Hepatitis Screening, Immunization and Testing for Mobile Populations and Immigrants from Mexico, Central and South America, and the Caribbean

Migrant Clinicians Network, Inc. Position Paper

The mission of the Migrant Clinicians Network (MCN) is to provide access to high quality, culturally relevant, and population specific information and tools as an essential part of improving quality of care for farmworkers and other underserved mobile populations.¹ Communicable disease prevention guidelines are often not specific to migrant and immigrant populations. MCN offers these guidelines on hepatitis prevention to supplement standard guidelines¹ in order to suggest a best practice approach to protecting mobile clients in the U.S. from viral hepatitis.

Hepatitis Screening

MCN recommends that all primary care and public health clinics include questions about hepatitis risks, and history of liver disease and immunization as part of standard medical assessment (whether asked in written or oral format). MCN recommends that clinics ask these questions of all new clients and update this information at least annually. Specific risk question content is given below. Many clients who move for work purposes are young men. Because young lowincome men tend to present in clinics only with acute illness or injury, MCN recommends that, if the client's condition permits, young men in particular be screened for hepatitis risk factors at any visit, even if they are presenting with unrelated illness or injury.

Hepatitis A

Hepatitis A is transmitted via a fecal-oral route. Though not chronic, hepatitis A can cause serious illness and loss of work time as well as being a more serious health risk to people with chronic liver disease and weakened immune systems. Adults are more likely

to show symptoms of illness (jaundice, fatigue, abdominal pain, loss of appetite, nausea, diarrhea, fever) than children.

Mobile working poor persons may be at increased risk for hepatitis A due to lack of access to appropriate water and sanitation facilities while traveling, and substandard housing situations. In addition, hepatitis A is endemic to Mexico, Central and South America, and the Caribbeanⁱⁱ, and history of exposure is much more common in those countries than in the U.S.

Standard risk assessment questions for hepatitis A should include the following: standard hand washing practices around food handling and diapering; gender of sexual partners (men having sex with men or a male partner who has sex with men); country of origin, travel history, and current travel plans; as well as history of hepatitis A disease and hepatitis A vaccination.

Hepatitis A vaccination (a two-shot series, with the second shot at 6-12 months after the first) is recommended for persons with chronic liver disease (including chronic alcoholism), men who have sex with men, and persons who work with hepatitis virus in a laboratory setting. These recommendations apply to migrant and immigrant populations in the same way as to all other groups.

Hepatitis A vaccination is also recommended for "persons traveling to or working in countries that have high or intermediate endemicity of hepatitis A." This description might include many migrant workers who travel between Mexico (or Central or South America or the Caribbean) and the US.

However, because hepatitis A is endemic in their countries of origin, MCN recommends that clinicians serving migrant and mobile populations assume that adolescents and adults who spent significant

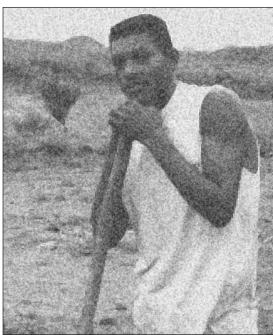


Photo © Carmen Retzlaff 2000

portions of their lives in Mexico, Central or South America, or the Caribbean have been exposed and developed immunity to hepatitis A. These adults should not be tested or immunized for hepatitis A, even if they are traveling to Mexico, Central or South America, unless they meet other standard hepatitis A risk criteria (listed above). MCN also recommends that children over 24 months² who were born in the US and will be traveling to Mexico, Central or South America, or the Caribbean with their families be vaccinated against hepatitis A. For older children, between the ages of five and 12, who have already lived in or traveled to

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Mexico, Central or South America, or the Caribbean, hepatitis A testing may be cost-effective, if time allows, in order to decide whether to vaccinate them if they are traveling again to an endemic area. One study found that children along the US-Mexico border who visited Mexico with their families were susceptible to food-borne exposure to hepatitis A via street vendors.iv The child will have optimal protection from hepatitis A after two weeks from the first vaccination, so the series should be started as far in advance of the travel as possible, but given even if the child is leaving immediately.

The Centers for Disease Control and Prevention (CDC) also recommends hepatitis A vaccination for "children in states, counties, and communities where rates of hepatitis A were/are at least twice the national average during the baseline period of 1987-1997." Also, "children living in areas where rates of hepatitis A are greater than the national average but lower than twice the national average should be considered for routine vaccination. "These are urban and rural areas with high rates of hepatitis A. The eleven higher incidence states are: Arizona, Alaska, Oregon, New Mexico, Utah, Washington, Oklahoma, South Dakota, Idaho, Nevada, and California. Intermediate incidence states are: Missouri, Texas, Colorado, Arkansas, Montana and Wyoming. Because migrant children may move through these areas, MCN recommends that migrant children between the ages of 24 months and 10 years whose families are expected to move frequently for work be vaccinated against hepatitis A.vi

If hepatitis A vaccination is indicated and immunization records are not available and/or history of hepatitis A is inconclusive, clients can be vaccinated for hepatitis A: vaccination of persons with immunity to hepatitis A is considered safe. A combination hepatitis A and B vaccine is an option for immigrant and migrant children for whom both immunizations are indicated (this is a three-shot series: infant vaccination schedules vary slightly by vaccine brandvii).

Hepatitis B

Hepatitis B virus is spread through blood or infected body fluids, via unprotected sex, sharing injection equipment, job-related needlesticks, and vertical transmission from an infected mother. In the U.S., hepatitis B is primarily a sexually transmitted infection. Adults are more likely to show symptoms of illness (jaundice, fatique, abdominal pain, loss of appetite, nausea, vomiting, joint pain)

than children, and about 30% of those infected show no symptoms. Infection can be acute or chronic and chronic infection is more likely for persons infected in childhood. Chronic infection can lead to cirrhosis, liver cancer, and liver failure.

Standard risk assessment questions for hepatitis B should include the following: current sexual activity, sexual history (number of partners in the last six months) and history of unprotected sex; gender of sexual partners or partners' partners (men having sex with men or woman's male partner who has sex with men); information on partners' partners (whether partner is monogamous, has unprotected intercourse with IDU); history of sexually transmitted infections; history of injection drug use or sharing of any kind of injection equipment; and country of origin; as well as history of hepatitis B disease and hepatitis B vaccination. Anecdotal reports from immigrants and migrant clinicians indicate that sharing of needles for self-injection of vitamins, antibiotics, or injectable contraceptives may occur among groups of immigrants from Mexico and Central America. Therefore, MCN recommends that clinicians serving this population ask about sharing of any needles for any reason.

Hepatitis B vaccination (typically a threeshot series, with the second dose at 1-2 months after the first, and the third 4-6 months following) is recommended for adults with renal failure/end-stage liver disease, recipients of hemodialysis or clotting factor concentrates, healthcare and public safety workers who have exposure to blood in the workplace, correctional inmates, persons with HIV, and household and sexual contacts of infected persons. Behavioral risk factors and vaccine indications include injection drug users, persons with more than one sexual partner in the previous six months, persons with a new sexually transmitted infection, all clients of STD clinics, and men who have sex with men. These recommendations apply to migrant and immigrant populations in the same way as to all other

Accelerated hepatitis B vaccine schedules have been considered for international travelers leaving before the three-shot series can be completedviii and for inmates in correctional facilities for whom the vaccine is indicated but who are scheduled to be released before the series can be completed. Similarly, MCN recommends that clinicians consider acceleration of the second dose of hepatitis B vaccine in adults for whom the vaccine is indicated who will be migrating and leaving the care of the clinic; clinicians may choose to administer

the second dose within three weeks of the first and assume that adequate coverage is likely with two completed doses rather than three. Hepatitis B vaccination given in series closer than the suggested guidelines is considered safe. The entire three dose hepatitis B vaccine series is preferred whenever possible, to ensure long-term immunity. There is no outer time limit to complete the schedule: the third dose can be given years later.

All children in the U.S. should be vaccinated against hepatitis B as part of their routine immunization series^{ix}. Hepatitis B is also recommended for children in Mexico, and vaccination coverage rates are reported to be high in recent years (since 2000).x If hepatitis B vaccination is indicated and immunization records are not available and/or history of hepatitis B is inconclusive, clients can be vaccinated for hepatitis B: vaccination of persons with immunity to hepatitis B is considered safe.

MCN recommends that clinicians take every opportunity to assess immunization status of immigrant adolescents from Mexico, Central and South America and the Caribbean: routine hepatitis B vaccine was generally not in place in those countries when those children were young.

All pregnant women should be tested for hepatitis B early in pregnancy and retested later in pregnancy if they have behavioral risk factors during the pregnancy. MCN recommends that mobile prenatal clients lacking complete records from previous prenatal visits indicating hepatitis B screening be tested for hepatitis B.

Because many young adults have multiple sexual partners, changes to current recommendations are being considered to move toward vaccination of all young adults, since adequate sexual risk assessment is sometime not undertaken or possible. MCN recommends that all adults be vaccinated against hepatitis B, especially adolescents and young adults under 30. This appears to be best clinical practice to fully protect young people against hepatitis B.

Parts of Central America and the Caribbean are considered to have intermediate rates of hepatitis B.xi This includes countries of common origin for migrant workers in the U.S., including Guatemala, Honduras, El Salvador, Dominican Republic^{3xii} and Haiti. Little data has been gathered on hepatitis B rates in these countries. Countries with endemic hepatitis B have high rates of vertical or perinatal transmission and children infected with hepatitis B have a much higher risk of developing chronic hepatitis B (and subsequent problems

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including liver cancer).xiii In light of these risks, 4 MCN recommends that persons born in Guatemala, Honduras, El Salvador, the Dominican Republic and Haiti be tested for hepatitis B.5 In addition to providing optimal protection from disease for clients, screening of immigrant clients will also add to the knowledge base about the level of risk for children from those countries. MCN will advocate for further data collection on hepatitis B rates in Latin America and among immigrants to the United States.

Vaccinating young adults against hepatitis B and testing persons born in countries that may have high rates of perinatal transmission of hepatitis B is best practice for protecting the health of Latin American immigrant clients. Many clinics and clinicians do not have funding for adult immunizations and serologic testing for hepatitis B. MCN will continue to advocate for funding for these clinical resources.

Endnotes

- 1. MCN produced this position paper in conjunction with Community Health Education Concepts (CHEC): http://www.healthletter.com. This paper was inspired by work done on HepTalk, a hepatitis prevention project with health centers and health department clinics serving migrant and immigrant populations. For more information about the HepTalk project and other MCN hepatitis initiatives, see Clinical Excellence on the MCN website: http://www.migrantclinician.org/excellence/ hepatitis.
- 2. The hepatitis A vaccine is currently approved in the U.S. for children over 24 months.
- 3. While these four countries are rated by CDC as "intermediate risk," there is a lack of data. One study (in 2000) indicated a 21.4% seroprevalence rate in the Dominican Republic, which would place the Dominican Republic in the high prevalence category.
- 4. Approximately 90% of hepatitis B infected infants become chronically infected. Risk of death for cirrhosis or hepatocellular carcinoma for chronically infected persons is 15-25%.
- 5. In addition, Hepatitis B is endemic to the Amazon Basin of South America, Few migrants come to the US from this area, but if these patients do present, MCN recommends that persons who were born or whose parents were born in the Amazon Basin (including Peru, northern Chile, southern Columbia, extreme southern Venezuela, northwestern Brazil and northern Bolivia) be tested for hepatitis B, as well as those from the intermediate-risk areas of northern Venezuela, Guyana, Suriname and central and southern Brazil.

Hepatitis C

Hepatitis C virus is spread through blood or infected body fluids, via sharing injection equipment, job-related needlesticks, and vertical transmission from an infected mother. In the US, hepatitis C is primarily transmitted through sharing of injection drug needles and equipment. Hepatitis C is the most common chronic bloodborne infection in the US. Hepatitis C often found to be chronic and can lead to liver failure. There is no vaccine against hepatitis C infection.

Standard risk assessment questions for hepatitis C should include the following: history of injection drug use (including experimenting minimal times many years in the past) or sharing of any kind of injection equipment including for health benefit (e.g. vitamins); receipt of donated blood or organs prior to 1992; and receipt of clotting factors made before 1987; as well as history of hepatitis C disease. As stated above, anecdotal reports from immigrants and migrant clinicians indicate that sharing of needles for self-injection of vitamins, antibiotics, or injectable contraceptives may occur among groups of immigrants from Mexico and Central America. Therefore, MCN recommends that clinicians serving this population ask about

sharing of any needles for any reason.

CDC recommends hepatitis C testing for persons with a history of injection drug use, recipients of clotting factors made before 1987, hemodialysis patients, recipients of blood or solid organs before 1992, and persons with undiagnosed liver problems (e.g., persistently abnormal ALT levels). These recommendations apply to migrant and immigrant populations in the same way as to all other groups.

Because treatment of hepatitis C is currently very expensive, clinicians serving poor clients often question the benefits of testing (which is also itself expensive). MCN recommends that all persons for whom standard (CDC) recommendations indicate testing be tested if financially feasible. Diagnosis of hepatitis C, even in the absence of treatment, can be useful in helping clients maintain liver health and quality of life, as well as in counseling to prevent transmission.

In addition, MCN will continue its work to advocate for the availability of hepatitis C treatment for indigent clients, including working with primary care physicians to explore possibilities for hepatitis C treatment management in the primary care setting as this burgeoning epidemic leaves fewer specialist-only treatment options available.

References

- All vaccination and testing guidelines cited here are from the Centers for Disease Control and Prevention. Viral Hepatitis Division website: http://www.cdc.gov/ncidod/diseases/Hepatitis and MMWR QuickGuide: Recommended adult immunization schedule—United States, October 2004-September 2005, November 19, 2004/Vol. 53/No. 45.
- All geographic information on prevalence and risk in this report is from: CDC, Health Information for International Travel (The "Yellow Book") 2003-2004. The Yellow Book is published every two years by CDC as a reference for those who advise international travelers of health risks.
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- Wienberg, M et al, Hepatitis A in Hispanic children who live along the United States-Mexico border: The role of international travel and food-borne exposures. Pediatrics vol. 114, No. 1, July 2004.
- Prevention of hepatitis A through active or passive immunization: Recommendations of the Advisory Committee on Immunization Practices (ACIP), MMWR, October 01, 1999 / 48(RR12);1-37.
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- vii See schedule recommendations of the Immunization Action Coalition at http://www.immunize.org/ catq.d/2081ab.htm
- viii Bock HL, Löscher T, Scheiermann N, et al. Accelerated schedule for hepatitis B immunization. | Travel Med 1995; 2: 213-7.
- ibid i.
- World Health Organization, Vaccines, Immunizations and Biologicals, http://www9.who.int/vaccines/ globalsummary/timeseries/TScoverageHepB3.htm
- ibid ii, and http://www.cdc.gov/travel/diseases/maps/hbv_map.htm
- xiii KA Wokowski, WC Levine, Sexually transmitted disease treatment guidelines 2002, MMWR, May 10, 2002/25(RR06); 1-80

2005 Migrant Health Practicum Participants

Provider Practicum in MCN's 2005 New Provider Practicum in Migrant Health were recently hosted at the MCN headquarters in Austin for a one-and-a-half-day orientation program. The eight selected "new provider" clinicians again represent the four professions of physician assistant, nurse practitioner, nurse-midwife and dental hygienist. All have been paired with a migrant health center and a staff clinician who will supervise them clinically.

In addition to their passion and enthusiasm for providing care to the underserved, they bring a wide range of experience to the program. They have international experience from India to South Africa to Paraguay and work experiences including HIV counselor, Spanish teacher and community health nurse. One participant is the daughter of farmworkers and will be working at the clinic where she was cared for as a child. Another studied dentistry in Nicaragua prior to immigrating to the United States and eventually becoming a

dental hygienist. One nurse practitioner serving as a preceptor was hired at her current position 7 years ago by the site where she worked as a participant in the Practicum.

The orientation provided Practicum participants with information about program requirements and logistics, migrant health issues and resources, and culturally appropriate health care. Most of the clinicians will begin their placements during the summer months.

Applications for the New Provider Practicum in Migrant Health are accepted each year in the fall. Interested individuals can access online applications beginning in October on the MCN web site at www.migrantclinician.org/development/practicum. For further information, contact the program's coordinator, Candace Kugel, at ckugel@migrantclinician.org.

The 2005 selected participants in the Practicum and their placements are:

1. Kari Carter-Cherelus, Dental Hygienist,

- Family Health Centers of SW FL, Ft. Myers, FL. Preceptor: Ligia (Terry) Magner, RDH
- 2. **Maria Moreira**, Dental Hygienist, Gateway Community Health Center, Laredo, TX. Preceptor: Rebecca Morales, RDH
- 3. Callandra Clark, Nurse-Midwife, Hudson River Healthcare, Inc., Peekskill, NY. Preceptor: Joan Combellick, CNM
- Caitlin May, Nurse Practitioner, NW Michigan Health Services, Traverse City, MI. Preceptor: Ann Avery, FNP
- Maggie Sullivan, Nurse Practitioner, Clinica de Salud del Valle de Salinas, Salinas, CA. Preceptor: Liliana Prakasam, FNP
- William Riker, Physician Assistant, Proteus Migrant Health Center, Des Moines, IA. Preceptor: Bob Witt, PA-C
- 7. **Rosa Luna**, Physician Assistant, Valley Health Team, Inc., Kerman, CA. Preceptor: Husam Kaileh, MD
- 8. **Stephanie Miller**, Physician Assistant, Plan de Salud del Valle, Fort Lupton, CO. Preceptor: Rhina Rodriguez, PA-C



Pesticide Exposure and Treatment Education for Health Care Providers

he Casa y Campo Project has developed a continuing education program for health care providers on farmworker pesticide exposure. The target audience for this program includes health care providers and outreach workers who work with farmworkers and rural populations. The continuing education activity includes 6 modules, each lasting 10 to 30 minutes.

"Pesticides" provides a general overview of pesticides and crops in the Southeast.

"Pesticide Exposure" reviews the signs and symptoms and initial treatment of the ten pesticides most commonly implicated in symptomatic illness.

"Long Term Consequences of Pesticide **Exposure in Farmworker Communities**" reviews the literature on the health consequences of pesticide exposure.

"Skill Sets" discusses the basic medical skills needed to treat pesticide exposure.

"Clinical Cases" reviews the differential diagnosis of organophosphate toxicity.

"Patient Education" reviews the principles for farmworker pesticide safety education and prevention.

The program is available on the Northwest Area Health Education Center website: http://northwestahec.wfubmc.edu/ ahecevents1.cfm?list_details=all_details&event _pk=12627&nosearch=1

The program is also available on CD by contacting Tom Arcury at tarcury@wfubmc.edu. \$5.00 is requested to pay for duplicating and shipping the CD.

The Wake Forest University School of Medicine designates this educational activity for a maximum of 1.5 category 1 credits toward the AMA Physician's Recognition Award. Each physician should claim only those credits that he/she actually spent in the activity. The Wake Forest University School of Medicine is accredited by the Accreditation Council for Continuing Medical Education to provide continuing medical education for physicians. Wake Forest University School of Medicine will award .15 Continuing Education Units. This activity is sponsored by Wake Forest University School of Medicine.

Casa y Camp is a community-based collaborative project of Wake Forest University School of Medicine and the North Carolina Farmworkers Project. Ann Hiott, MD, Thomas A.



Arcury, PhD, and Sara A. Quandt, PhD, developed the program in partnership with the Northwest Area Health Education Center

(AHEC). Funding for the program was provided by grant R25 OH07611 from the National Institute for Occupational Safety and Health.

Serious Birth Defects in Immokalee County, Florida

Carlitos is one of three Immokalee babies who were born horribly disfigured to mothers and fathers who work together in Florida's fields. Carlos Candelario, or Carlitos, was born in December 2004 without arms or legs. A few months later Jesus Navarrete, whose parents live about 100 feet away from Carlitos' family, was born with Pierre Robin syndrome. Two days later, Maria Meza gave birth to another baby missing a nose, an ear and with no signs of visible reproductive organs. This baby died of massive birth defects. Maria lives about a mile away from Carlitos' and Jesus' family. But when all three mothers became pregnant in 2004 they lived within 200 feet of one another at the same Florida migrant labor camp. All of them are Mexicans who worked for the same company, picking tomatoes, in the same field. More than two dozen different pesticides are used in that field.

More information about these cases can be found on our web site (www.migrantclinician.org/excellence/environmental), where we have posted a series the investigative articles from the Palm Beach Post describing this alarming incident. In the next issue of Streamline we will take a deeper look at this issue in terms of the clinical implications involved with this case.

West Nile Season and Current CDC Insect Repellent Recommendations

(The following article was published April 22, 2005 on the CDC website www.cdc.gov/ncidod/dvbid/westnile/RepellentUpdates.htm)

wide variety of insect repellent products are available. CDC recommends the use of products containing active ingredients that have been registered with the U.S. Environmental Protection Agency (EPA) for use as repellents applied to skin and clothing. EPA registration of repellent active ingredients indicates the materials have been reviewed and approved for efficacy and human safety when applied according to the instructions on the label. Of the active ingredients registered with the EPA, two have demonstrated a higher degree of efficacy in the peer-reviewed, scientific literature. Products containing these active ingredients typically provide longer-lasting protection than others:

- DEET (N,N-diethyl-m-toluamide)
- Picaridin (KBR 3023)

Oil of lemon eucalyptus [p-menthane 3,8diol (PMD)], a plant based repellent, is also registered with EPA. In two recent scientific publications, when oil of lemon eucalyptus was tested against mosquitoes found in the US it provided protection similar to repellents with low concentrations of DEET.

Oil of lemon eucalyptus has not been tested against mosquitoes that spread malaria and some other diseases which occur internationally. See CDC Travelers' Health website (http://www.cdc.gov/travel/bugs.htm) for specific recommendations concerning protection from insects when traveling outside the United States.

In addition, certain products which contain permethrin are recommended for use on clothing, shoes, bed nets, and camping gear, and are registered with EPA for this use. Permethrin is highly effective as an insecticide and as a repellent. Permethrintreated clothing repels and kills ticks, mosquitoes, and other arthropods and retains this effect after repeated laundering. The permethrin insecticide should be reapplied following the label instructions. Some commercial products are available pretreated with permethrin.

Length of protection from mosquito bites varies with the amount of active ingredient, ambient temperature, amount of physical activity/perspiration, any water exposure, abrasive removal, and other factors. For long duration protection use a long lasting (micro-encapsulated) formula and re-apply as necessary, according to label instructions.



EPA recommends the following precautions when using insect repellents:

- Apply repellents only to exposed skin and/or clothing (as directed on the product label.) Do not use repellents under clothing.
- Never use repellents over cuts, wounds or irritated skin.
- · Do not apply to eyes or mouth, and apply sparingly around ears. When using sprays, do not spray directly on face—spray on hands first and then apply to face.
- Do not allow children to handle the product. When using on children, apply to your own hands first and then put it on the child. You may not want to apply to children's hands.
- Use just enough repellent to cover exposed skin and/or clothing. Heavy application and saturation are generally unnecessary for effectiveness. If biting insects do not respond to a thin film of repellent, then apply a bit more.
- After returning indoors, wash treated skin with soap and water or bathe. This is particularly important when repellents are used repeatedly in a day or on consecutive days. Also, wash treated clothing before wearing it again. (This precaution may vary with different repellents — check the product label.)
- If you or your child get a rash or other

bad reaction from an insect repellent, stop using the repellent, wash the repellent off with mild soap and water, and call a local poison control center for further guidance. If you go to a doctor because of the repellent, take the repellent with you to show the doctor.

Note that the label for products containing oil of lemon eucalyptus specifies that they should not to be used on children under the age of three years. Other than those listed above, EPA does not recommend any additional precautions for using registered repellents on pregnant or lactating women, or on children. For additional information regarding the use of repellent on children, please see CDC's Frequently Asked Questions about Repellent Use. [http://www.cdc.gov/ncidod/ dvbid/westnile/qa/insect_repellent.htm]

DEET-based repellents applied according to label instructions may be used along with a separate sunscreen. No data are available at this time regarding the use of other active repellent ingredients in combination with a sunscreen.

See http://www.epa.gov/pesticides/ factsheets/insectrp.htm for additional information on using EPA registered repellents.

Evaluation of Salud Para Su Corazón (Health for Your Heart) — National Council of La Raza Promotora Outreach Program

Editor's Note: The following is excerpted from a longer CDC report that details an evaluation of a heart disease prevention that relied on promotoras. We have included this excerpt in Streamline because of the important contribution that promotoras provide to migrant health. This evaluation contributes to an ongoing discussion of the role and value of promotoras as members of an overall health care team. You can read the full report at www.cdc.gov/pcd/issues/2005/jul/04_0130.htm

n 2001, the National Heart, Lung, and Blood Institute partnered with the National Council of La Raza to conduct a pilot test of its community-based outreach program Salud Para Su Corazón (Health for Your Heart), which aims to reduce the burden of morbidity and mortality associated with cardiovascular disease among Latinos.

Discussion

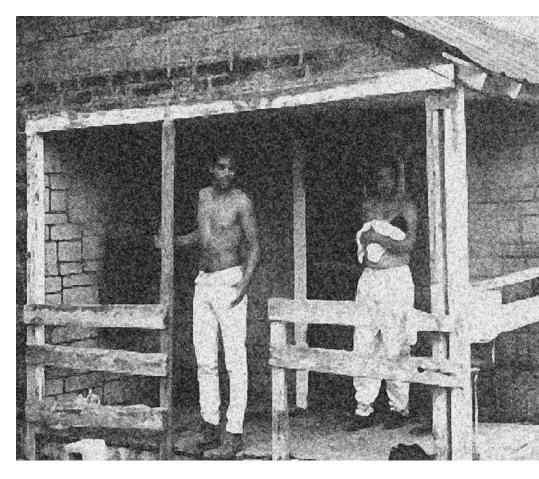
The community outreach model worked well in the seven pilot programs because of the successes of the promotores de salud and the support of the community based organizations (CBOs). With their skills, commitment, and enthusiasm, the training program and health education curriculum proved effective, translating into success for the SPSC-NCLR initiative. Overall, the results of the evaluation show that the initiative resulted in significant accomplishments at all three levels: promotores, families, and CBOs.

The successes realized in promoting heart health stems in part from the trainthe-trainer approach. It nurtured the competency of the promotores to ensure success of the intervention. The train-thetrainer approach empowered promotores in their work by broadening their range of instructional approaches and heart-health knowledge. Based on self-reports by promotores and families, after completing the SPSC training, promotores were able to obtain the knowledge and skills necessary to recruit community members to participate in the program, to pass on the knowledge they had gained, and to support community members in accomplishing lifestyle changes that promoted better heart health. Promotores also expanded awareness of the project in the community, solicited additional funding, developed public service announcements related to

the teaching materials, or did all of these. Despite facing a number of challenges, including limited funding and the need to prove the value of their work and that of the SPSC-NCLR program to some health care professionals, they successfully established partnerships with a variety of local organizations and programs, including clinics and health care providers, churches, schools, radio stations, health professional

promotores to function as health educators and advocates has important implications for health promotion and disease prevention, given recent evidence that physicians spend less than 10 minutes per patient delivering educational messages.

The ability of promotores to effect behavioral change is evident among the families they served. Evidence suggests families participating in the SPSC-NCLR



associations, restaurants, and pharmaceutical companies.

Promotoria, as implemented in the SPSC-NCLR program, has the potential to be integrated with a medical model of patient care for primary, secondary, and tertiary prevention. Using the ¡Cuéntamelo! evaluation tools, promotores successfully identified risks for heart disease at the levels of both families and individuals, refering individuals for screening and providing community members with the knowledge and skills that they needed to improve their heart health. The capacity of

program made positive changes in hearthealthy behaviors. Families showed an improvement of 18% on self-reported heart-healthy behaviors. It seems that promotores succeeded at improving heart-health awareness and creating a cultural environment for learning hearthealth information to promote changes in lifestyle behaviors among family members. Changes in heart-health behaviors have been consistently observed for similar promotora educational programs, adding credibility to the promotora approach.



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calendar

18th Annual East Coast Migrant Stream Forum

October 20 -22, 2005 Memphis, Tennessee 919.469.5701

http://www.ncphca.org/ECMSF_20 05.htm

Midwest Stream: FARMWORKER HEALTH FORUM

Facing the Challenges of Diversity in Health Care November 10-12, 2005 South Padre Island, TX (512) 312-2700 http://www.ncfh.org/

The following health awareness markers may be useful as you plan Health Education events:

July

Int. Group B Strep Awareness Month,

http://www.thejessecause.org/pages/home.html

Eye Injury Prevention Month, http://www.aao.org/

Alzheimer's Awareness Week (3rd-9th), http://www.alzheimers.org/

August

Cataract Awareness Month, http://www.aao.org/

Clean Air Month, http://www.nsc.org/

MedicAlert Awareness Month,

http://www.medicalert.org/home/Homegradient.aspx

National Immunization Awareness Month, http://www.partnersforimmunization.org/

World Breastfeeding Week (1st-7th), http://www.lalecheleague.org/

National Minority Donor Awareness Day (1st), http://www.nationalmottep.org/

September

5 A Day Month, http://www.5aday.com/

Children's Eye Health and Safety Month, http://www.preventblindness.org/

Gynecologic Cancer Awareness Month, http://www.wcn.org/

National Cholesterol Education Month, http://www.nhlbi.nih.gov

Ovarian Cancer Awareness Month, http://www.ovarian.org/