I. INTRODUCTION

The 2007 Washington State Legislature passed Engrossed Second Substitute House Bill (E2SHB) 5930, also known as the Blue Ribbon Commission bill. Sections 60-65 of the bill addressed public health and are now codified in RCW 43.70.512 – 522. The purpose of this document is to provide a brief overview of efforts related to and the impacts of the public health section of E2SHB 5930.

II. BACKGROUND

Engrossed House Concurrent Resolution 4410 and the Joint Select Committee on Public Health Funding

The 2006 Washington State Legislature passed Engrossed House Concurrent Resolution (EHCR) 4410 and created the Joint Select Committee (JSC) on Public Health Funding. The JSC was a bipartisan study committee of the House and Senate, tasked with studying the persistent shortfall in public health funding. In response to the committee’s request for information, local and state public health officials developed and presented a report titled Creating a Stronger Public Health System: Setting Priorities for Action (labeled “Statewide Priorities” on the committee’s web site http://www.leg.wa.gov/jointcommittees/PHF/Pages/default.aspx). The report ordered a list of priorities “for the next investment in public health” as follows:

- Stopping communicable diseases before they spread
- Reducing the impact of chronic disease
- Investing in healthy families
- Protecting the safety of drinking water and air
- Using health information to guide decisions
- Helping people get the health care services they need

The committee unanimously concluded that “the lack of a stable source of funding provided specifically for public health services has eroded the ability of local health jurisdictions to maintain a reliable statewide system that protects the public’s health.” It recommended that the state “provide additional funding in the amount of approximately $50 million annually during the 2007-2009 biennium, as an initial investment” and that a “dedicated account for public health revenues” be established. Finally, it recommended that these actions be considered “the first step in what must be continuing state and local efforts to fund the public health system at a level that provides the capacity to effectively deliver the five core functions.” http://www.leg.wa.gov/jointcommittees/PHF/Pages/default.aspx

Engrossed Second Substitute House Bill 5930

The 2006 Washington State Legislature established the Blue Ribbon Commission on Health Care Costs and Access and charged it with delivering a five-year plan for substantially improving access to affordable health care for all Washingtonians. The recommendations of the Commission are available at http://www.leg.wa.gov/JointCommittees/HCCA/Documents/Final%20Report.pdf. In 2007 the recommendations were largely incorporated into Engrossed Second Substitute House Bill (E2SHB) 5930 which was passed by the legislature. This bill also addressed the findings of the Joint Select Committee on Public Health Funding. Sections 60-65 of the bill addressed the public health system and are now codified in RCW 43.70.512–522.

Through the 2007-2009 biennial budget process (SHB 1128, Section 222 (29)) the legislature also appropriated $20 million per biennium of General Fund State dollars for local public health to implement the public health portion of the new law.
This new public health funding stream and effort, known as “5930” after the bill number, is not a program unto itself, but rather additional funding to enhance public health work in the priorities identified in the *Building a Stronger Public Health System* report.

As required by the new law, public health officials made recommendations to the Secretary of Health regarding: a) performance measures for the new funds and b) activities and services that qualify as core public health functions of statewide significance. See [http://www.doh.wa.gov/phip/5930PM/product.htm](http://www.doh.wa.gov/phip/5930PM/product.htm)

Finally, the law also required the Washington State Department of Health (DOH) to report to the legislature beginning in November 2009 and annually thereafter on how the funds were spent and the impact. In 2009, as a part of budget reductions, the legislature eliminated this report. In lieu of the report, this document provides a summary of the efforts and impacts of the law and new funds.

### III. MEASURING THE IMPACT OF NEW FUNDS ON PUBLIC HEALTH SYSTEM PERFORMANCE

Local and state public health officials agreed to focus the funds on the top two priority areas identified in the *Building a Stronger Public Health System* report, specifically:

- Stopping communicable diseases before they spread
- Reducing the impact of chronic disease

The following performance measures were selected:

- Improved uptake of childhood immunizations
- More timely and complete communicable disease investigations
- Increased efforts to stop the obesity epidemic

They agreed to direct the funds, in rank order, to improve performance first in immunizations, then communicable disease, and if funds stretched far enough in a given local health jurisdiction (LHJ), also in chronic disease prevention.

Specific reporting measures were selected from existing or available data sources because it was believed that the legislature provided the new funds primarily for *doing* public health work and not for designing and building new data or measurement systems. Also work had already begun and existing data could provide for both baseline (performance before the new funds were provided) and on-going (performance with the infusion of new funds) data needs. Other criteria that influenced the selection of reporting measures included:

- Desire for meaningful measures
- Measures of public health system performance, not necessarily health status or outcome measures
- Sensitive to a change in resources
- Rapidly reflect change (6-12 months)
- Available every 6 months
- Applicable to 35 independent agencies
- Provide county-level data
- Be agreeable to local and state public health officials

The 5930 performance measures and specific reporting measures for the new funds follows.

**Stop Communicable Disease Before It Spreads**

**Performance Measure #1**: Increase the uptake of new and under-used child and adolescent vaccines; specifically focusing improvement efforts and reporting on varicella, rotavirus, HPV and pediatric influenza vaccines.

- **A**: Number of doses of vaccine ordered by each LHJ
- **B**: Number of doses administered as recorded in CHILD Profile

**Performance Measure #2**: Improve the timely, complete identification and standard, effective investigation of notifiable conditions per Washington Administrative Code (WAC) 246-101.
A - Percent of notifiable condition cases reported to the LHJ within the required time frame (per WAC)
B - Percent of notifiable condition cases reported to the LHJ where investigation was initiated within the time frame specified
C - Percent of notifiable condition cases reported to the LHJ with a completed investigation as indicated by completion of "measurement fields"

**Reduce the Impact of Chronic Disease**

**Performance Measure #3:** Develop and implement effective community and health care system interventions to address obesity and its consequent burden of chronic disease. Interventions may target worksites, schools, communities, or primary medical care.
A - Number and description of LHJ activities and interventions to address obesity or chronic disease and associated risk factors in the community

**IV. RESULTS**

**Stop Communicable Disease Before It Spreads**

**Performance Measure #1:** Increase the uptake of new and under-used child and adolescent vaccines; specifically focusing improvement efforts and reporting on varicella, rotavirus, HPV and pediatric influenza vaccines.
A - Number of doses of vaccine ordered by each LHJ
B - Number of doses administered as recorded in CHILD Profile

**Doses of Vaccine Ordered**

![Doses of Vaccine Ordered Chart]

HPV  Rotavirus  Varicella  Pediatric Flu
Notes

**Varicella vaccine**
In 2007 varicella vaccine transitioned from a single dose to a two-dose series. 2007 also marked the second year that varicella vaccine was required for school entry. These changes drove high ordering in both 2007 and 2008, but usage at that level would not be expected to be sustained over time. A two-dose series, once stabilized, should yield about 174,000 doses of vaccine used each year. That would be enough for 100% vaccination coverage rates for all children in a single Washington birth cohort with two doses of vaccine. This leveling out process is most noticeable in 2009 and is continuing into 2010. Continued growth in vaccine ordering is not expected due to this process of stabilization.

**Rotavirus vaccine**
Rotavirus vaccine was introduced in Washington in May 2007. A change in state law enabled health care assistants, who frequently staff physician offices, to administer rotavirus vaccine (an orally administered product). This dramatically increased the use of the vaccine in Washington. Eight months' usage in the baseline year and 12 months' usage in subsequent measurement periods contributed to a 119% increase in ordering between 2007 (baseline year) and 2008. Between 2008 and 2009 the increase continued, with a 22% increase between years 2 and 3 post implementation. 2009 (year 3) of implementation of rotavirus vaccine showed a 166% increase over the baseline year. This vaccine is a three-dose series, and stabilization is expected to be about 200,000 doses. Growth for rotavirus vaccine ordering should peak in 2010.
Notes

**Human Papillomavirus (HPV) vaccine**
In 2007 and 2008, HPV vaccine was ordered for all adolescents in Washington through the State Childhood Vaccine Program. In 2009 Washington no longer provided HPV vaccine for adolescents with health insurance. This dramatically decreased the ordering of HPV vaccine between 2008 and 2009. In addition, during the first two years HPV vaccine was available, it appears that the majority of catch-up vaccination was completed by adolescents who sought health care. Adolescent health care-seeking behavior indicates that fewer than 65% self-report having a health care encounter and, of those, fewer receiving vaccinations. Nationally, the usage of HPV has declined dramatically and it is suspected that the same influencing factors are at work – those adolescents that intended to be vaccinated have been vaccinated, with less catch-up vaccination occurring among adolescents.

**Childhood influenza vaccine**
Childhood influenza vaccination has shown continued growth as the acceptance of routinely immunizing all children less than 19 years of age grows among the provider community and with the public. In the 2009–2010 influenza season, media coverage and public health campaigns for H1N1 vaccine may have driven up the ordering and use of seasonal childhood influenza vaccine as well as adult seasonal influenza vaccine.

**Seasonality**
“Seasonality” impacts the amount of vaccine ordered and administered at different times during the year. Between July and September each year, preparation for back to school causes parents to make sure children’s vaccinations are up-to-date. Influenza vaccine is typically administered from fall (October) through spring (March). Because of these patterns, it is best to compare winter/spring 07 to winter/spring 08 and summer/fall 07 to summer/fall 08, until annual totals are available for comparisons.

**CHILD Profile**
The statewide immunization registry CHILD Profile reflects the patterns of usage described above. In addition, it is influenced by the degree of provider participation in the immunization registry. At the beginning of 2007, 70% of vaccination providers statewide participated in the registry, compared to 90% at the end of 2009. Increased usage of CHILD Profile and more complete submission of immunization data is also reflected in the increases in number of doses administered per the immunization registry. While the number of HPV doses in CHILD Profile decreased from 2008 to 2009 for the reasons described above, the degree of decrease was much less. The number of doses in CHILD Profile exceeded the number of doses ordered through the state program because providers do not restrict their reporting only to publicly-supplied doses.

**Performance Measure #2:** Improve the timely, complete identification and standard, effective investigation of notifiable conditions per Washington Administrative Code (WAC) 246-101.

A - Percent of notifiable condition cases reported to the LHJ within the required time frame (per WAC)

B - Percent of notifiable condition cases reported to the LHJ where investigation was initiated within the time frame specified

C - Percent of notifiable condition cases reported to the LHJ with a completed investigation as indicated by completion of "measurement fields"
Percent of Non-STD/TB/HIV Cases Reported on Time and with Timely and Complete Investigations

Percent of Chlamydia and Gonorrhea Cases Reported on Time and with Timely and Complete Investigations

Reported to LHJ on time
LHJ began investigation on time
LHJ completed investigation

No timeframe specified
Percent of Early Syphilis Cases Reported on Time and with Timely and Complete Investigations

Percent of HIV/AIDS Cases Reported on Time and with Timely and Complete Investigations
Notes

**Non-STD/TB/HIV cases**
During the last half of 2009, similar to other six-month time periods, approximately 2,000 notifiable condition cases were reported and investigated. During this same time period, due to the H1N1 pandemic, an additional 1,615 influenza cases were reported and investigated. Public health staff also planned and implemented community wide pandemic prevention and response activities.

**STD-TB-HIV**
To establish consistent measures between communicable and infectious diseases (HIV, STDs, and TB) required new data to be collected for infectious diseases, modification of data collection forms, and data systems upgrades. This work was carried out between 2007 and the first half of 2008. Thus, the July-December 2008 period is the first available data point for these diseases. Changes between the two measured time periods more likely indicate adjustments to the data collection forms and systems than changes in actual program performance.

Continued refinement of the electronic disease investigation records in the Public Health Issues Management System (PHIMS) to better capture the patient follow-up activities and interviews will improve the ability to measure performance.

Investigation of the non-acute infectious diseases (e.g., early syphilis, HIV) may occur over many months and, thus, may not be counted as complete in the reporting period in which they were initiated.
Notes

*Chlamydia and gonorrhea*

On average, about 23,500 cases of Chlamydia and gonorrhea are reported statewide annually. Thus the data displayed in the charts, while indicating performance improvement statewide, do not fully display the magnitude of impact on people and disease. Every 10% of improvement in timeliness of investigations or completeness of reporting represents 2,350 cases statewide that are receiving timely and complete investigations to prevent further spread of the disease.

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**Reduce the Impact of Chronic Disease**

**Performance Measure #3:** Develop and implement effective community and health care system interventions to address obesity and its consequent burden of chronic disease. Interventions may target worksites, schools, communities, or primary medical care.

**A -** Number and description of LHJ activities and interventions to address obesity or chronic disease and associated risk factors in the community

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**Percent of LHJs Completing the Survey that Lead or Participated in Community Interventions**

![Graph showing the percentage of LHJs completing the survey over time](image-url)
Notes

Obesity and chronic disease prevention, on a population-based or community-wide basis, is relatively new to public health in Washington State. Promising practices, best practices and standardized approaches are evolving. Few routine processes are in place and no performance data exists at this time.

The most cost effective strategies involve community approaches that make it easier for individuals to make healthy choices around nutrition and physical activity – like having healthy foods available at school or work and creating safe places to walk or play. These types of initiatives require cooperative action by many agencies, organizations and individuals. This type of cooperation frequently occurs via a community coalition.

To measure change, a survey of each LHJ was implemented. LHJ’s were asked if they lead or participated in a community coalition(s) and community-wide activities to reduce the impacts of chronic disease.

Based on work plans submitted by each LHJ, 25 of 35 LHJs included a focus on “reducing the impact of chronic disease.” All 35 LHJs were required to complete the survey, but the response rate varied (57-91%) each time the survey was conducted. The survey did not collect information about whether or not the LHJ was using 5930 funds for these activities.
V. HOW WERE THE FUNDS USED?

Allocation
The state 2007-2009 biennial budget (beginning July 2007) appropriated $20 million. DOH was allowed up to 5% of the funds for costs to administer the work. The budget proviso (SHB 1128, Section 222 (29)) established the funding allocation formula for local health jurisdictions (LHJs). In general, each LHJ was to receive a base of $100,000, with the remainder of the funds allocated per capita. The budget proviso directed that the funds be disbursed to LHJs on January 1 of each year, beginning in 2008. Each LHJ received a year’s worth of funds in one lump sum to use for public health activities that positively impact the performance measures. Performance-based contracts were established between DOH and each LHJ via the Consolidated Contract. A table of LHJ allocations and information regarding tracking of funds can be found at http://www.doh.wa.gov/phip/5930PM/product.htm.

Based on work plans submitted by each LHJ, all 35 LHJs focused on “stopping communicable diseases before they spread” and 25 of 35 LHJs also focused on “reducing the impact of chronic disease.”

Use
The State Department of Health (DOH)
DOH was allowed up to 5% of the funds for costs to administer the work. DOH used these funds as shown below:

- Updated Guidelines for each notifiable condition – includes collaboration and vetting with local health officers
- Improved computer data systems:
  - Vaccine Ordering & Management Systems (VOMS) – implemented
  - CHILD Profile – make more data and reports available to each LHJ
  - Public Health Issues Management System (PHIMS) – added TB and STD to this system; defined and indicated “required fields”
- Trained LHJs on updated Guidelines and use of the computer systems
- Conducted statewide outreach efforts to health care providers on immunizations, disease, reporting, investigation
- Provided technical assistance to LHJs
- Compiled and analyzed statewide data
- Convened statewide committees, as mandated by the law, to select performance measures and recommend core public health functions of statewide significance and performance measures
- ~2 FTE

DOH Funds

- Communicable Disease $163,019
- Activities and Services $91,391
- Committee $40,131
- Staff for statewide coordination $251,272
- Community Wellness and Prevention $26,692
- Agency indirect charges on $20 million $323,540
- Total: $1 million/biennium

Source: Expenditures 07-09
Local Health Jurisdictions (LHJs)

Based on work plans submitted by each LHJ, the funds were used for the following types of activities across the state:

- Analyzed and used local data to identify issues and target effort
- Planned to hire over 40 FTEs and expanded work hours of others
- Trained public health staff and health care providers in
  - Immunizations, disease reporting, investigation
  - Software use - VOMs, CHILD Profile, PHIMS
- Provided information to partners and the public that promoted immunizations, reduce immunization exceptions, reduce behaviors that increase risk of disease and promote healthy behaviors
- Lead/joined community coalitions addressing obesity prevention
- Implemented automated immunization reminder/recall notices from CHILD Profile, an evidence-based practice
- Established automated transfers of immunizations data from Electronic Medical Records to CHILD Profile
- Increased treatment options for patients with STDs by expanding referral networks and implementing Expedited Partner Therapy
- Promoted nutrition and physical education in schools and walk-to-school programs
- Implemented Basic Food and Nutrition Education Program and other healthy eating programs

LHJ Use of Funds

Total: $9.5 million/year
Source: 2008 Bars
VI. CONCLUSIONS

As a field of study and as a system, public health is experienced in using health data to monitor and respond to health concerns. The public health system in Washington State has growing experience in measuring the performance of the system for quality improvement and accountability purposes. The 5930 funding provided much needed resources to enhance efforts to keep the public safe and promote health and increased attention to measuring the effect of the funds.

After analyzing and reviewing the performance data and reviewing how the funds were used, we conclude that the impact of the 5930 funds was positive. Other conclusions include:

- New state funds were used for statewide priorities – common focus, goals, measures (“what”)
- While allowing local flexibility on the best way to impact the measures in each jurisdiction (“how”)
- A clear cause and effect relationship is not possible, but the needle is heading in the right direction
- Measuring impact of additional funds is challenging, still needs improving, but is showing progress
- Both state and local public health agencies have gained more experience with performance-based contracting

Measuring performance across the governmental public health system that is composed of 36 independent agencies is a challenge, but is necessary in order to gauge the impact of system-wide policy, strategies, and investments. Measuring performance of key public health processes that span many separately funded and administered programs is also a challenge, but necessary in order to see the whole picture.

The results and lessons learned from the on-going experience with 5930 will be used to inform and improve performance measurement of the public health system in Washington State.

VII. FUTURE – 2009-2011 BIENNium

The 09-11 state budget that was passed during the 2009 legislative session included reductions in state general funds to many programs. Funding for 5930 was reduced by 20% from $20 million/biennium to $16 million/biennium and the source of these funds was changed from state general funds to the Tobacco Prevention and Control Account. At present the Tobacco Prevention and Control Account is expected to be depleted by June 2011.

The funding formula specified in the original budget proviso continues to be used to allocate the $16 million/biennium of 5930 funds. As specified in the proviso, funds will be disbursed to each LHJ on January 1 of 2010 and 2011. As before, performance-based contracts will be established via the Consolidated Contract with each LHJ to receive a year’s worth of funds in one lump sum to take action and positively impact the performance measures.

For now the performance measures will remain the same. This will allow us to compare performance over time. One of the purposes of measuring performance is to observe, evaluate, or demonstrate the impacts of policy and resource changes on performance, over time. Will changing the “universal” vaccine approach affect these measures? What will the effect be of reduced 5930 funds and other budget constraints on these measures? How will H1N1 or other public health emergencies impact performance? The only way to find out is to keep the measures the same, so that baseline data can be compared to 2008, 2009, 2010 and 2011, while considering what changed or happened during these time periods and how this may have affected performance.

The new biennium began in July 2009 and the new calendar year is already underway. The public health system is stretched to address H1N1, budget reductions and more. Time will be needed to engage local and state public health leaders in a thoughtful and collaborative process to evaluate 5930 so far, learn from the data that has been collected, consider other related measurement initiatives and recommend improvements in measurement and an overall integrated approach.

More information can be found on the 5930 web page at http://www.doh.wa.gov/PHIP/5930PM/overview.htm

5930 is one of three flexible state funding streams to LHJs. For more information on local public health funding, please see the 2008 PHIP report, Appendix 2 http://www.doh.wa.gov/phip/documents/2008PHIP/08report.pdf
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5930 Summary
2007-2009 Biennium (Calendar Years 2008-2009)

Appendix

I. PERFORMANCE MEASURES AND SUMMARY DATA USED TO PRODUCE CHARTS

In selecting performance and reporting measures the aim was to measure performance of the public health system – work done by or the impact of work done by the public health system - rather than ultimate health status or outcome such as immunization rates or disease rates. In measurement terms, the aim was to focus more on process measures or intermediate outcomes. The types of things that would answer questions like, “With new resources, is the public health system doing more or better public health work?”

Detailed and raw data for each LHJ can be found on the 5930 web page at http://www.doh.wa.gov/phip/5930PM/product.htm

Stop Communicable Disease Before It Spreads

Performance Measure #1: Increase the uptake of new and under-used child and adolescent vaccines; specifically focusing improvement efforts and reporting on varicella, rotavirus, HPV and pediatric influenza vaccine.

A - Number of doses of vaccine ordered by each LHJ – selected as a proxy for the number of shots given.

B - Number of doses administered as recorded in CHILD Profile – selected to measure the use of the statewide immunization registry. As more providers who administer immunizations use this system, it will be easier for providers to have complete data at their fingertips in order to administer the correct vaccine at the correct time and allow public health official to more accurately determine immunization rates and implement effective strategies to promote immunizations.

Selected or sentinel antigens were used as indicators because in general the same efforts employed to promote these will also promote all other antigens.

Reporting Measure 1A – Number of doses of vaccine ordered

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<thead>
<tr>
<th></th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
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</thead>
<tbody>
<tr>
<td>HPV</td>
<td>169,860</td>
<td>180,060</td>
<td>91,490</td>
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<tr>
<td>Rotavirus</td>
<td>72,530</td>
<td>158,680</td>
<td>193,040</td>
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<tr>
<td>Varicella</td>
<td>313,310</td>
<td>313,180</td>
<td>269,320</td>
</tr>
<tr>
<td>Pediatric flu</td>
<td>333,600</td>
<td>388,640</td>
<td>405,310</td>
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Reporting Measure 1B – Doses recorded in CHILD Profile

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<tr>
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<th>2007</th>
<th>2008</th>
<th>2009</th>
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<tbody>
<tr>
<td>HPV</td>
<td>84,775</td>
<td>124,487</td>
<td>95,288</td>
</tr>
<tr>
<td>Rotavirus</td>
<td>33,813</td>
<td>113,866</td>
<td>146,400</td>
</tr>
<tr>
<td>Varicella</td>
<td>157,083</td>
<td>264,260</td>
<td>220,323</td>
</tr>
<tr>
<td>Pediatric flu</td>
<td>231,873</td>
<td>318,998</td>
<td>389,113</td>
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</table>
DOH Activities

Implementation of a web-based vaccine ordering system for all individuals and organizations in Washington State that order and use vaccine. This included providing training to LHJ staff and health care providers on how to use the new system.

Additional training for LHJ staff on how to use the statewide immunization registry called CHILD Profile.

Identifying promising practices and encourage implementation across the state. For example, use of “immunization reminder cards” that are mailed to parents. DOH provided training and technical assistance to LHJs and health care providers on how to use existing functionality in CHILD Profile to automatically generate these mailings.

DOH conducted large-scale statewide outreach efforts to health care providers, including school nurses and other school personnel, to provide vaccine and immunization information, enroll their site in the statewide immunization registry called CHILD Profile and provide training on how to use this web-based software.

Contracted with a vendor to build additional analytic and reporting functions into CHILD Profile so that LHJs have more capacity to analyze local immunization data to better identify specific local issues and implement the most effective strategies.

Technical assistance is provided to LHJs individually and in groups on conference calls.

Statewide data compilation and analysis.

LHJ Activities

BARS data for calendar year 2008 indicates that statewide LHJs spent 18% of the funds on communicable disease prevention by promoting immunizations and 10% on maternal and child health activities.

Work plans submitted by each LHJ can be found at: [http://www.doh.wa.gov/phip/5930AS/product.htm](http://www.doh.wa.gov/phip/5930AS/product.htm). Work plans for calendar years 2008 – 2009 indicate the intent to hire over 20 FTE of new staff statewide (8.4 RNs, 7 data analysts, 4 health educators, 1.25 clerical) and expand the work hours or otherwise provide salary support to other existing staff. The work plans indicate that nearly every LHJ planned to implement almost all of the activities listed below – many with their own tailored approach specific to the unique issues and opportunities in their communities.

1. Provide training/education to LHJ staff, health care providers (including WIC, adolescent and family planning providers), community (parents, day-care providers, schools) and non-English speakers on immunizations (risks, benefits, schedule, how to access, etc.) to increase awareness of and interest in immunizations.

2. Provide training/education to LHJ staff, health care providers and schools on how to use the web-based statewide immunization registry called CHILD Profile to recruit new providers to use it and increase use among existing users.

3. Providing training/education to LHJ staff, health care providers and schools on how to use the CHILD Profile reminder/recall functions to increase the use of the evidence-based practice of mailing parents reminder cards when it is time for their child’s next immunization.

4. Provide training/education, technical assistance, and in some cases staff support to health care providers regarding data entry into CHILD Profile to reduce the workload burden on health care providers and increase their participation in CHILD Profile, reduce the time lag between vaccine administration and data entry and improve the quality and usability of immunization data.
5. Analyze and use data from CHILD Profile.
   • Assess the completeness and accuracy of data in CHILD Profile.
   • Provide estimates of baseline immunization rates. Interpret county immunization rates for LHJ staff and health care providers. Improve provider understanding of community immunization rates and their role in improving overall rates.
   • Use the data to target efforts:
     o To providers serving large numbers of children and adolescents, especially low-income clients
     o To providers with low usage rates of vaccines or CHILD Profile
   • Quarterly recognize provider who gives the largest number of vaccines based on their practice size.
   • Research, collect and analyze health data related to vaccine-preventable disease and link with immunization data and information.

6. Minimize the number of immunization exemptions by providing education to child care and school staff about immunizations, vaccine-preventable disease, and issues around susceptible or unimmunized students in the event of an outbreak. Working with child care and school staff to review and analyze the data regarding exemptions and improve the completeness and accuracy of data.

7. Increase the availability and convenience of immunizations in the community by sharing information on where immunizations are provided; promoting the routine offering of immunizations at schools based clinics, family planning clinics, sports physicals juvenile detention facilities, etc.; promoting or arranging special immunization events (i.e., school-based “back to school” immunization events), expanding LHJs’ immunization clinic services.

Performance Measure #2: Improve the timely, complete identification and standard, effective investigation of notifiable conditions per Washington Administrative Code (WAC) 246-101.

A - Percent of notifiable condition cases reported to the LHJ within the required time frame (per WAC)

B - Percent of notifiable condition cases reported to the LHJ where investigation was initiated within the time frame specified

C - Percent of notifiable condition cases reported to the LHJ with a completed investigation as indicated by completion of “measurement fields”

These measures were selected because they measure critical aspects of public health for stopping the transmission of disease in communities.

Selected or sentinel conditions were not used in these measures. Rather all 61 notifiable conditions that the Washington Administrative Code (WAC) requires be reported to public health were used. This made for challenging data analysis on such wide-ranging and voluminous data. It also provided the opportunity for a new look at this type of data.

• A similar public health process (disease reporting, investigation, action) is used for most of the notifiable conditions.
• Timelines for reporting, investigation and action vary by condition due to how rapidly it spreads or causes complications
• Some conditions included in the WAC are not communicable or infectious, require very different public health responses and, thus, were not intended to be the focus of this measure (i.e., lead, pesticide poisoning, gun shots wounds, etc.) and are not included in the 5930 data.
### Performance Measure #2 – Non-STD/TB/HIV conditions

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<tbody>
<tr>
<td>A. Reported to the LHJ within the WAC time frame for report source</td>
<td>72%</td>
<td>77%</td>
<td>85%</td>
<td>86%</td>
<td>80%</td>
</tr>
<tr>
<td>B. Investigation initiated within time frame</td>
<td>98%</td>
<td>98%</td>
<td>98%</td>
<td>99%</td>
<td>97%</td>
</tr>
<tr>
<td>C. LHJ completion of “measurement fields”</td>
<td>No data</td>
<td>68%</td>
<td>89%</td>
<td>97%</td>
<td>95%</td>
</tr>
</tbody>
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### Reporting Measure #2 – Chlamydia and gonorrhea

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<tbody>
<tr>
<td><strong>Number of measures cases</strong></td>
<td>11,843</td>
<td>23,423</td>
<td></td>
<td></td>
</tr>
<tr>
<td>A. Reported to the LHJ within 3 days of laboratory confirmation</td>
<td>No data</td>
<td>No data</td>
<td>29%</td>
<td>44%</td>
</tr>
<tr>
<td>B. Investigation initiated within the required time frame</td>
<td>Time frame not specified</td>
<td>Time frame not specified</td>
<td>Time frame not specified</td>
<td></td>
</tr>
<tr>
<td>C. LHJ completion of “measurement fields”</td>
<td>No data</td>
<td>No data</td>
<td>55%</td>
<td>75%</td>
</tr>
</tbody>
</table>

### Reporting Measure #2 – Early Syphilis

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Number of measures cases</strong></td>
<td>138</td>
<td>197</td>
<td></td>
<td></td>
</tr>
<tr>
<td>A. Reported to the LHJ within 3 days of laboratory confirmation</td>
<td>No data</td>
<td>No data</td>
<td>36%</td>
<td>44%</td>
</tr>
<tr>
<td>B. Investigation initiated within the required time frame</td>
<td>Time frame not specified</td>
<td>Time frame not specified</td>
<td>25%</td>
<td>64%</td>
</tr>
<tr>
<td>C. LHJ completion of “measurement fields”</td>
<td>No data</td>
<td>No data</td>
<td>29%</td>
<td>76%</td>
</tr>
</tbody>
</table>

### Performance Measure #2 – TB

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Number of measured cases</strong></td>
<td>123</td>
<td>251</td>
<td></td>
<td></td>
</tr>
<tr>
<td>A. Reported to the LHJ on the same day treatment was started</td>
<td>No data</td>
<td>No data</td>
<td>35%</td>
<td>79%</td>
</tr>
<tr>
<td>B. Investigation initiated within the required time frame</td>
<td>No data</td>
<td>No data</td>
<td>22%</td>
<td>55%</td>
</tr>
<tr>
<td>C. LHJ completion of “measurement fields”</td>
<td>No data</td>
<td>No data</td>
<td>33%</td>
<td>98%</td>
</tr>
</tbody>
</table>

### Reporting Measure #2 – HIV

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Number of measured cases</strong></td>
<td>211</td>
<td>583</td>
<td></td>
<td></td>
</tr>
<tr>
<td>A. Reported to the LHJ within 3 days of laboratory confirmation</td>
<td>No data</td>
<td>No data</td>
<td>13%</td>
<td>19%</td>
</tr>
<tr>
<td>B. Investigation initiated within the required time frame</td>
<td>No data</td>
<td>No data</td>
<td>49%</td>
<td>46%</td>
</tr>
<tr>
<td>C. LHJ completion of “measurement fields”</td>
<td>No data</td>
<td>No data</td>
<td>75%</td>
<td>31%</td>
</tr>
</tbody>
</table>
Establishing consistent measures between communicable and infectious diseases (HIV, STDs, and TB) required the collection of new data for select infectious diseases, modification of data collection forms, and data systems upgrades. This work was carried out between 2007 and the first half of 2008. Thus, the July-December 2008 period is the first available data point for these diseases. Changes between the two measured time periods more likely indicate adjustments to the data collection forms and systems than changes in actual program performance.

Continued refinement of the electronic disease investigation records in the Public Health Issues Management System (PHIMS) to better capture the patient follow-up activities and interviews will improve the ability to measure performance.

Investigation of the non-acute infectious diseases (e.g., early syphilis, HIV) may occur over many months and, thus, may not be counted as complete in the reporting period in which they were initiated.

Broader participation by laboratories in DOH’s electronic laboratory surveillance system would likely improve performance on the timeliness of reporting to LHJ for all notifiable conditions.

**DOH Activities**

In 2002, DOH deployed a statewide electronic disease reporting system called the Public Health Issues Management System (PHIMS). This web-based system allows LHJs to manage their communicable disease investigations and electronically report cases to DOH. Initially, tuberculosis (TB) and sexually transmitted diseases (STD) could not be managed and reported through PHIMS. In 2008, new modules for TB and the STDs were built and implemented in PHIMS so LHJs can now open one portal to manage and report all communicable disease conditions. No more paper, no more faxes and the number of phone calls and confusion has decreased substantially.

The *Notifiable Conditions Surveillance and Reporting Guidelines* are a set of documents initially developed in 2002 which provide evidence-based public health recommendations for the 61 notifiable conditions. During 2007–2008 DOH worked collaboratively with local public health officers to review and update these evidence-based guidelines. In addition, DOH developed a set of *Procedures* for measuring the timeliness of reporting, timeliness of investigating and completeness of investigating communicable diseases using fields in the PHIMS. The *Procedures* document outlines which fields are used to measure timeliness and which “measurement fields” need to be completed in order to deem a case report complete. As a result of these measures, public health practice is becoming more uniform across the state.

For the first time, statewide, we are measuring our performance on the disease investigation process. Previously, systems were not in place to do this. Now, across 35 autonomous LHJs, we can see steps in the process which are consistently done well and areas that need improvement. Aspects of performance are being routinely measured and evaluated, and improvements in the process are being made. This is increasing efficiency and effectiveness of our disease investigation process.

Technical assistance is provided to LHJs individually and in groups on conference calls.

Statewide data compilation and analysis.

State and local communicable disease experts are considering the most useful measures to include next to continue improving the communicable disease system in Washington state.
LHJ Activities

BARS data for calendar year 2008 indicates that statewide LHJs spent 43% of the funds on communicable disease investigation.

Work plans submitted by each LHJ can be found at: http://www.doh.wa.gov/phip/5930AS/product.htm. Work plans for calendar years 2008–2009 indicate the intent to hire over 20 FTE of new staff statewide (7.7 RNs, 5.5 communicable disease investigators, 3 health educators, 1.4 epidemiologists, 1 outreach worker, 0.5 public health veterinarian and 0.25 clerical) and expand the work hours or otherwise provide salary support to other existing staff. The work plans indicate that nearly every LHJ planned to implement almost all of the activities listed below – many with their own tailored approach specific to the unique issues and opportunities in their communities.

1. Make timely and complete disease investigation a priority. Some LHJs focused on specific conditions like Chlamydia, gonorrhea, sexually transmitted disease (STD), hepatitis C, tuberculosis (TB) and/or West Nile virus.

2. Provide training/education to LHJ staff on the diagnosis, treatment, and investigation of communicable diseases, reporting requirements and how to use the web-based statewide disease investigation system called Public Health Issues Management System (PHIMS). Assure access to PHIMS for the appropriate public health staff by acquiring digital certificates and implementing required security measures.

3. Provide training/education and on-going outreach and communication to healthcare providers on the diagnosis, treatment, and investigation of communicable diseases and promote policies regarding timely and complete reporting and investigation.

4. Acquire and implement additional technologies or software to aid in timely and complete disease investigation.

5. Analyze and use data from PHIMS. Establish baseline data. Routinely review data to check performance on timely and complete investigation. Share information with LHJ staff and healthcare providers. Make changes as needed to improve the timeliness and completeness of investigations.

6. Improve the chances of clients receiving timely treatment by:
   - Developing and using an extensive referral system
   - Promoting or implementing “Expedited Partner Therapy,” an evidence-based strategy for increasing treating people exposed to STDs

7. Implement public education campaigns so people can take actions to protect themselves from communicable diseases like West Nile virus.

Reduce the Impact of Chronic Disease

Performance Measure #3: Develop and implement effective community and healthcare system interventions to address obesity and its consequent burden of chronic disease. Interventions may target worksites, schools, communities, or primary medical care.

A - Number and description of LHJ activities and interventions to address obesity or chronic disease and associated risk factors in the community

Obesity and chronic disease prevention, on a population-based or community-wide basis, is relatively new to public health in Washington State. Promising practices, best practices and standardized approaches are evolving. Few routine processes are in place, and no performance data exists at this time.

The most cost effective strategies involve community approaches that make it easier for individuals to make healthy choices around nutrition and physical activity – like having healthy foods available at school or work and creating safe places to walk or play. These types of initiatives require cooperative action by many agencies, organization, and individuals. This type of cooperation frequently occurs via a community coalition.
To measure change, a survey of each LHJ was implemented. LHJs were asked if they lead or participated in a community coalition(s) and community-wide activities to reduce the impacts of chronic disease. The survey collected information on:

- FTEs focused on chronic disease
- Leading or participating in coalitions
- Leading or participating in initiatives

Based on work plans submitted by each LHJ, 25 of 35 LHJs included a focus on “reducing the impact of chronic disease.” All 35 LHJs were required to complete the survey, but the response rate varied (57-91%) each time the survey was conducted. The survey did not collect information about whether or not the LHJ was using 5930 funds for these activities.

### Performance Measure #3 – LHJs that lead or participated in community interventions or activities

<table>
<thead>
<tr>
<th>Percent of LHJs completing the survey that lead or participated in community interventions</th>
<th>2007</th>
<th>2008 Jan-Jun</th>
<th>2008 Jul-Dec</th>
<th>2009 Jan-Jun</th>
<th>2009 Jul-Dec</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>80%</td>
<td>81%</td>
<td>75%</td>
<td>80%</td>
<td>90%</td>
</tr>
<tr>
<td>Percent of LHJs completing the survey that lead or participate in two or more community activities</td>
<td>28%</td>
<td>16%</td>
<td>40%</td>
<td>26%</td>
<td>19%</td>
</tr>
</tbody>
</table>

### DOH Activity

**Policy survey**

Making resources and best practice information more available to LHJ by re-organizing information on the web.

Technical assistance was provided to LHJs individually and in group on conference calls.

Statewide data compilation and analysis.

### LHJ Activity

**BARS data for calendar year 2008 indicates that statewide LHJs spent 5% of the funds on chronic disease.**

Work plans submitted by each LHJ indicated that 26 of the 35 LHJs plan some types of activities to address this measure, including:

- Assessment of the local issues including: collection of data such as height and weight of school students to assess body mass index (BMI), community food assessment; analysis of existing data such as the Healthy Youth Survey which collects information about behaviors; and other data. Sharing this information with partners, coalitions and the community. Using this information to identify priorities and effective strategies.
- Initiate, join, partner with, provide leadership or staffing for community coalitions addressing this topic.
- Partner with schools, educational services districts, hospitals, breastfeeding coalitions; Hispanic health coalition, etc.
- Provide information and education to LHJ staff, partners, coalitions and the community regarding obesity issues, prevention, health nutrition and physical activity, including via media, county fair, farmers market, schools, community meetings, Spanish language radio, food bank, etc.
- Partner with schools to support nutrition and physical education programs and education. Implement policies to support these activities.
- Promote walking school bus and other walk-to-school programs. Sponsor community run.
• Healthy food – implement federal Basic Food and Nutrition Education Program (now called SNAP-Ed program).
  Provide healthy cooking classes, healthy recipes at the food bank; promote gardening and community gardening.
• Promote workplace wellness programs.

Local health has increased the number of coalitions to address obesity. Outreach continues to happen with medical providers, local community agencies, school and work places. Local health is focusing on changing the system that helps to enable obesity, such as improving and promoting a healthier environment and implementing effective policies.

Many new community-based programs have been established, more trainings for the public and professionals have been started, and access to best practices and research-based interventions to address obesity have been improved.

II. FINANCIAL DATA

The State Auditor’s Office collects information from local government via the Budgeting, Accounting and Reporting System (BARS) http://www.sao.wa.gov/EN/Audits/LocalGovernment/BarsManuals/Pages/default.aspx. A new revenue code was established in BARS for the 5930 funds.

DOH uses information from BARS to produce reports on revenue and expenditures for each LHJ and LHJs, in aggregate. These reports can be found at http://www.doh.wa.gov/msd/OFS/2008rs/Revsum08.htm. The document Statewide Summary of Expenditure Codes displays the revenue streams to local health agencies (columns) and the various programs/services these funds are allocated to (rows). The Graph of Sources of Funding displays this information graphically.

Data from 2008, the first year that 5930 funds were disbursed to LHJs, is currently available. Data for 2009 will be available in the summer of 2010. For use in this summary, the following expenditure codes were grouped to analyze how the 5930 funds were expended.

<table>
<thead>
<tr>
<th>Expenditure Code</th>
<th>Topic Area</th>
<th>Programs</th>
</tr>
</thead>
<tbody>
<tr>
<td>562.10</td>
<td>Administrative Services</td>
<td></td>
</tr>
<tr>
<td>562.20 – 31</td>
<td>Maternal and Child Health</td>
<td>Children with Special Health Care Needs (CSHCN), Family Planning Non-Title X, Women, Infants and Children (WIC), Other Family &amp; Individual Health</td>
</tr>
<tr>
<td>562.32</td>
<td>Immunizations</td>
<td></td>
</tr>
<tr>
<td>562.33 – 39</td>
<td>Communicable Disease</td>
<td>Sexually Transmitted Disease (STD), HIV/AIDs, Tuberculosis (TB), Other Communicable Disease</td>
</tr>
<tr>
<td>562.41 – 49</td>
<td>Chronic Disease</td>
<td>Cardiovascular Risk Reduction, Obesity, Cancer Prevention &amp; Control, Other Non-Communicable Disease</td>
</tr>
<tr>
<td>562.52 – 60</td>
<td>Environmental Health</td>
<td>Vector</td>
</tr>
<tr>
<td>562.80</td>
<td>Community Health Assessment</td>
<td></td>
</tr>
<tr>
<td>562.72, 73, 88</td>
<td>Other</td>
<td>Laboratory, General Health Education, Bioterrorism</td>
</tr>
</tbody>
</table>