5880

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Hampton Health District S. William Berg, M.D., M.P.H. District Director 3130 Victoria Blvd. Hampton, VA 23661-1588 (757) 727-1172

Henrico Health District Mark J. Levine, M.D., M.P.H. District Director 8600 Dixon Powers Drive Richmond, VA 23228 (804) 501-4522

Lenowisco Health District John J. Dreyzehner, M.D., M.P.H. Acting District Director 134 Roberts Street, S.W. Wise, VA 24293 (276) 328-8000

Lord Fairfax Health District Diana R. Helentjaris, M.D., M.P.H. District Director 107 N. Kent St., Suite 201 Winchester, VA 22601 (540) 722-3480

Loudoun Health District David Goodfriend, M.D., M.P.H. District Director 1 Harrison Street, S.E. Leesburg, VA 20177 (703) 777-0234

Mount Rogers Health District D. Craig Smith, M.D., M.P.H. District Director 201 Francis Marion Lane Marion, VA 24354-4227 (276) 781-7450 New River Health District Jody H. Hershey, M.D., M.P.H. District Director 210 South Pepper Street, Suite A Christiansburg, VA 24073 (540) 381-7100

Norfolk City Health District Valerie Stallings, M.D., M.P.H. District Director 830 Southampton Ave. Ste. 200 Norfolk, VA 23510 (757) 683-2796

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Pittsylvania/Danville Health District M. Geoffrey Smith, M.D., M.P.H. District Director 326 Taylor Drive Danville, VA 24541 (434) 799-5190

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