Stanislaus County Health Services Agency

Annual Public Health Report
April 2010

Stanislaus County HEALTH SERVICES AGENCY

Public Health
Prevent. Promote. Protect.

Introduction

Stanislaus County Health Services Agency – Public Health (Public Health) is responsible for ensuring the health and well-being of residents in Stanislaus County through three primary efforts: protection, promotion and prevention.

- **Protect** the community from health threats, whether everyday or exceptional as in disease outbreaks or bioterrorism, such as the West Nile or H1N1 Flu viruses.
- **Promote** healthy behaviors and healthy decisions through public awareness, individual or group education, and social marketing activities through the media. These are a few examples:
    1. The Safe Sleep for Infants Public Awareness campaign;
    2. The Healthy Birth Outcome case management project; and
    3. The Walk It Out Physical Activity Program incorporated within afterschool programs.
- **Prevent** chronic diseases by providing health solutions through preventive measures, with programs such as the Healthy Eating Active Living – Community Health Initiative, or the Central California Regional Obesity Prevention Project.

One effective way to ensure and improve the health and well-being of Stanislaus County residents is to utilize the existing Mobilizing for Action through Planning and Partnerships (MAPP) collaborative—which involves key stakeholders from different sectors of the public health system to address the many aspects of public health—as health is not merely an absence of disease. One of our most recent projects, which would not have been possible without the support of the MAPP stakeholders, was the 2008 Community Health Assessment (CHA).

After the completion of CHA, stakeholders expressed the need to improve health outcomes by moving data to action. The 2010-2015 Community Health Improvement Plan (CHIP) was initiated to address some of the priority issues. The approach stakeholders agreed upon was that of addressing the broad determinants of health—upstream factors such as poverty and lack of basic needs—that ultimately affect a community's health. The CHIP was subsequently divided into four components: Access to Care, Education, Basic Needs and Built Environment. During this process, new stakeholders were identified as important key players that could aid in this effort, one of them being the United Way of Stanislaus County.

Partnerships have been the mainstay by addressing community health concerns by focusing on the major contributing factors. Many of the strategies needed to address the issues of concern are not normally spearheaded by public health yet are important to improving the total health outcomes within the community.

The current fiscal climate is one of the most challenging obstacles Public Health faces. Strategic planning efforts have shown that, to effectively meet this challenge, Public Health must maintain and strengthen partnerships as the public health system strives to make improvement in the overall health status of residents in Stanislaus. The fiscal limitations and diminishing resources for PH and its partners necessitate working more closely

together to leverage funds as all departments/agencies are charged with doing more with less. Limitations though will likely influence timeliness for achieving objectives.

Local, statewide, and national planning efforts have identified local public health jurisdictions to fulfill the leadership role in a health-focused emergency response. As financial and staffing resources continued to be impacted by the economic downturn, the demand on Public Health during this last year has increased tremendously in the form of H1N1 response. While all staff, both professional and non-professional, were called into service to plan for and implement the many community vaccination clinics, provide hospital surveillance and communication and mitigation efforts with the medical community and schools, community partners were instrumental in assuring that services required to support such an endeavor were carried out. This responsiveness from community and organizational partners clearly illustrated Public Health's "readiness" in responding to this situation and any emergency.

Many of the chronic diseases that result in an enormous financial burden for the healthcare system can be prevented. Effective prevention requires a focus on nontraditional strategies, such as policy development, media involvement, advocacy and community intervention. These strategies require Public Health to move beyond its more traditional efforts in order to effectively address the root causes of these health concerns. Strategies necessitate Public Health's involvement in areas such as the environment, basic needs and social factors that make up the broader determinants of health.

This year's report highlights a few of the partnership efforts that have assisted Health Services Agency-Public Health in responding to the fiscal and service challenges. Also included within this report are the latest health trends within the county and recognition of achievements within Public Health.

County Health Rankings – University of Wisconsin, Population Health Institute

The importance of addressing the broad determinants of health has become increasingly recognized in the public health community. Recently, the Robert Wood Johnson Foundation (RWJF) began a nationwide effort to draw attention to health problems and broad determinants that influence them. RWJF has provided three years of funding to the University of Wisconsin Population Health Institute to gather available data nationally and to rank counties within each state on their overall health outcomes and on the factors that influence health. The resulting documents are state-based county comparisons published as the *County Health Rankings*[1] for each state. Because of the emphasis on the broad determinants of health, the measures on which counties are ranked in this document are very different from those in the California *County Health Status Profiles*.

[1] see www.countyhealthrankings.org

Traditionally, the California *County Health Status Profiles* rank counties on health outcomes such as cancer mortality and teen births, using data derived from vital statistics data sets. There is only one measure in the State's profile that is related to the broad determinant of health – percentage of youth in poverty . The nationwide *County Health Rankings*—in contrast to the specific health outcomes listed in the California *County Health Status Profiles*—include only 5 measures of health outcomes, and instead emphasizes the broad determinants of health through 23 separate measures in five categories: health behaviors (e.g. diet and exercise and smoking), clinical care (e.g. insurance coverage and preventable hospital stays), social and economic factors (e.g. unemployment and violent crime rates) and physical environment (e.g. air quality and access to healthy food).

The following table presents the health outcome and health factor rankings for Stanislaus and our neighboring counties from the County Health Rankings.

Comparison of Stanislaus County Health Rankings (Out of 56 Ranked Counties) to Neighboring Counties, 2010 from nationwide County Health Rankings

Health Outcomes	Stanislaus	San Joaquin	Merced	Santa Clara	Tuolumne
Overall	43	38	40	4	29
Mortality†	38	34	35	2	42
Morbidity††	46	44	43	19	13
Health Factors					
Overall	43	51	49	3	32
Health Behaviors	52	53	50	1	51
Clinical Care	41	39	34	10	16
Social & Economic Factors	40	50	52	3	27
Physical Environment	18	20	36	34	19

† Mortality is measured by Years of Potential Life Lost before age 75

†† Morbidity is a composite measure including health-related quality of life (overall health, physical health, mental health) and birth outcome (low birth weight) measures.

While both the California *County Health Status Profiles* and the *County Health Rankings* rank counties as a way of drawing attention to health issues that need to be addressed, they do so in very different ways, with different emphases and using different measures. Thus they cannot be directly compared. Taken together, the two documents provide complementary views of the health status of California counties, describing both specific health outcomes as well as their ultimate causes.

Prevention: Chronic Disease

Heart disease and diabetes continue to be the top health concerns in Stanislaus County. According to 2009 County Health Status Profiles, the age-adjusted death rates from coronary heart disease for Stanislaus County during the 2005 – 2007 three-year period was 197.1 deaths per 100,000 population, placing Stanislaus 56th within the State. According to the 2007 California Health Interview Survey, 7.7% of Stanislaus county adults have been diagnosed with diabetes. Of these diabetic adults, 12.4% have Type I diabetes, 87.6% have Type II diabetes. It has been found that the most common and preventable risk factor contributing to these chronic diseases is obesity, mainly caused by poor nutrition and physical inactivity. During the last year, with limited funding, Public Health has been focusing its efforts and resources in addressing obesity prevention. A report released by Trust for America's Health in July 2008 concluded that an investment of $10 per person per year in proven community-based programs in chronic disease prevention could save the country more than $16 billion annually within five years. This translates to a return of $5.60 for every $1.[2]

Historically, obesity has been addressed through interventions that focus on individual and behavior changes. While it is important that a person has the knowledge to change his/her behavior to prevent illness, it is also important that the environment in which the person lives supports and facilitates the change. For example, if there are no grocery stores within walking distance of a neighborhood where a person without a car lives, it would be much harder for the person to be able to purchase fresh produce to follow a healthier diet. With this in mind, Public Health began to embark on a comprehensive and coordinated effort in addressing chronic disease prevention, leveraging partnerships to better collaborate and share resources, to implement prevention strategies that will reach each level of "the spectrum of prevention" – the individual, the providers, the community, the coalitions and networks, the organizations, and the policy makers.

The federal government, as well as a number of private funders, has recognized the importance of place-based initiatives that focus on community and grassroots efforts to affect systems changes in a community to increase the quality of life for its residents, hence improving the health of the community. This is evidenced by funding trends during the last few years; major funders preferentially fund projects that target neighborhoods that partner with Public Health, with the goals of systems, environmental, and policy changes.

During the last year, Public Heath continued to engage in two levels of partnerships and collaboration to address chronic disease prevention. The first level is working with all partners within the public health system, which include some very "non-traditional" public health entities such as business organizations, planning departments, redevelopment agencies, the housing authority, and law enforcement agencies. Together (through the MAPP process mentioned in the next section of this report and the various Coalitions

[2] Trust for America's Health (July 2008). Prevention for a Healthier America: *Investments in Disease Prevention Yield Significant Savings*, *Stronger Communities*. Available at http://healthyamericans.org/reports/prevention08/ (downloaded April 2010)

coordinated by HSA-Public Health) prevention strategies and plans are developed and implemented to combat obesity. In most instances, Public Health does not act as the driver of these initiatives, but takes more of a backseat role in supporting and providing input to push the agendas forward.

At a more involved level, Public Health is partnering with two specific neighborhoods in implementing grant funded activities to address obesity prevention. The Healthy Eating Active Living –Community Health Initiative (HEAL-CHI) is funded by Kaiser Permanente to the West Modesto King Kennedy Neighborhood Collaborative, while the Central California Regional Obesity Prevention Program (CCROPP) is funded by the California Endowment to the Ceres Partnership for Healthy Children. Both programs focus on systems and environmental changes in the specific neighborhoods, while requiring collaboration and leadership from Public Health. Outcomes include the implementation of Certified Farmers Markets at Mellis Park in West Modesto and at Whitmore Park in Ceres; and the Walking School Bus Program (where parent leaders volunteer to walk the neighborhood children to school every day instead of them riding in a car or taking the school bus) at Franklin Elementary School in West Modesto, and Caswell and Don Pedro Elementary Schools in Ceres. In addition, a Walking Trail (the Helen White Memorial Walking Trail) is being planned for in the West Modesto area to facilitate and promote a safe environment for physical activity by residents in that neighborhood.

Significant obesity prevention efforts in 2009

<u>Employee and worksite wellness</u>
Employee wellness is an area that is required by both the HEAL-CHI and CCROPP grants. Through assessments and working with the County Chief Executive Office staff, Public Health identified opportunities for the County to institutionalize a countywide policy on employee wellness. The Board of Supervisors' adoption of an Employee Wellness Policy in February had set the example for cities, local businesses, and other employers. Public Health staff presented this as a best practice, as well as provided training and resources to area employers on how to adopt a worksite wellness policy and implement activities. Establishing policies and guidelines to facilitate and promote healthy eating and physical activity in the work place is a proven win-win strategy for both employer and employees, through fewer sick days, lower absenteeism and higher productivity.

<u>A Framework to improve nutrition and increase physical activity</u>
Many of the partners within the public health system have embarked on chronic disease and obesity prevention efforts during the last few years. To ensure coordination of effects, reduce duplication, and consistent messaging, Public Health developed and published the document: "*Chronic Disease Prevention in Stanislaus County – A Framework to Improve Nutrition and Increase Physical Activity*", with the help of CCROPP funding. The purpose of this document is to provide a roadmap for community stakeholders and partners to collectively address obesity in Stanislaus County. It describes existing public health and community efforts and resources aimed at obesity and chronic disease prevention; it also provides 'The Spectrum of Prevention' as guiding principles, and specific recommendations

in obesity prevention strategies. Attached is a copy of this document. This document can also be accessed at www.hsahealth.org/data.

Promoting Health: Community Health Improvement Plan

The 2009 Public Health Report highlighted results from the 2008 Community Health Assessment, categorizing the major findings from the assessment into four broad determinants of health: access to care, education, basic needs, and the built environment. Through the Mobilizing for Action through Planning and Partnerships (MAPP) process, stakeholders from a variety of disciplines developed eight (8) over-arching goals and 14 focus areas for inclusion in the 2010 Stanislaus County Health Improvement Plan (CHIP), through a series of workshops in 2009. Subsequently, CHIP Task Forces were formed to address each of the focus areas. In February 2010, the stakeholders formally decided to implement the CHIP in phases, starting with the focus areas with the most stakeholder interest and the most available resources. Phase I includes five focus areas, with at least one from each of the four broad determinants of health (see Table below).

Broad Determinant	Focus Areas (Task Forces)	Phase I
Access to Care	Public Program Enrollment and Access	√
	Consumer Education and Empowerment	
	Coordination of Services	
Education	Parent and Student Engagement	√
	Promotion of Healthy Behaviors in Schools	√
	Life Skills & Workforce Readiness (Students)	
Basic Needs	Child Care Availability	√
	Crisis Food and Clothing	
	Housing and Utility Assistance	
	Self-Sufficiency Skills Promotion	
	Worker Retraining	
	Employer Recruitment and Support	
Built Environment	Inter-Agency Understanding	√
	Public Education about the Built Environment	

Over 50 individuals from a wide range of organizations (government agencies, school districts, non-profits, business, community-based organizations, churches, etc.) currently sit on the five Phase I CHIP Task Forces. Nearly 30 others have volunteered to sit on Phase II and III Task Forces.

The Phase I Task Forces are working on developing attainable objectives, strategic activities to reach them ("action plan") and measurable indicators to assess progress

toward them ("evaluation plan"), for each of their own areas–The CHIP Phase I Plan is planned to be released publically in June 2010.

New Partnerships

Through the MAPP approach to the CHIP development process, Public Health was able to leverage valuable resources from some non-traditional new partners, as well as enhancing linkages amongst existing partners.

United Way

Resources available:

1) Pre-established Impact Councils (Health, Education, and Income: Crisis to Stability), with multiple subject matter experts from a broad range of agencies
2) Funding to provide an incentive to partner agencies to work toward CHIP objectives that overlap with United Way goals
3) Contractual relationship with consultant who is guiding the development of specific indicators and measurement tools
4) Relationships with business and other community partners to help expand the pool of MAPP stakeholders implementing the CHIP

Actual Outcomes:

1) Integrating the existing United Way Impact Councils into the CHIP Task Forces to make action and evaluation plan creation faster and more efficient
2) Providing funding for agencies to carry out CHIP objectives
3) Assistance with developing indicators and measurement tools for CHIP

Inter-Agency Coordination with Children and Families Commission, Behavioral Health and Recovery Services, and Community Services Agency

Resources available:

1) Program evaluation expertise
2) Data on programs, needs and health outcomes not accessible directly by Public Health
3) Funding for partner agencies to work toward CHIP objectives that overlap with respective agency priorities

Actual Outcomes:

1) Ability to bring in international evaluation expert Mark Friedman (paid for by BHRS)
2) Better access to data measuring the broad determinants of health
3) Assistance with developing indicators and measurement tools for CHIP

City and County Planning Departments and Planning Commissions

Resources available:

1) Technical expertise and regulatory authority to change city and county plans to incorporate health issues and implement infrastructural changes that will support health

Actual Outcomes:

1) Understanding public health's role, city and county planning departments' roles in mixed use zoning, complete streets and form-based codes
2) Better understanding of how Public Health can support these agencies to more effectively incorporate the health perspective into community planning

Protecting Health: Emergency Preparedness

During 2009, Stanislaus County was impacted by the global H1N1 influenza pandemic. The County was primed for response through three years of advance inter-agency planning that culminated in a full-scale Pandemic Preparedness exercise on April 15 & 16, 2009. The following week the first H1N1 cases were reported in Southern California and linked to the outbreak in Mexico. Since April of 2009, Public Health has dedicated major efforts and resources in responding to the H1N1 epidemic, protecting the health of county residents.

County Emergency Operations Center

Public Health was in charge of the Incident and coordinated all of the medical-health response during the activation of the County Emergency Operations Center (EOC) from April 28 to March 1. After the EOC closed, Public Health continued to coordinate activities focused upon mitigating the anticipated epidemic. Once the epidemic arrived during July, the operations expanded.

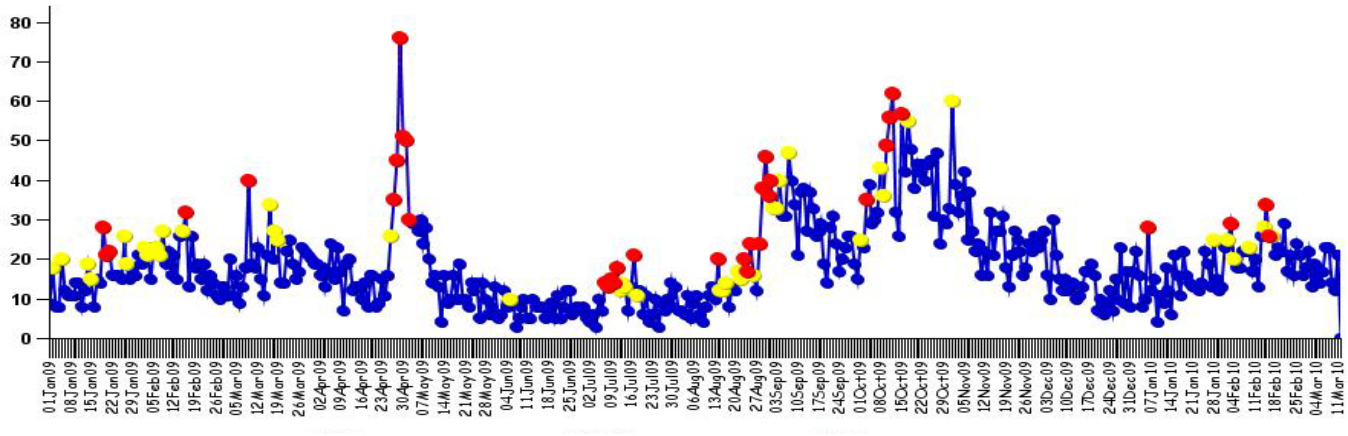
Risk Communication and Public Information

Press releases to update the community were prepared regularly. The "flu information line" was activated with information in English and Spanish. Documents and information for the public, for health care providers, as well as schools and employers were posted on the County's www.stanemergency.com website. During the summer, Public Health participated in a series of continuing education seminars for healthcare providers and community members. A specific set of precautions were prepared for the faith community and childcare providers. Prompted by an extraordinary number of community requests for information, with the assistance from the County PIO, an H1N1 special report was produced, which is available through the county's website, shown on the government cable channel, and in DVD format to be distributed to the community.

Surveillance

The ESSENCE surveillance system is a web-based tool developed for the early identification of epidemics. These data provide nearly real time information regarding the impact on our community. The following graph (Graph 1) is the trending of influenza-like illnesses (ILI) patient chief complaints at Memorial Medical Center (MMC), Doctors Medical Center (DMC), and Emanuel Medical Center (EMC) emergency departments from January 2009 to March 2010. In addition, ambulance call volume, hospital bed availability, and school absenteeism were closely monitored.

Graph 1: Influenza-Like Illness Emergency Department Visits, DMC, MMC and EMC, from January 2009 to March 2010



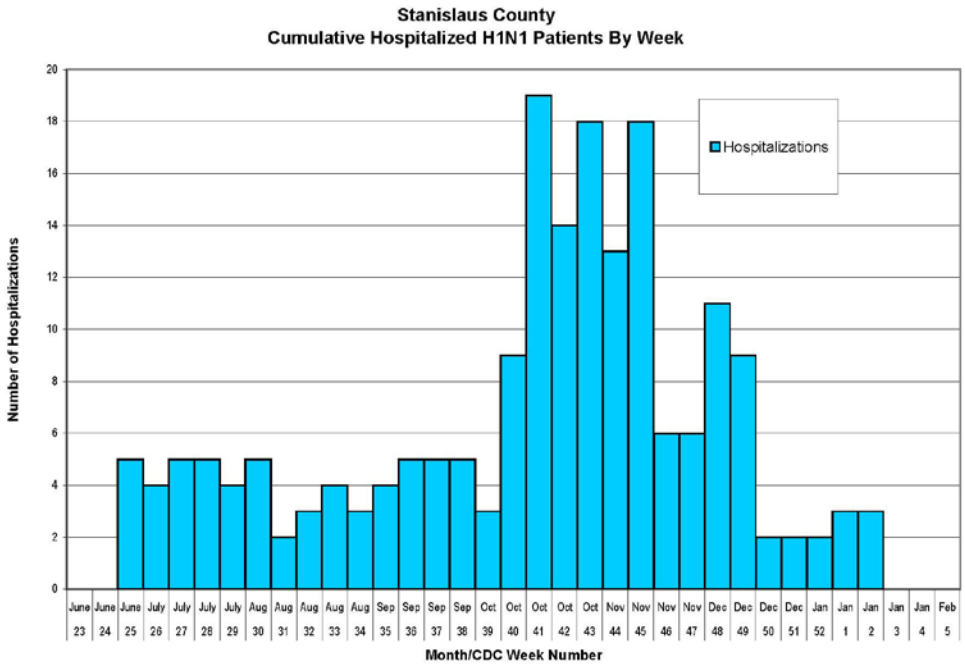
Laboratory Testing

During the spring, several hundred laboratory samples were forwarded to the Public Health Laboratory for testing. Later in the summer, testing became commercially available, but was generally restricted to hospitalized patients.

H1N1 Hospitalizations in Stanislaus County

More than 200 county residents required hospitalization during the epidemic. They ranged in age from 13 days to 82 years old. Median age was 37, 42.3% were male, and 57.7% were female. Fourteen deaths were reported. The following graph (Graph 2) is the epidemic curve indicating when cases were reported to Public Health.

Graph 2: H1N1 Cases Reported to Stanislaus Public Health Department.

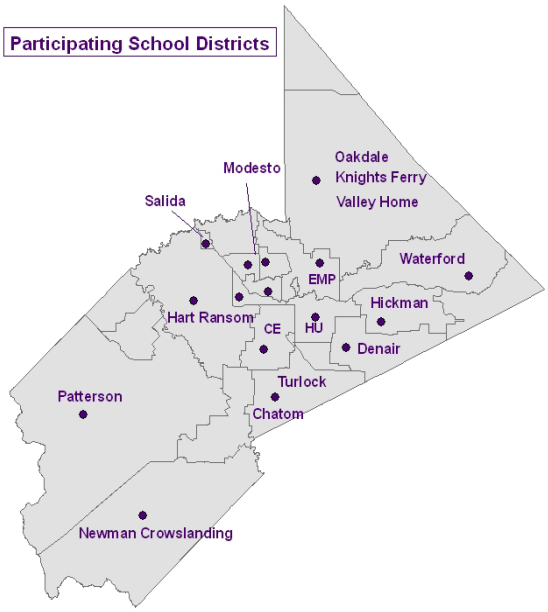


School Absenteeism Monitoring

The school absenteeism monitoring project is a collaborative project that commenced between Public Health and Stanislaus County Office of Education (SCOE) in June 2009 shortly after the first H1N1 cases were reported in California and in Stanislaus County. Three conditions gave impetus to the project: (i) the H1N1 virus was easily spread amongst children in closely spaced environment (such as schools), (ii) school absenteeism impacts the workforce and (iii) data was needed to determine whether school closure was warranted.

Participating school districts began sending daily school absenteeism data once per week in June 2009. Some school districts also sent retrospective absenteeism data for the months of April and May which served as baseline comparison data. The following map lists all of the school districts participating in the project.

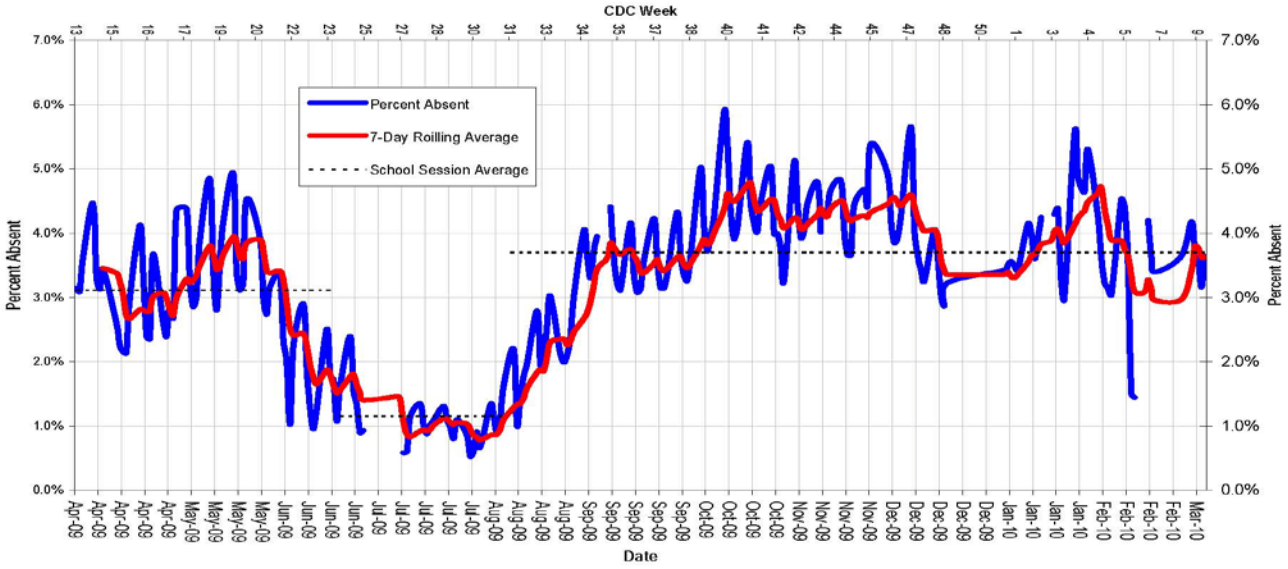
Map of School Districts Participating in School Absenteeism Monitoring Project



The following graph (Graph 3) on the next page depicts the weekly percentage of school absenteeism as reported by all of the participating school districts.[3] A gradual increase in school absenteeism was seen after the start of the 2009-2010 school year at the end of August.

[3] Not all schools were in session in the summer months of June/July; schools also were not in session during Thanksgiving and Christmas break.

Graph 3: School Absenteeism in Stanislaus, 2009 – 2010, by MMWR Week



The weekly percentage of students absent appeared to be a good reflection of local H1N1 activity. The increase in student absenteeism seen in October 2009 mirrored upward trends in ESSENCE ILI emergency department visits in the same month (Graph 1) and the peak in the epidemic curve of the H1N1 cases reported to public health (Graph 2) in October and November 2009.

Seasonal Influenza Vaccination

Public Health undertook its most aggressive immunization campaign to date. Due to delays in arrival of the H1N1 vaccine, Public Health nursing focused on providing the seasonal flu vaccine, especially to protect seniors. 22,000 doses were administered in a period of seven (7) weeks between September 14 and November 4. Forty (40) community clinics were held around the county. This community demand reflects almost double the number of seasonal flu vaccines given in a typical year.

H1N1 Vaccinations

With serious delays of a significant volume of the H1N1 vaccine, Public Health collaborated with the Stanislaus Medical Society to identify appropriate vaccine prioritization to ensure the most effective and fair distribution of vaccine. This collaboration worked well. Ample supply of vaccine became available at the end of 2009. Thereafter, seven (7) community clinics were held throughout the county, including large Mass Vaccination clinics in Modesto and Turlock. Public Health has continued to provide H1N1 vaccinations to the community at large, free of cost. The vaccine campaign was funded by a federal grant.

Significant Emergency Preparedness Accomplishments in 2009:

- The approval of the Medical-Health Surge Plan
- Completed 90+ Facility Site Evaluations
- Contractual relationship developed between the American Red Cross and the County. (that incorporates all departments that have responsibility for care and shelter.)
- Implemented Sydion patient tracking system at all hospitals
- ESSENCE implemented in two additional hospitals
- Completed the Emergency Function for Medical-Health for the County Emergency Operations Plan
- Provided training in Homeland Security Exercise & Evaluation Program (HSEEP) to stakeholders and provided Sydion Training to hospitals
- Coordinated the full-scale medical surge exercise (Alternate Care Site)
- Selected by California Association of Healthcare Facilities (CAHF) as one of six counties to host long-term care emergency preparedness summit
- Staff deputized to swear-in disaster service workers
- Requested and received state stockpiles of antivirals and respirators.
- Executed agreements with safety net providers to pre-position antivirals, and with a pharmacy to provide Tamiflu to underinsured population.
- EOC activated for H1N1 Response
- Funding for Polymerase Chain Reaction (PCR) to enhance Public Health Lab capacity, and purchase of additional lab equipment (i.e. microscopes, etc)
- Successfully recruited 140+ volunteers for the Medical Reserve Corps
- The facilitation of Hospitals and Clinics Health Executives meetings

Special Recognitions

During this past year, Public Health has received special recognitions from both State and federal agencies for a few award winning best practices. At the same time, Public Health would like to recognize some special partners for their contributions to the health of the community.

State and Federal Awards

- Mother Baby Friendly Workplace Award, awarded by the California Breastfeeding Coalition.
- Best Practice Award for Innovative Customer Service, for the Women, Infants, and Children (WIC) Program, by the California Department of Public Health.
- The Corazon Award, which is a statewide Promatora and Community Health Worker Award awarded by Vision y Compromiso, to recognize Public Health's work in the Promatoras/Community Health Workers Network.
- 'Certificate of Appreciation' for Field Treatment Site and Alternate Care Site Full Scale Pandemic Influenza Exercise, by California Department of Public Health Emergency Preparedness Office.

- Promising Practice Award from the National Association of County & City Health Officials (NACCHO) for Public Health's work Outstanding Innovative Program Quality Improvement Process Integrated into Public Health Strategic Plan.

Local Partnership Recognition

- Stanislaus County Office of Education – for the strengthened relationship between Public Health and Stanislaus County Office of Education, through the school absenteeism monitoring project.
- United Way – for its new partnership and contribution to the Public Health system, and the progress on the CHIP.
- City and County Planning Departments – for their plan to include health language into the County's and cities' general plans.

Summary

Stanislaus County Health Services Agency continues to ensure the health and well-being of county residents during this challenging fiscal climate by continuing to work collaboratively with its many partner agencies. New partnerships have been formed with external agencies in order to successfully meet the needs of protecting the community from health threats, promoting healthy behaviors and preventing chronic diseases. Public Health has also moved towards addressing the broad determinants of health – factors outside of the traditional health care system – thereby mirroring nationwide efforts to measure health outcomes and health factors.

As demonstrated by this report, much has been accomplished in the past year but much more remains to be done. Partnerships with external agencies will remain vital in the upcoming years as all departments/agencies are charged with doing more with less.

Acknowledgement

A special thank you to the following Public Health staff for their contribution to the publication of this document:

Renee Cartier
Nancy Fisher
Sharon Hutchins
Phoebe Leung
Cle Moore-Bell
Olivia Tong
John Walker

Stanislaus County Board of Supervisors
Jeff Grover, Chairman, District Three
Dick Monteith, Vice-Chairman, District Four
William O'Brien, District One
Vito Chiesa, District Two
Jim DeMartini, District Five

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