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Immigrants May Hold Clues to Protecting Health During Pregnancy

Exploring a Paradox

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The following material was excerpted with permission from the book entitled *Promoting Human Wellness: New Frontiers for Research, Practice, and Policy,* eds. Stokols, Daniel and Margaret Schneider Jamner, University of California Press, 2000

For the entire chapter with complete references, please refer to a copy of the book or contact Jillian Hopewell at MCN, jhopewell@migrantclinician.org or 530-345-4806.

Poverty is a well-known determinant of health. Persons of low socio-economic status have much higher levels of morbidity and mortality than do those of higher status. ¹⁻³ Yet recent research revealing positive pregnancy outcomes within poor immigrant groups raises the question of whether poverty is necessarily linked to adverse pregnancy outcomes. Are there protective factors that can buffer against the noxious effects of poverty during pregnancy? If so, what lessons can we learn from immigrant and refugee women about promoting healthy pregnancy outcomes?

To address these questions, this [article] attempts to identify protective factors that may be associated with favorable pregnancy outcomes among Latina and Southeast Asian women. It reports the work by Guendelman and colleagues on Latina women of reproductive age and extends previous analyses to compare Latinas and Southeast Asians. The geographic focus is predominantly on California since it is the most important immigrant-receiving state, absorbing approximately 40% of Latino and Asian newcomers. Favorable pregnancy outcomes among Southeast Asian women and Mexican immigrants have been reported in other states, suggesting that what we learn about these populations residing in California may be applicable elsewhere.

California's Fertile Ground

California leads the nation in rapid diver-

sification, moving away from a White "majority" toward a predominantly Asian and Latino population. Immigration and high fertility have fueled the growth of these populations, which are increasing at a rate ten times faster than that of Whites (i.e., White non-Latinos)...

Aside from their large immigration numbers and high fertility rates, it would seem that Mexican and Southeast Asian women have little in common. Indeed, these ethnic grounds have very different histories in California. Mexicans have a long history in the state, while Southeast Asians are recent immigrants. Hence, whereas a large proportion of Mexican origin women of reproductive age are U.S. born, Southeast Asian women are predominantly foreign born. Whereas Mexican women most often come by choice, seeking economic opportunity for themselves or their families, Southeast Asian women have been formed to flee their war-torn native lands. Yet because Southeast Asians are admitted as refugees, they can receive resettlement funds and other assistance such as language instruction and job training. Mexican immigrants, legal or not, are ineligible for such benefits since they do not qualify for "political refugee" status. Such circumstances, which are often exacerbated by anti-immigrant attitudes, create their own set of resettlement stresses for Mexican newcomers. In addition to the differences across these populations, there are important differences in language, culture, and social and political standing within the Mexican and Southeast Asian populations.

Despite these notable differences, similarities do exist at the population level in the general socioeconomic profiles of Mexican Americans and Southeast Asians in comparison to the majority White population of California. Both populations are characterized by low educational attainment and high incidence of poverty, especially among women....Mexican-American women, while more active in the labor force and less likely than Southeast Asian women to have families living below the poverty level, nevertheless have very low incomes in comparison with White women.

From a health perspective, Mexican-American and Southeast Asian women also share a high-risk profile. Both groups of women experience delayed entry into prenatal care, have large families with short birth-spacing intervals, and – with the exception of the Vietnamese – have high rates of teen pregnancy compared to White women.

Uncovering the Paradox

These socioeconomic and health risk factors have traditionally predicted adverse pregnancy outcomes in other populations. For instance, African Americans have risk

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profiles that are similar to immigrants, yet on average their pregnancy outcomes are much worse. 3,8-10 Studies of White women who share similar risk factors also show increased rates of low birthweight. 3,11 Surprisingly, Mexican Americans and Southeast Asians enjoy pregnancy outcomes that are comparable to those of the overall White population despite the dramatic differences in risk profiles.

California birth cohort files for 1990-92 indicate that infant mortality (birth to 364 days) and postneonatal mortality (28-364 days) rates among all Mexican Americans regardless of nativity states and Southeast Asians are comparable to those of Whites. The infant mortality rates are comparable even with the inclusion of infants weighing less than 500 grams at birth, who are increasingly being saved with improved technology in neonatal intensive care units.

Mexican Americans do have higher neonatal (0-27 days) mortality rates (4.1 per 1,000 live births) than Whites (3.7) or Southeast Asians (3.5); however, when we restrict the comparison to births of Mexican-born women exclude U.S.-born Mexican Americans, the neonatal mortality rates (3.9) are similar to those of Whites. Since foreign-born immigrants are even poorer, less educated, and face more difficulties in access to care than native-born Mexican Americans, their more favorable pregnancy outcomes are especially puzzling.

Birthweight data provide another strong indicator of Perinatal health, as infants who weigh 2,500 grams or less at birth have higher-than- average rates of morbidity, neurological impairments, and mortality during the early years of life. Among Mexican Americans in California, the rate of low birthweight is equal to that of Whites (5.1%) despite differences in socioeconomic status. However, Mexicanborn women have significantly lower rates than Whites. The low birthweight rates among Southeast Asian women appear to be significantly higher than Whites, possibly because of genetic or biological differences.10 On average, Asian infants weigh one-half pound less than White infants.12 Differences in birthweight distribution among Southeast Asians, however, do not

appear to affect rates of infant mortality adversely.

Seeking to Explain the Paradox

Research indicates that there are no straightforward explanations for the epidemiological paradox of positive pregnancy outcomes in immigrant mothers born in Mexico and Southeast Asia. Several hypotheses have surfaced that point to deficits in these populations, such as an underreporting of infant deaths, ethnic misclassification in birth and/or death certificates, and the possibility that excess fetal deaths might eliminate weaker fetuses before birth. Other hypotheses focus on the positive or "protective" factors that may contribute to healthy outcomes. For instance, selective migration may favor healthy mothers and healthy babies, and immigrant mothers who relocate in California may bring with them certain attitudes, values, and behaviors that protect them against stresses and other adverse conditions associated with poverty and resettlement in a new society. This [article] will examine each of these issues but will emphasize a search for clues in identifying protective factors for positive pregnancy outcomes.

Underreporting/Misclassification

It has been suggested that infant mortality rates among immigrant groups may be artificially low because of underreporting of infant deaths. However, low rates of out-of-hospital births in California, coupled with the fact that the great majority of neonatal deaths occur before the first hospital discharge, make it appear that underreporting of neonatal deaths is not a significant phenomenon for Mexican Americans or Southeast Asians in this state. 13-15 Underreporting, if it does occur, is more likely to occur in the postneonatal period (28-364 days), when the child is living at home. 15

Underestimation of infant mortality cannot, however, explain more favorable birthweight distributions among infants of Mexico-born mothers than White mothers, unless there are selective pressures to return to Mexico when a pregnancy has complications likely to result in adverse pregnancy outcomes.

Excess Fetal Deaths

Another conceivable deflator of the infant mortality rate might be excess fetal deaths among Latinas and/or Southeast Asians, whereby biologically weaker fetuses are eliminated and only healthy ones survive until birth.

Studies of fetal mortality are few, and they offer poor comparability because of different state reporting laws. Examination of available data in California, where the law mandates reporting of fetal deaths after 20 weeks' gestation, has not supported the hypothesis that excess late fetal deaths occur in the Latina (predominantly of Mexican birth or descent) and Southeast Asian populations. Guendelman, Chavez, and Christianson studied a large sample of low-income women enrolled in the California Comprehensive Perinatal Program and found that the fetal death rate after 20 weeks' gestation among Latinas (7.8 per 1,000 live births and fetal deaths) was actually lower than the rate among Whites (8.4).25 These ethnic disparities persisted after controlling for sociobehavioral characteristics, such as maternal age and education, support systems, level of acculturation, tobacco use before and during pregnancy, and prenatal care.

One predictor of fetal death after 20 weeks is a history of fetal loss. By self-report, Latina women indicated having had fewer previous fetal losses than White women.

Clearly, more studies are needed to compare the actual rates of fetal death among our study populations and Whites. Yet the information to date offers little support for the excess fetal death hypothesis as a likely explanation of the epidemiological paradox.

Selective Migration

Several studies have shown that both economic and cultural self-selection operate in voluntary migration, as from Mexico.³⁰⁻³² The unpredictability of the economic environment in the sending communities often motivates people

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to want to take the risks involved in relocation.

Evidence indicates that labor migration decisions are made jointly by family members within households.35 But selection factors may vary according to gender roles and expectations. While Mexican male migrants are pushed out of their communities by lack of employment and pulled to the United States by labor and higher wages and social network ties that facilitate access to employment,33-35 female participation in migration is more often a means of keeping the family together and providing continuity of care.36 This being the case, health selection factors may perhaps be stronger among Mexican men, who are most often the initiators of migration, than among Mexican women, who are often the implementers of household decisions to migrate.

Protective Sociocultural Factors

While the hypotheses discussed to this point offer some hints about the health paradox among immigrant mothers, perhaps most compelling from the "prevention" perspective is the idea that immigrants and refugees might be profiting from sociocultural and behavioral factors whose benefits outweigh the risks stacked against them. It appears that newcomers bring to the host society values, attitudes, and behaviors that protect them against the risks of adverse pregnancy outcomes or directly contribute to healthy outcomes.

HEALTHY HABITS

Several studies have shown that the consumption of tobacco, alcohol, and illicit drugs during pregnancy are associated with poor pregnancy outcomes. Fetal growth retardation has been associated with smoking^{38,39} and with moderate to high levels of alcohol use.^{40,41} Substance use also contributes to general pregnancy complications and congenital malformations.^{3,38,42,43}

Cigarette Smoking

Cigarette smoking during pregnancy causes close to 10% of fetal and infant deaths and one-fifth of all low-birthweight births in the united States and is the single

most important known cause of environmentally induced low birthweight.10 Women who smoke are almost twice as likely to deliver a lowbirthweight baby as are nonsmokers.44 Studies consistently show low prevalence rates of tobacco use among Mexican-American, including Mexico-born women, and Southeast Asian women.

Since the bulk of evidence shows a clear and consistent association between low birthweight and infant mortality and smoking, the low rate of smoking in these immigrant populations is clearly advantageous.

Alcohol Use

Alcohol use during pregnancy has been associated with both short and long-term negative health effects for infants, including congenital malformations and mental retardation.⁴⁸

Women who consume large amounts of alcohol during pregnancy have higher rates of low-birthweight babies than do nondrinkers. While the evidence is mixed, alcohol use during pregnancy appears to be low among Mexican-American and Southeast Asian women.

While important, it does not appear that alcohol has nearly as strong an impact on low birthweight and infant mortality as cigarette smoking. ¹⁰ However, the low prevalence rate of alcohol consumption during pregnancy in immigrant groups does suggest a reproductive health advantage.

Illicit Drugs

Prenatal use of controlled substances has been correlated with fetal growth retardation, prenatal death, and pregnancy and



delivery complications.56-60

Overall, foreign-born Asian and Latina women in this Vega et al. Study were far less likely to consume addictive substances than White women during pregnancy, except for alcohol among Latinas. These findings indicating low consumption have been supported by recent studies conducted by Rumbaur and Weeks⁴⁹ and Newman et al.⁶¹ in San Diego.

Although few pregnant women engage in drug abuse, it appears that those who do are generally in poorer health and obtain limited prenatal care. ⁴⁸ The much lower prevalence of illicit drug use among immigrants suggests another health advantage.

DIETARY INTAKE

A nutritious diet helps to meet the changing needs of the pregnant woman and her fetus. Specific nutrients such as calcium, zinc, protein, iron, and vitamins C, A, and E and folic acid have been related to pregnancy outcomes, 38, 62 and there is no evidence of substantial differences in nutritional requirements among various ethnic

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groups. Guendelman and Abrams compared the intake of the previously named eight nutrients between White women and Mexican-American women of reproductive age, using data from two Health and Nutrition Examination Surveys. 63 For the purpose of comparison, these analyses are extended here to examine the different nutrient intakes of Mexican-American pregnant women in the Hispanic HANES (n = 79), White women in the second HANES (n = 72), and a sample of pregnant Southeast Asian women who participated in a Prenatal Nutrition project at the University of California at San Diego between similar reference periods (1978-90). The latter were studied by Newman et al., who reported results based on 91 Cambodian, 37 Laotian, and 59 Vietnamese women.⁶¹ For all groups, dietary intake was elicited by participant recall of food and beverage consumption during the preceding 24-hour period.

...[T]he five study groups did not differ significantly with respect to age or mean number of live births. However, they differed markedly with respect to height, weight, and body mass index (BMI). White women were the tallest, while Mexican Americans had the highest BMI. All three Southeast Asian groups were shorter and lighter and had a lower BMI than either Mexican-American or White women. Despite these differences, the energy intake among the groups was similar.

A comparison of the mean daily intake of each nutrient relative to the recommended daily allowance (RDA) standards for pregnant women shows that the mean intake of protein was above the RDA for all ethnic groups. Yet the protein intake was significantly higher for Southeast Asian women (particularly the Vietnamese) in comparison with Mexican-Americans and White women. Mexican-American and White women did not differ significantly in their intake of any of the eight nutrients, and the mean daily intake of vitamins C and A, iron, and zinc relative to the RDA was similar across all ethnic groups. Aside from protein, then, the findings do not show a better diet for immigrant compared to nonimmigrant pregnant women.

(Because the RDAs are estimated to exceed the nutrient requirements of most individuals, intakes below the RDA for a given group are not necessarily inadequate, but they do suggest an increased likelihood of poor dietary intake.) In fact, compared with non-Southeast Asian women, Cambodian women showed a lower intake of folate, vitamin E, and calcium.

These findings were not adjusted for socioeconomic status. White women in the HANES sample had higher incomes than the immigrant groups in either study, and it is possible that after controlling for income, Southeast Asian women, all of whom were at or under 200% of the poverty level in the Newman et al. Study, would have had better nutrient intake than Whites. Clearly, more research, utilizing larger samples and controlling for socioeconomic status, is needed to compare the nutrient intake of Southeast Asian and White women.

Somewhat more information is available for Mexican Americans. As with drug and alcohol use, the nutrient intake of Mexicanborn women seems to be far better than the intake of U.S.-born women of Mexican descent. According to Guendelman and Abrams in their study of generational differences in nutrition,63 Mexican-born immigrants had significantly higher absolute intake and higher average intake relative to RDA standards for protein, vitamins (A, C, E, and folic acid), and calcium than did second-generation Mexican Americans and Whites. Although this study did not follow women through their pregnancies, the results suggest that nutrition may help to explain the much lower rate of low birthweight among first-generation Mexican-American women than among U.S.-born women of Mexican descent. 64,65 Large epidemiological studies are needed to examine the association between dietary intake, weight gain during pregnancy, and pregnancy outcomes among newcomer populations to help us further unravel the epidemiological paradox.

KIN NETWORKS AND FAMILY STABILITY

The role of social factors in explaining the

paradox is even more poorly understood than that of health and nutrition habits. Nevertheless, some social factors related to family and social networks seem to provide clues to better reproductive health, even though we do not understand the mechanisms by which they affect pregnancy outcomes.

Close kin networks may confer protection to the pregnant woman and compensate for income deficits by improving access to informational and psychosocial support.⁶⁶⁻⁶⁹

These resources may translate into more knowledge about healthy pregnancies, the encouragement of positive behaviors, and less stress during pregnancy, all of which more directly affect perinatal morbidity and mortality. They may also alter hormonal and immunological responses associated with pregnancy complications.⁷⁰

Research on Latinos and Southeast Asians has described the centrality of the family in both cultures. Latinos tend to have close kin networks and emphasize the collective needs of the family over individual needs.71-74 Indeed, the family has been described as the single most important institution for Mexican Americans.75,76 Kinship in this case comprises not only relatives but also the Latino compadre system, which establishes "coparents," in the Catholic tradition, who share broader, less formalized obligations toward the children.77 Recent evidence further suggests that women of Mexican descent appear to have more social network contacts outside of the family66 compared with Whites as well as enhanced access to psychosocial and informational social support. As noted, these factors may contribute to favorable pregnancy outcomes by making more resources available to the pregnant woman, thereby compensating for economic deficits.

Family stability also appears to influence reproductive health. For instance, a study by Ramsey et al.⁶⁹ showed that women who lived alone were at highest risk of having smaller babies, while living with

extended family was correlated with higher birthweights. Living with a husband further increased the likelihood of having a heavier baby. These effects might be mediated by such factors as higher income, better nutrition, and less stress.

Family stability may play a role in the case of teenage pregnancies as well.

Scientific and popular understanding have linked births to teenage mothers (under 18 years) with poverty, welfare dependency, and a host of other social problems, including alienation from family. But teenage pregnancy among Mexican Americans and Southeast Asians appears to follow a different pattern. In both groups, pregnancy at a young age appears to be more common and more culturally acceptable than among Whites, and teenage mothers are often cared for and supported by extended family.

Few studies have directly tested the relationship between family networks, family stability, and pregnancy outcomes. The prevalence of strong and stable family networks in immigrant populations suggests that these factors might help to explain the paradox of favorable pregnancy outcomes among at-risk populations.

THE EFFECT OF ACCULTURATION ON PREGNANCY RISKS AND OUTCOMES

A corollary to the protective sociocultural hypothesis is the acculturation hypothesis. According to the latter, as immigrants spend more time in the United States or move to the second generation, their healthy behaviors, norms, and attitudes change, resembling those of the White nonimmigrant population or of high-risk groups with which they come into contact. Shifts in health risks coupled with changes in sociodemographic characteristics that occur with acculturation affect pregnancy outcomes.

Recent findings suggest that it may not take a whole generation for changes in the reproductive risk profile of Mexican Americans to become apparent. Guendelman and English found that within five years of moving to this country, there was notable deterioration in the perinatal health of Mexican-born women living in California. Long-term residents had fewer planned pregnancies and were

more likely to smoke than newcomers who had lived in the country for five years or less. After controlling for smoking planned pregnancy, and maternal age, long-term immigrants living in the United States for more than five years were more likely to have pregnancy complications and to deliver preterm and low-birthweight infants than newcomers.⁹¹

CONCLUSION

The rapidly growing Mexican-American and Southeast Asian populations in California are quite heterogeneous in terms of social and cultural backgrounds. Despite the diversity, both within and across immigrant groups, these populations share a socioeconomic disadvantage compared to White Californians.

Although research has linked low socioeconomic status with a host of health risk factors and adverse outcomes, this relationship does not necessarily hold when examining the pregnancy outcomes of these immigrant women. As this [article] has shown, Mexican-American and Southeast Asian immigrants have favorable pregnancy outcomes despite their socioeconomic disadvantages. This health paradox is more accentuated among foreign-born women, who are even poorer than their U.S.-born counterparts. There is strong evidence to suggest that immigrants bring to the United States values, attitudes, and health behaviors that may protect them from adverse pregnancy outcomes. Among the protective factors, the very low use of addictive substances stands out as an important contributor to healthy outcomes. Other protective factors such as good nutrition, a strong sense of family and social support, and a positive attitude toward childbearing show strong potential for contributing to favorable pregnancy outcomes.

These protective factors may buffer immigrant women from the stresses of poverty or else directly contribute to positive outcomes by bolstering the immune and hormonal systems. Although several studies have focused on the relationship between these factors and pregnancy outcomes in other populations, remarkably few studies have focused on immigrant Latina and Southeast Asian women. Large

epidemiological studies are needed to examine the relationship between pregnancy outcomes and healthy diets, weight gain during pregnancy, healthy habits, and networks that provide informational and emotional support and reinforce healthy behaviors among immigrants.

As this [article] demonstrates, the pregnancy outcomes of immigrant women vary according to nativity and increased exposure to American society. Although certain risk factors associated with pregnancy outcomes – such as education, income, and access to prenatal care – improve among U.S.-born, second-generation Mexican Americans, many protective factors become eroded. Compared with first-generation Mexican-American women, the pregnancy outcomes of second-generation women are less favorable.

While it is too early to examine generational changes in birth outcomes among the more recently arrived Southeast Asian population, we can begin to explore the effects of acculturation among foreignborn Southeast Asian women. Research suggests that they may be buffered from many of the negative effects of acculturation, as demonstrated by their improving birth outcomes in recent years. This response contrasts with that of Mexican immigrants who appear to show a marked deterioration in risks and pregnancy outcomes after only five years of residing in the United States. Such differentials may be a result of the different ways in which immigrants adapt to our society. More research is needed to examine the modes of immigrant adaptation and its effect on pregnancy outcomes. We must determine whether the differentials observed between the two immigrant groups are a product of different community receptivity to these populations or a different sociocultural orientation that immigrants bring to our society.

Recognizing that tremendous gaps in knowledge exist, some preliminary conclusions can be drawn regarding what immigrants can teach us about having healthy babies.

This health paradox demonstrates — contrary to the implications of earlier epi-

Gestational Diabetes and Hispanic Women

Candace Kugel, CRNP, CNM, MS

while Hispanic women seem to suffer fewer complications of pregnancy, there is at least one area where they appear to be at higher risk. In several studies that have looked at the incidence of gestational diabetes in various ethnic groups, Latina women in the U.S. have significantly higher rates of this condition, compared with non-Hispanic whites and African-American women.

Gestational diabetes deserves the attention of prenatal care providers since it can result in a high birthweight baby, which in turn may lead to a more difficult labor and birth experience, with an increased risk of cesarean section. Neonatal hypoglycemia is not uncommon in infants born to women with gestational diabetes.

Although gestational diabetes usually resolves soon after delivery, probably the most significant health risk for women with this condition is that they are at high risk of developing diabetes later in life. According to the American Diabetes Association, the prevalence of Type 2 diabetes among Latinos is double that of non-Latino whites in the US. Identifying some of these individuals early in life may offer an opportunity to provide important preventive care, including nutrition education and periodic screening.

Recently, the practice of routine screening for gestational diabetes has been questioned. This has led to the development of a "selective screening" strategy based on

SELECTIVE SCREENING CRITERIA FOR GESTATIONAL DIABETES

Criteria for women who *do not* need screening:

- Age less than 25.
- No history of poor obstetric outcome.
- Member of an ethnic group with a low prevalence of gestational diabetes (Hispanic, Native American/Alaskan, Asian/Pacific Islander, African American women do have a high prevalence and thus should be screened)
- Weight normal before pregnancy
- No known diabetes in first-degree relatives
- No history of abnormal glucose tolerance

risk criteria. The Fourth International Workshop/Conference on Gestational Diabetes developed a list of factors that indicate a woman would *not* need to be screened (see table). Of significance to providers working with migrant farmworkers, note that screening *is* recommended for Hispanic women.

Screening is performed at 24-28 weeks of pregnancy and consists of a one-hour serum glucose test after ingestion of a 50 gm glucose solution. The usual screening threshold of 140 mg/dL is used to determine an abnormal result. A 3-hour glucose tolerance test is then administered for diagnosis of gestational diabetes.

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Pre-Natal Tracking

CN has begun an exciting new initiative. At the request of the DeSoto County Health Department in Florida, MCN is developing a pilot-tracking program for pregnant migrant women. Migrant health providers have expressed frustration with attempting to deliver comprehensive prenatal care to women who change residence multiple times during their pregnancies. Migrant women also encounter problems in finding prenatal care as they travel. As a result of this lack of

continuity, they often miss important prenatal screening procedures or are subjected to duplication of expensive blood tests and sonograms. Several attempts at developing mobile records for pregnant migrant women have met with mixed results.

The prenatal tracking program will use the existing tracking structure developed through MCN's TB and Diabetes tracking efforts. The initial goal is to enroll and track 10 women through their pregnancies. Transfer of records from one location to the next will be facilitated and women will be assisted in promptly accessing care when they move. Information from prenatal care records will be compiled to measure outcomes throughout the pilot project. Applications for funding have been submitted to expand this project to serve a larger number of pregnant farmworker women.

For more information about this new initiative contact Stephanie Freedman at *sfreedman@migrantclinician.org* or 512-327-2017.

CDC Releases New Bioterrorism Web Resources for Clinicians, Lab Professionals, Public

tlanta-The Centers for Disease Control and Prevention (CDC) has unveiled a redesigned Web site offering both new and updated bioterrorism resources for health professionals and the public." The site at www.bt.cdc.gov addresses the need for up-to-date and accurate information on health threats arising from exposure to biological, chemical, or radiological agents. The redesigned site, which focuses on Public Health Preparedness and Emergency Response, is the official federal site for medical, laboratory, and public health professionals to reference when providing information to the public and for updates on protocols related to health threats such as anthrax.

CDC redesigned the site in response to overwhelming demand from the public and professionals for credible information during the anthrax crisis. In October 2001, CDC experienced more than a 100 percent increase in traffic to its main Web site, www.cdc.gov, which links directly to www.bt.cdc.gov. CDC was the most visited federal government Web site in the nation in October, registering more than 9.1 mil-

lion unique visits. "As a result of recent events, we find that not only health professionals, but people from all walks of life want information on health threats directly from our agency's Web site," said CDC Director Jeffrey P. Koplan, MD, MPH. "This new site makes the most-requested information on public health preparedness and emergency response easier to find and update quickly."

CDC will continue to add information to the site as part of its increased role in responding to health threats that involve biological, chemical, or radiological agents. CDC's other information resources include a hotline: 1-888-246-2675 (English) and 1-888-246-2857 (Spanish) available Monday through Friday, 8 a.m. to 10 p.m. EST; Saturday and Sunday, 10 a.m. to 8 p.m.

MCN Seeks 2002 Unsung Hero Nominations

In 1990, the Migrant Clinicians Network established its Annual Unsung Hero Award as a way to honor one of the unrecognized clinicians in the field of migrant health. The Award winner receives an expense paid trip to the 2002 Annual Migrant Health Conference, and is introduced and applauded at MCN's Annual Meeting.

Nominees for the Unsung Hero Award are distinguished by their demonstrated dedication to migrant health, participation in a variety of areas in migrant health care delivery, innovation in service delivery and prevention strategies, clinical leadership, and lack of previous recognition for their contributions to migrant health.

To nominate your Hero, please submit the clinician's name, address, telephone number, and a short paragraph describing why you believe the nominee is a Hero to: jhopewell@migrantclinician.org or mail it to Jillian Hopewell, Migrant Clinicians Network, 1933 Mars Way, Chico, CA 95926, (530) 345-4806 voice and fax. Nominations should be received by MCN no later than March 4th, 2002.

CALENDAR

Social Determinants of Health: Assembling Pieces of the Puzzle

The UNC-Chapel Hill School of Public Health 24th Annual Minority Health Conference Friday, March 1, 2002

For information about:

- Satellite and Internet broadcasts: www.minority.unc.edu/sph/minconf/2002/
- Dr. Sherman James and the Keynote Lecture: www.minority.unc.edu/sph/minconf/2002/keynote.htm
- Attending the Conference in person in Chapel Hill or displaying an exhibit for your organization www.sph.unc.edu/oce/mhc/

16th Annual California Conference on Childhood Injury Control

September 23-25, 2002 Sacramento, CA California Center for Childhood Injury Prevention 619-594-3691 www.cccip.org

2002 National Conference on Health Care and Domestic Violence

September 26-28, 2002 Atlanta, Georgia Family Violence Prevention Fund (415) 252-8900 www.endabuse.org/health/CFA

The National Safety Council Annual Congress and Exposition

October 7-9, 2002 San Diego, California (630) 285-1121 www.nsc.org

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demiological studies — that poverty does not necessarily coincide with unhealthy lifestyles and that a lack of economic resources does not always mean a lack of human and social resources. If we grasp the significance of this paradigm shift, we may be in a better position to design health promotion policies that address immigrants' needs by emphasizing their sociocultural assets rather than assuming — and often blaming them for — their deficits.

With the advent of California's "majority-minority" population in the 21st century and the increasingly negative stereotypes placed on immigrants, as well as the

cutbacks in social programs for the poor, it is incumbent on health care providers, public health planners, and policy makers to recognize the positive health and social aspects of immigrant communities. Such awareness is important in order not only to preserve the health and healthy lifestyles of immigrant women and their children but also to learn ways of transferring this knowledge to promote health in other communities with a high incidence of infant mortality and low-birthweight babies. In recognition of these positive and protective factors and the benefits that they provide to all communities, the

following steps are recommended:

- Health-media messages reinforcing these protective values and behaviors must be disseminated broadly in ethnic communities to counteract the influences of alcohol, tobacco, and food industry advertising.
- Educational strategies must encourage a sense of pride and confidence in the sociocultural assets that immigrant families and communities possess.
- State funding must be maintained to support primary care facilities for both legal and undocumented immigrants.
- Research and evaluation opportunities must be expanded to assess the best ways to apply the protective knowledge and skills of Southeast Asian and Mexican –American populations to other at-risk populations.

The reproductive health of California's large immigrant populations is a compelling area for future research and the development of new health promotion strategies. Through increased attention to these groups, we can more fully understand how to optimize maternal and child health for all Americans.

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