Clark County Public Health uses data to help us make the best decisions about how to protect the health of our community. To assess health needs in Clark County, our epidemiologists continually evaluate local health data—everything from smoking and obesity rates to adverse childhood experiences and health inequalities by zip code. We use data to improve the effectiveness of public health programs and to influence policy decisions that improve the health of the population. Knowing what the research shows about program effectiveness also helps us make better decisions on how to spend funds. This annual report provides examples of how data and research guide our work and help us achieve the primary goals of our 2013-14 strategic plan: working with community partners to prevent disease and injury, promote healthier choices, protect food, water, and air, and prepare for emergencies.

SHOW US
THE DATA

Graduated 40
moms from the Nurse Family Partnership Program, which provides home visits to low-income, first-time parents to improve pregnancy outcomes, child health and development, and self-sufficiency.

Assisted 373
low-income, at-risk women in accessing first trimester prenatal care through the Pregnancy Partners Program.

Administered 92
tuberculosis (TB) tests to persons exposed to someone with active TB to determine if they became infected with TB.

Issued 17,364
food worker cards, which certify that food workers are trained in the proper handling of food to reduce the chance of spreading foodborne illnesses.

Conducted 3,001
routine food service establishment inspections and 307 temporary food service inspections to ensure safe handling and preparation of food and correct any problems.

Ensured inspection of 7,552 onsite sewage systems to prevent groundwater contamination.

Identified deficiencies in 25% of onsite sewage systems inspected and of those, 3% were critical deficiencies requiring immediate repairs; worked with property owners to correct deficiencies.

Conducted 375 pool and spa inspections to ensure proper maintenance and reduce the spread of recreational water illnesses.

Evaluated 61 well sites, approved 101 new public water systems and inspected 10 public drinking water systems to prevent waterborne illness.

Issued 16,167
birth certificates and 10,577 death certificates.

2013 AT A GLANCE
NEIGHBORHOODS AND HEALTH

Nearly one-fifth of all Americans—about 52 million people—live in poor neighborhoods that lack the opportunities needed to support healthy living. Typically, these neighborhoods have fewer job opportunities, lower housing quality, and more pollution and crime. (Robert Wood Johnson Foundation, “Commission to Build a Healthier America”)

Did you know that your zip code may be a better predictor of your life expectancy than your genetic code? Public Health has been working to improve conditions in an area of central Vancouver where children are at a greater lifetime disadvantage than kids in surrounding neighborhoods. Initially, when we approached the faith community to join our Partnerships for Healthy Neighborhoods efforts, we were met with polite interest. But when we shared our data, our faith partners confronted some startling statistics: in this part of Clark County, 2 in 7 children live in poverty, 1 in 7 residents is unemployed, and 24 out of 30 students are on subsidized lunches compared with 13 out of 30 students in Clark County overall. Compared to the Clark County average, getting a healthy start in life is more challenging in this neighborhood, where babies are 30% more likely to have low birth weight and moms are 10% less likely to have first trimester prenatal care. Academic success is uncertain when only 56% of kids meet 3rd grade reading standards vs. the 72% Clark County average. The faith group quickly coalesced into an ongoing meeting group called Faith Based Coffee. Their current priority is working with Public Health and local schools to further the goal of healthy children who are ready to learn.

FAITH COMMUNITY TACKLES INEQUALITY


> Collaborated with community partners to help 130 uninsured children receive dental services.

> Investigated 146 reports of possible HIV infection; helped HIV positive individuals access health care and insurance, and identified partners potentially exposed to HIV to reduce transmission in the community.

> Provided HIV case management services to 339 clients, linking them to services that provide care and reduce HIV viral load and transmission within the community.

> Increased SNAP (Supplemental Nutrition Assistance Program) shopper transactions at area farmers markets by 68% and provided an additional $5,300 worth of fresh fruits and vegetables to low-income shoppers through a new Fresh Match program.

> Increased physical activity for over 1,000 children and their families with safe routes to school programs.

> Maintained a group of over 380 Medical Reserve Corp Volunteers to assist during public health emergencies.

> Partnered with Region IV PHEPR to conduct a full scale exercise, WASABE 2013, to test response plans for an Anthrax incident. Two hundred fifty-five participants, 145 from local agencies, 95 from state agencies, and 15 from federal agencies participated in this 3 day exercise.
If terrorists unleashed a cloud of deadly anthrax bacteria over the Clark County Event Center, would we be ready? It’s a scenario most people would prefer not to think about, but it’s one our community should be prepared to respond to. Using that scenario, Public Health led a three-day exercise last May designed to test the ability of staff and community partners to identify the illness, notify affected populations of the need to receive antibiotics, and be ready to distribute antibiotics at a medication center within 24 hours. Clark College provided space for us to set up a medication center, where exercise participants efficiently shepherded volunteer patients through the line to receive their simulated meds. Exercises show us what works well and what we need to improve. While there are still some things we could do better, Public Health has made great strides since a similar exercise we conducted in 2005. Since then, we’ve strengthened our relationship with emergency management agencies, improved our incident management skills, and shown that our plan for mass dispensing of medications really works. We will continue to periodically stage exercises to strengthen our ability to protect the public.
DRUG DEATHS IN CLARK COUNTY

In 2011, there were 42 deaths related to opiates for a rate of 10.3 per 100,000 deaths (age-adjusted). Opiate-related deaths represent 72.4% of all drug-related deaths in Clark County. (Washington Dept. of Health)

HOW HEALTHY ARE PEOPLE IN CLARK COUNTY?

The Healthy Columbia Willamette Collaborative offers a regional perspective on this question, looking at health data for Clark County and the Oregon counties of Clackamas, Multnomah, and Washington. The Collaborative was formed by metro area health leaders to address Affordable Care Act requirements that non-profit hospitals conduct periodic community health needs assessments. Health leaders felt that collaboration would strengthen the connection between hospitals and public health, reduce duplication of efforts, and improve community health and well-being. The Collaborative—which includes four public health departments, seven hospitals/health systems, and two Oregon Coordinated Care Organizations—began assessing community health in each of the four counties. It reviewed data and received community input from health agencies, low-income and medically underserved populations, and various other groups and minority communities. The Collaborative then identified several key health improvement areas: access to affordable health care, suicide prevention, opiate prescription misuse (see below), breastfeeding promotion, and tobacco prevention. Although each county has other specific health issues to address, these priorities represent the best opportunities for working together regionally to solve common problems. The Collaborative's website, www.healthycolumbiawillamette.org, contains detailed information about the health assessment, and a snapshot of each county’s health as a series of dashboard indicators.
When it comes to septic systems, Public Health works to disprove the old adage “out of sight, out of mind.” We need to be mindful of all septic systems in Clark County and get precise information about their numbers and locations. That’s important because just a few failing septic systems can threaten fragile ecosystems and human health. To better protect health and the investments of property owners, Public Health expanded its “septic system reconciliation” project in 2013. The goal is to get an accurate inventory of all septic systems in Clark County, including some that might not be in our records.

We’re comparing our septic system records with those of other county departments and other cities in Clark County. Our staff has found information about systems we never knew existed and properties that no longer use their systems because they’re connected to sewer. Better records mean our staff can more efficiently respond to sewage complaints and investigate potential hazards. The project also makes it easier for property owners and others to get accurate septic system records online. To search a property, visit http://intragis/gishome/property/index.cfm.

THE HUNT FOR HIDDEN SEPTIC SYSTEMS

SEPTIC SYSTEM RECONCILIATION PROJECT

- 3,837 properties with unknown waste water systems in June 2013
- 3,837 developed properties with unidentified waste water system
- 32,836 with known septic system
- Breakout of the 3,837 properties with unidentified system in January 2014
- 2,048 with septic system
- 1,450 awaiting ID
- 339 connected to sewer
“Sunday Streets Alive” is an appropriate name for an event that vividly brought streets to life in west Vancouver one sunny Sunday last August. More than 3,000 people took to the pavement on foot, bicycle, and skateboard. They walked, ran, danced, roller-bladed and enjoyed an abundance of healthy food, activities, and entertainment along a 4-mile route that was closed to motor vehicles but open to just about any other mode of transportation. The event was planned and organized by the city of Vancouver and 14 other community partners including Public Health. Event planners had multiple goals that included increasing a sense of community pride, enhancing social networks and interaction, and providing opportunities for fun, physical fitness, and healthy eating. It was a chance to rediscover neighborhoods, businesses, community centers, and parks. From a public health perspective, Sunday Streets Alive was also a great way to make people more aware of their options for active living, including safe, active transportation.

ACTIVE TRANSPORTATION COMPARISON BY COUNTY

Just 4.6% of Clark County commuters travel by biking, walking or transit, the lowest rate in the Vancouver-Portland region

<table>
<thead>
<tr>
<th>County</th>
<th>Percent Using Active Transport</th>
<th>Total Commuters (thousands)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clark</td>
<td>4.6%</td>
<td>189,117</td>
</tr>
<tr>
<td>Clackamas</td>
<td>6.7%</td>
<td>180,793</td>
</tr>
<tr>
<td>Washington</td>
<td>9.5%</td>
<td>257,225</td>
</tr>
<tr>
<td>Multnomah</td>
<td>19.8%</td>
<td>353,831</td>
</tr>
</tbody>
</table>

(Clark County Growing Healthier report)
Here’s an example where we acted on a hypothesis, confident that the data would support us. Our staff believed that using Internet technology to observe tuberculosis (TB) patients taking their medications would save time and money while improving convenience and privacy for patients. TB remains a serious illness. A barrier to TB control is treatment that requires multiple medications for at least six months. That’s why the Centers for Disease Control and Prevention and the World Health Organization recommend directly observed therapy (DOT)—observing a patient taking TB medications to ensure every dose is taken to completion. A patient who fails to take the full course of medications can develop multi-drug resistant TB. In 2009, Clark County Public Health became the first agency in Washington State to use electronic DOT, allowing patients to record dose-taking by home computer or smartphone, a convenience they appreciate. Twelve patients have used electronic DOT and all completed treatment. The data supports electronic DOT. Since 2009, we have saved almost $29,000 by reducing staff time and travel. Now we’re expanding the use of electronic DOT by lending tablet computers to those without electronic equipment.

A NEW APPROACH TO CONTROLLING AN OLD DISEASE

An anteroposterior (AP) x-ray of a patient’s chest, who was diagnosed with bilateral pulmonary tuberculosis.

TUBERCULOSIS TREATMENT

% of TB patients completing treatment (national studies)

<table>
<thead>
<tr>
<th>Treatment Type</th>
<th>Completion Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Non-supervised treatment</td>
<td>61.4%</td>
</tr>
<tr>
<td>Partial DOT</td>
<td>78.6%</td>
</tr>
<tr>
<td>DOT with incentives/enablers</td>
<td>86.3%</td>
</tr>
<tr>
<td>DOT (e.g., electronic DOT)</td>
<td>91.0%</td>
</tr>
</tbody>
</table>

(Chaulk CP, Kazdanjian VA, Public Health Tuberculosis Guidelines Panel. Journal of the American Medical Association)
On a crisp day last October, a crowd of people eager to get health insurance lined up to get onto a bus parked outside the Vancouver Community Library. The event was part of a statewide enrollment bus tour hosted by the Washington Health Benefit Exchange. The state enrollment system was down, which meant applications had to be filled out by hand. Even so, the 50 or so people who enrolled seemed genuinely excited. Some had been uninsured for decades. Others had expensive plans they couldn’t afford. In-Person Assisters, trained by Public Health, were on hand to help applicants sort through the details, compare plans, and determine eligibility for tax deductions. Besides those who enrolled, nearly 100 people signed up to receive additional information, and even more stopped by to pick up flyers and ask about available health plans. It was a good day for improving health care access. Although the deadline for enrolling in a qualified health plan was March 31, 2014, Apple Health (Medicaid) enrollment is available year round. If you aren’t covered, please visit wahealthplanfinder.org.

CAN’T AFFORD A DOCTOR

In 2010, 15.1% of adults in Clark County said they could not afford to see a doctor when they needed to (WA State BRFSS)
Last April, Clark County Public Health offered farewells and best wishes to John Wiesman, who resigned as director of this department to become Washington State’s new Secretary of Health, reporting directly to Governor Jay Inslee. John joined this department in 2004 and skillfully oversaw a period of great transition. He helped to raise the profile of Public Health in the community and gave us a roadmap for the future. We’ll no doubt continue to benefit from his leadership at the state level.

In October, Marni Storey, who served as interim director following John’s departure, left the department to take on a new health leadership position in Washington County, Oregon. Marni joined the department in 1999 and successfully oversaw the implementation of numerous health initiatives. She will also be remembered for excellence in developing and mentoring department managers.

We are grateful to John and Marni for their creativity, dedication, and leadership. Following their departure, we have implemented a new leadership structure. Dr. Alan Melnick is now serving as both county Health Officer and department administrator, a leadership model used in several other Washington health departments. He serves on the department’s new leadership team along with Jeff Harbison, Chief Administrative Officer; Janis Koch, Chief Performance Officer; and Tricia Mortell, Chief Operations Officer.
Improving access to data and keeping up with rapidly changing technology is essential to the work of public health. Here are some changes related to the use of data that will make a difference in our ability to serve the public in the next several years:

- In 2014, we hired an informaticist to help us integrate the various systems we use for managing data. Currently, each of these systems has different security measures, capabilities, and user interfaces. This position will help improve the efficiency, accuracy, and security of our business practices and allow us to better share data with our partners.
- Public Health is working with the Washington Department of Health to replace the state’s communicable disease reporting system by summer of 2014. The new system will improve accuracy, efficiency, and our ability to control the spread of communicable diseases.
- The Healthy Columbia Willamette collaborative will use data from its recent community health needs assessment to finalize regional health promotion strategies, including reducing prescription opioid misuse, promoting breastfeeding and reducing suicide rates for veterans. (See page 5 of this report.)
- Public Health is using available data to create maps that show varying obesity rates in Clark County along with the location of parks, walkable streets, healthy food sources, areas of poverty, and other factors. Overlaying these maps will help us more accurately understand the connections between county obesity rates, the built environment, and social determinants of health. Ultimately, these efforts will help us develop policy recommendations and programs to reduce obesity.
- Clark County, like much of the country, is experiencing an increase in heroin overdoses. As Public Health develops training on the use of naloxone (opioid antagonist) to prevent overdoses, our epidemiologists will create evaluation tools to monitor training effectiveness. Collecting timely overdose death surveillance data, monitoring overdose reversals, and evaluating the effectiveness of naloxone distribution will help inform future strategies to reduce opioid deaths.
- Thanks to a federal grant, our chronic disease prevention team is working on strategies to reduce salt consumption in Clark County. Our epidemiologists will develop a rigorous evaluation plan to track performance data such as increased availability and selection of low-salt foods, including those offered at local restaurants implementing sodium reduction strategies.
- Our public health nurses (PHNs) who make home visits are transitioning from paper charts to electronic health records. Using computer tablets with portable Internet access, PHNs can help clients apply for health care coverage or download teaching materials. PHNs will be able to chart off site and can more easily coordinate care with other health care providers.

Ultimately, the effective use of data translates into improved health outcomes for our community. As we position ourselves for the future in the digital era, I’d like to personally thank all the public health partners—agencies, organizations, individuals—whose help and support makes this work possible.

Alan Melnick, MD, MPH, CPH
Health Officer/Administrator