Welcome to our inaugural issue

Riverside County and California’s Inland Empire is an area with great challenges and great potential alike. Ever since its founding in 1893, the County of Riverside has always been an innovator in maintaining the health of the public, starting with the county’s first public health officer, Dr. Rio Delos Barber, appointed the very first year of the county’s existence.

Today we are still innovating in public health through everything we do in our public health department. As California’s fourth largest county both by population and land mass, the services our department provides are as varied as our geography and as diverse as our residents. Whether it’s looking at new ways to manage communicable disease, or looking at how to improve our communities to make healthy choices easy, or even simply making sure our ambulances stay on the road, we are advancing not only the health of our own residents but the science of public health as well.

This short regular compendium of our presentations and abstracts only scratches the surface of what we do, but I hope it’s valuable to you, the reader, as you look for solutions for your own organization. I invite your comments and suggestions on this inaugural issue. Please E-mail me your thoughts at ckaiser@rivcocha.org.

— Cameron Kaiser, MD
Editor and Public Health Officer

PRESENTATION ABSTRACT

An introduction to public health: improving health for all.


Aaron Gardner, MA * Marshare Penny, DrPH(c), MPH * Wendy Hetherington, MPH * Diane Ewing, BA, RN * Susan Mora, BS, RN, PHN
mandatory training outlines the public health system, its core functions and 10 essential services, cultural competency and cultural humility, the history of race and racism in the United States, and the social determinants of health and health equity. Through facilitated exercises these trainings promote dialogue about their correlation with health disparities. This presentation detailed steps taken to develop a novel training series designed for public health staff. Presenters covered the successes and challenges in the design and implementation of this training series including development of the curriculum, the scheduling and facilitation challenges, budgetary concerns and barriers, curriculum assessment, and staff response.

We gratefully acknowledge all our contributors for their outstanding work, and tremendously appreciate all the submissions received for our first issue.

The Editor also thanks Melody Sharp for assistance with our prototype print run, and to our director and deputies and senior public information specialist Jose Arballo, Jr. for their careful review.

Our second issue is scheduled to close April 1 for publication on May 1. We look forward to showcasing more of the great work our department is doing in future issues. We would be delighted to add you to our mailing list; please request by E-mail. — Ed.

### Negative QFT, suggestive film: class TB0 or TB4?

*Presented May 30, 2013 at California Tuberculosis Controllers Association Annual Meeting, San Jose, CA.*

Cameron Kaiser, MD * Barbara Cole, RN, MSN, PHN * James Saunders, RN, PHN * Noriko Cuanon, RN, MPH, PHN * Donna Bedney, RN, PHN * Irene Hastings, RN, PHN

**Abstract.** Interferon-gamma release assays (IGRA) are becoming increasingly available and may be used in many clinical situations where the TB skin test (TST) was. Both TSTs and IGRA are subject to reversion where subsequent serial testing may demonstrate a result that is no longer positive. However, some serial testing studies have suggested IGRA may have a higher rate of inter-test variability, including reversions, and these results may be discordant with TSTs in the same population. Currently, the ATS guidelines generally require both a positive IGRA or TST and radiography consistent with old disease to establish a classification of TB4. In this poster, we review our departmental pilot study of QuantiFERON-Gold In Tube™ in B1 immigrants and review X-rays suggestive for TB but nevertheless with negative QFT-GIT to see if changes in procedure are needed in this context.

**Methods.** We reviewed 20 B1 immigrant cases between October 5th, 2011, when the question was first posed, and March 1st, 2013. All cases met B1 clinical and/or radiographic criteria at the time of selection. Cases were selected from B1 referrals made to the County of Riverside on the basis of a negative QuantiFERON-Gold In Tube™ and a film judged consistent with TB4 either by the department physician and/or the consulting radiologist. Age and characteristics of the film were recorded. TST was not performed in the USA for these patients due to perceived poor specificity in this population. At this time of this study, QFT values were not reported by the testing laboratory.

**Results.** Nine films were indicated by the consulting radiologist, with an average patient age at review of 60; eleven by the department physician, with an average patient age at review of 67. Of the nine indicated by the consulting radiologist, concurred with by the department physician, seven (78%) were for apical thickening with morphology not consistent with apical cap and the other two (22%) for fibrous stable apical infiltrates. Of the eleven indicated by the department physician, nine
(82%) were for apical thickening with morphology not consistent with apical cap, one (9%) for volume loss without other explaining etiology, and one (9%) for fibrous stable apical infiltrates. No patient had positive cultures for *M. tuberculosis* and were classed as TB0 by prevailing criteria by the department physician after review.

**Discussion.** First, it is noteworthy that out of 283 total B1 cases in our jurisdiction for calendar years 2011 and 2012 how few cases actually fell into this category, suggesting that this problem may not be a widespread issue for most jurisdictions. The vast majority of flagged abnormal radiographic changes in this small sample were for apical findings, specifically apical thickening. Although apical thickening is frequently present due to tuberculosis, the frequency of otherwise idiopathic apical thickening (especially the classic “apical cap”) increases with advancing age in general and other etiologies have been proposed, including chronic pulmonary ischemia. Isolated apical thickening and isolated calcified granulomata, compared with other radiographic findings, may also pose a much lower risk of progression to postprimary disease, which may make the clinical relevance of classifying them as TB4 low (and/or the NNT for this subpopulation correspondingly high to actually impact reactivation rates, assuming the findings truly are due to healed primary disease), other than obvious caps which are often classified as TB2. On the other hand, the individuals did all come from nations with higher tuberculosis prevalence than the United States, though the actual numbers are far too small to draw any conclusions about predictive value, and a policy that would uncritically treat these findings as either clinically irrelevant or uniformly due to senile changes or other non-tubercular etiology may be missing some opportunities for treatment considering some of the questions regarding QFT reversion and variability. After this analysis, we decided to have our lab start issuing the raw data as well as interpretation for QFT-GIT, which we may use in the future. Although we ultimately concluded that we couldn’t justify treating these patients differently due to the small sample, trying to characterize the actual positive predictive value of findings such as apical thickening or fibrous infiltrates for healed primary disease would go a long way to determine if there is any clinical utility to prioritizing the X-ray findings over a negative QFT result in B1 immigrants.


**PEER-REVIEWED PUBLICATION**

**Aging out in the desert: disclosure, acceptance, and service use among midlife and older lesbians and gay men.**

*Abstract only (subscription publication). Published online August 28, 2013.

Aaron T. Gardner, MA * Brian de Vries, PhD* Danyte S. Mockus, PhD, MPH (*non-DOPH affiliate)*

LGBT persons in the county of Riverside, CA and in the Palm Springs/Coachella Valley area in particular responded to a questionnaire addressing concerns about identity disclosure and comfort accessing social services. Distributed at a Pride festival as well as through religious, social and service agencies, the final sample for analysis of 502 comprised 401 (80%) “Gay Men” and 101 (20%) “Lesbians,” in four groups (less than 50 years of age (18%), 50–59 (26%), 60–69 (36%), and over 70 (20%). Results reveal that almost one-third of midlife and older gay men and lesbians maintain some fear of openly disclosing their sexual orientation. Along comparable lines with similar proportions, older gay men and lesbians maintain some discomfort in their use of older adult social services, even as the majority report that they would feel more comfortable accessing LGBT-friendly identified services and programs. In both cases, lesbians reported greater fear and discomfort than did gay men; older gay men and lesbians reported that they would be less comfortable accessing LGBT-identified services and programs than did younger gay men and lesbians. These data support prior research on the apprehension of LGBT elders in accessing care, the crucial
role of acceptance, with some suggestions of how social services might better prepare to address these needs.


POSTER PRESENTATION

A supportive-educative program for perinatal depression utilizing Orem’s theory of self-care.


Amy Larsen, RN, MSN, PHN * Teresa Dodd-Butera, RN, MSPH, PhD, DABATa
* Lisa Dryan, LCSW * Mary Molle, RN, PhD, PHCNS-BCa * Ashley Butler, MSW, LMSWa
(a non-DOPH affiliate)

Introduction. Depression in childbearing women is quite significant. For childbearing women worldwide, it is the leading cause of hospitalization except for obstetrical reasons and is the second leading cause of total disability. Perinatal depression incidence rates are estimated between 10 and 19% of all pregnant and postpartum women. However, perinatal depression rates are even higher for women living in poverty, ranging up to 30%. Although a historical, prevalent and disabling disorder, perinatal depression in women is often not diagnosed and treated due to barriers to care. Women who are not treated are more likely to have a reoccurrence, and have impaired mother-infant attachment, increased infant anxiety, and impaired cognitive, social and behavioral development in their children.

Risk factors for perinatal depression include prior episode of postpartum depression, depression or anxiety during pregnancy, depression at any other time of life, family history of depression or mood disorder, diminished social support (especially marital), current or history of stressful life events (e.g., trauma, poverty, unwanted pregnancy), adolescence and multiple births.

Riverside and San Bernardino Counties have very few resources available for women suffering from this disorder. Lori Burchett, a resident of Riverside County who was suffering from postpartum psychosis, was charged with the murder of her son Garrison Burchett in February 2009. This unfortunate catalyst spurred the development of the Inland Empire Perinatal Mental Health Collaborative which led to the creation of this study.

Estimated birth rates in Riverside County for 2011 are 32,758 and 32,385 for San Bernardino County. By applying the incidence rate to each county’s birth rate, it is estimated that between 3,200-6,200 women per county could experience perinatal depression this year. Taking into account the current economic stresses, more women are living in poverty which could increase the incidence rate to over 9,800 per county.

Research shows that a combination of counseling (e.g., such as group, individual or both) and medication therapy is the best plan of care for perinatal depression. However, research also shows that self-help activities also assist women in managing their perinatal depression symptoms. This study explores if mothers’ perinatal depression symptoms can improve after being involved in such self-help activities, as delineated in Orem’s theory of self care, through a support group medium in Riverside County.

Purpose. The purpose of this study is to explore whether a support group utilizing Dorothea Orem’s self-care model for perinatal depression in Riverside County can improve participants’ depressive symptoms and their maternal/infant communication, interaction and bonding.

Methods. This was an IRB-approved phenomenological design of 11 pregnant and postpartum women recruited from the Supplemental Nutrition Program for Women, Infants and Children (WIC) and the community of Riverside County. All participants were suffering from perinatal depression and/or experiencing some form of depression or anxiety symptoms and/or displayed risk factors.

Prior to attendance of the support group, each participant was assessed on a variety of mental health measures and one physical health measure utilizing the following assessment tools: Patient Health Questionnaire (PHQ); Edinburgh Postnatal Depression Scale (EPDS); Mental Status Exam (MSE); NCAST-PCI Feeding Scale (NCAST). The EPDS and NCAST scales were used to monitor the progress of the women throughout the 10 week program.

Once participants were interviewed, their clinical information was evaluated. All clients who scored an EPDS score of 10 or more and/or displayed risk factors were encouraged to come to the 10-week psychoeducational support group. In addition to the mental health and physical assessment, the participant’s self-care agency,
therapeutic self-care demand and self-care deficits were identified. Once all self-care strengths and deficits were understood, nursing systems were selected for each participant by the MSN and MSW student.

The support group was a weekly, hourly session with childcare provided. It was structured to provide an educational session for the first half and the second half allowed the participants to talk about how they were feeling and struggles that they were experiencing.

**Results.** This small pilot study was found to decrease depressive symptoms as displayed by EPDS scores and increase parent/infant communication, interaction and bonding as indicated by NCAST. Common stressor themes identified were finances, caring for baby and children, father of baby or husband, unsupportive family and demands of school. Most common concerns/fears about being a mom were being a good mom and being financially responsible.

**Discussion.** Involvement in this supportive-educative program utilizing the Orem Self-Care Framework demonstrated, in the majority of participants, decreased depressive symptoms by EDPS; increased maternal-infant attachment by NCAST; that Orem’s Self-Care theory can be extended to both maternal and infant care, within a perinatal depression support group; and that a nursing role can decrease self-care deficits.

Due to the study’s small sample size, inferential statistical significance for individual factors was not performed. In addition, counseling, psychiatric care and medication contributed to the results. The theme of anxiety was identified throughout the study. No pre- and post- tests were given to specifically measure anxiety levels.

Further research might include repeating the study with a larger sample size to include six and 12 month follow-up to assess if further care is needed with the inclusion of a control group, one with psychiatric care and one with the support group intervention. Other additional studies could include confirming associations between physical/medical problems during pregnancy and the development of perinatal depression and to confirm the impact of supplemental encouragement in the form of phone calls and cards.

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**Food and Supplemental Nutrition programs with new and non-traditional partners.**

*Presented July 12, 2012 at the National Association of County and City Health Officials Annual Meeting, Los Angeles, CA.*

Gayle Hoxter, MPH * Perveen Ali, MS, RD * Nancy Allende, RD

**Introduction.** Riverside County CNAP highlights the collaborations between the United States Department of Agriculture (USDA), Food Nutrition Services (FNS) and new and non-traditional partners to create healthier communities. Since 2005, representatives from the USDA food programs have organized a strong partnership with a mission to increase food access and effective utilization of services. Successful community prevention efforts include increase in Farm-to-School programs, expansion of summer feeding programs and farmers’ markets, as well as outreach programs such as “Stretching your Food Dollar.”

**Program Description.** CNAP’s mission is to work proactively with colleagues in other United States Department of Agriculture (USDA), Food Nutrition Services (FNS) programs and affiliated organizations to develop long-term strategies to promote fruit and vegetable consumption and physical activity through collaboration of services to help combat obesity in Riverside County residents.

**Best Practices.**

- Certified Farmer’s Markets
- Grocery stores in food deserts
- Utilized data and mapping resources to evaluate the food landscape
- Develop ratios of fast food to produce by city to locate areas of imbalance
- Increase fruit and vegetables in childcare settings
- Increase fruit and vegetables at WIC approved stores
- “Buy Fresh, Buy Local” collaboration study with University of California Cooperative Extension Program (UCCE) and Riverside County WIC clients
- Increase fruit and vegetables at schools
- Farm-to-School
- Schools’ Summer Feeding and WIC collaboration to increase fruits and vegetables

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**POSTER PRESENTATION**

**The County Nutrition Action Plan collaborations of USDA**
• Increase redemption of WIC Farmer’s Market program
• Increase number of EBT machines at markets

**Challenges.** Riverside County covers 7,208 square miles stretching from Orange County to the Arizona border. Our population as of 2010 was 2,189,641 and one of the fastest growing areas in the nation. Due to the geographic size, there is a need to develop a second CNAP group in eastern Riverside County.

**Conclusion.** CNAP has successfully coordinated USDA Food program interventions and put forth efforts to increase food security and obesity prevention in Riverside County, made possible by its many partners.

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**POSTER PRESENTATION**

**Tobacco’s war on culture.**

*Presented July 12, 2012 at the National Association of County and City Health Officials Annual Meeting, Los Angeles, CA.*

Mildred S. Flores, BS, CHES * Lesly Valbrun, MPH * Consuela T. Edmond, MA

**Background.** Tobacco-related morbidity and mortality disproportionately burdens America’s most vulnerable populations. Race, culture and ethnicity are targeted and challenged by the tobacco industry. Cultural norms are researched by tobacco companies and then used to increase sales to target groups. Some examples include Newport & Kool (menthol) to blacks/African-Americans, and Natural American Spirit to Native Americans, Alaska Natives and Latinos/Hispanics.

The tobacco industry has established cultural proficiency. For the past four decades, evidence demonstrated a strong targeting towards minority groups, women and youth to increase sales. Tactics included, but were not limited to, movies, merchandise (e.g., bags, clothes, cups), sponsorship of sports and cultural events, and the Internet. Cigarette advertisements were three to five times more prevalent in ethnic minority communities than in white communities. Ethnicity and race of models in advertisements consistently matched that of the targeted neighborhood.

**Purpose.** The purpose of the Tobacco’s War on Culture presentation is to prevent negative health outcomes by reducing morbidity and mortality rates through prevention education in Riverside County. The Project’s efforts will help reduce the tobacco-related health disparities among ethnic and lifestyle populations. Additionally, our purpose is to advocate health efforts and policy development that promote cultural competency.

**Methods and Presentations.** Educational presentations were held for members of collaborative groups reflective of Riverside County’s diverse population:

- Black American Subcommittee of the American Cancer Society (ACS)
- Participants of the Desert AIDS Project
- Representatives of the Asian-American Pacific Islander Group and Inland Empire Asian-American Resource Center
- Junior high and high school students from various schools
- Members of the Riverside County Tribal Alliance and students of Sherman Indian High School
- Community members of the American Cancer Society Hispanic/Latino Caucus
- Participants of the YWCA Born Free Program

The presentations were designed to create awareness of tobacco-related health disparities and the tobacco industry’s targeting of ethnic/racial and minority communities. The tobacco industry does not discriminate; everyone is a target to achieve their “bottom line,” namely making profits.

At the end of each training session, participants were asked to complete an evaluation instrument survey that assessed their reactions to the training activities. The post-presentation self-administered surveys assessed satisfaction with the information presented, perceived importance of tobacco-related health disparities, and the tobacco industry’s targeting of ethnic/racial and minority communities.

**Results and Conclusion.** Participants who completed the post-presentation evaluation form reported that about one-third used tobacco or reported having a person in their household who smoked.

Almost all (96%) indicated reactions that cultural competence was important to effective tobacco prevention and control; that the tobacco industry effectively targets minority groups in advertising; and that regulating ads can help discourage “profiling” by the tobacco industry.

The next step for the Tobacco Control Project is to adopt a health equity policy that promotes cultural competency and linguistically appropriate services to the diverse communities of Riverside County.

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**Our next issue will be published May 1.**
POSTER PRESENTATION

A health equity committee: a local health department’s effort to address health inequities.

*Presented October 29, 2012 at American Public Health Association Annual Meeting, San Francisco, CA.*

Marshare Penny, DrPH(c), MPH * Aaron Gardner, MA * Wendy Hetherington, MPH * Aphrodyi Antoine, MPH, MPA * Diane Ewing, BA, RN

Like many local health jurisdictions, Riverside County Department of Public Health (RCDOPH) has many grant-funded programs addressing specific issues among targeted groups creating disjointed silos and a fragmented approach to health equity. Unifying the departments programs and services into a coordinated approach is the objective of the County of Riverside, Department of Public Health, Health Equity Committee. Since its 2008 inception, the work of the Health Equity Committee broadened thinking to include factors such as predatory lending practices, land use, institutional and historic racism and homophobia, crime, stress, and other issues linked to social justice and social determinants of health. The Committee has remained representative of diverse disciplines, job classifications, and cultural experiences.

How have we established sustainable committee engagement?

1. Administrative support and promotion: A “grassroots” style, bottom up approach. The Committee’s inception began with staff interest. All divisions were asked by administration to have a presence on the committee. The role of administration has been to remove barriers, not create them. The anxiety surrounding a lack of direct control is clear and present but administrators have had faith in the process and not tried to control it.

2. Diverse experience: Comprised of a diverse group of individuals with unique experiences and expertise. There are members from 16 different divisions; with job classifications ranging from frontline staff to the public health director representing wide-ranging expertise such as clinicians, epidemiologist, anthropologists, and health educators.

3. Autonomy and empowerment: The Committee members must have control over decision-making. Every member has the same level power, irrespective of their job position. The Committee must also have successes; seeing their work and suggestions implemented. Members are passionate and that passion must be nurtured by action.

4. Productive meetings: All meetings are working meetings. At each meeting, action items are reviewed with discussion of status and new assignments for completion. Smaller sub-committee meetings are also held to complete specific and focused tasks such as curriculum and policy development.

What have been committee successes?

- **3-Year Strategic Plan:** The development of a 3-year strategic plan using the National Stakeholder Strategy for Achieving Health Equity as a framework to identify eight priority areas. Conducted a SWOT analysis on the eight priority areas and from that developed measurable objectives under each priority area. This was a great teambuilding exercise for the Committee members.

- **Developing an Innovative Training Series:** Using a 5-module training series developed by Public Health Department of Alameda County, California as a template, we developed a 6-module training series aimed at shifting the departmental culture around issue of health inequities. This training gets all staff on the same page and builds a well-informed public health workforce to meet the challenges of addressing health inequities. [See lead abstract for this presentation.—Ed.]

What have been committee challenges?

- **Time and Resources:** This has been a priority of RCDOPH, but it remains unfunded. Staff are pulled away from their regular duties for active committee involvement, which includes meeting attendance, curriculum development and program facilitation. Additionally all staff, department-wide, are required to participate in the training series.

- **Topic Sensitivity and Importance:** The ongoing discussion of sensitive issues such as culture, the history of race and racism in the United States, social justice, health equity, discrimination, and homophobia create challenges for some staff.

Where do we go from here?

- Further expansion of departmental efforts at community collaboration and capacity building, and increased partnerships with sister departments and agencies.
- Assess the feasibility and effectiveness of instituting health equity planning in all policies.
- Evaluate the focus and effectiveness of all RCDOPH programmatic activities addressing health inequities and the impact of the department-wide training series.
Information for Disease Reporters

All case reporting forms and information for the County of Riverside Department of Public Health are available from our website at [www.rivcoph.org](http://www.rivcoph.org).

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<th>Communicable Disease Reporting</th>
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<td>Please refer to our on-line list of reportable conditions, including those to be reported immediately by telephone, within one day of identification and within seven calendar days. All forms are available from <a href="http://www.rivco-diseasecontrol.org/">http://www.rivco-diseasecontrol.org/</a></td>
<td>Certain non-communicable diseases are reportable under state and local statute. These conditions include, but are not limited to, pesticide exposure and DMV reportable conditions such as disorders characterized by lapses of consciousness. Please refer to our on-line list of reportable conditions for more information.</td>
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<td><strong>24-Hour Emergency</strong> for calls outside office hours, on weekends and holidays: 951 782 2974</td>
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<td><strong>Telephone Reporting</strong>: For Western Riverside County, call 951 358 5266. For Indio and Eastern Riverside County, call 760 863 8448.</td>
<td><strong>Animal Bites</strong></td>
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<td><strong>Fax Reporting</strong>: For Western Riverside County, fax to 951 358 5102. For Indio and Eastern Riverside County, fax to 760 863 8183.</td>
<td>Animal bites must be reported to both the Department of Public Health and the Department of Animal Services. For more information, please call 951 358 7387 during business hours.</td>
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