

streamline

The Migrant Health News Source

Medicine on the Backstretch: Migrant Racetrack Workers

By Heide Castañeda

Heide Castañeda, PhD, MPH, is an Assistant Professor in the Department of Anthropology at the University of South Florida. A medical anthropologist, her primary research interests include immigrant and refugee health, social inequality and medicine, and health policy.

Migrant racetrack workers are part of a unique itinerant labor community who live their lives on the backstretch— that is, the stable area behind horse racetracks. While a largely invisible population, their health concerns are similar to migrants in other non-regulated, high-risk, and physically demanding jobs. Since the 1970s this workforce has increasingly been made up of migrants from Latin America, primarily from Mexico and Guatemala. Today, at tracks across the United States, the language of the backstretch is Spanish, and small communities form around seasonal racing. At many of the larger and more prestigious tracks, temporary medical clinics, dormitories, churches, schools, and libraries are set up to serve backstretch workers. However, at others, lower-status workers share small tack rooms in the horse stables as living quarters, and access to various forms of support is scarce. Everywhere, their pay is low and very few have access to health care because they lack insurance or cannot afford treatment.

Health Assessment

In 2009, I assembled a small team of medical anthropology and public health graduate students in order to survey 84 backstretch workers at a Florida racetrack in collaboration with an onsite weekly charity clinic. We sought to investigate their self-reported health concerns and provide recommendations for future areas of research and policy intervention. Most (more than 83%) of the respondents were men, and the age range was 18 to 78, with a mean of 39.2 years. Almost two out of three of those sur-



veyed identified themselves as grooms, whose primary duties include brushing, bathing, and rubbing down the horses, as well as feeding them and mucking out stalls. Hot walkers lead individual horses around the barn to cool them down after training, and represented the second largest group. The most common country of origin was Mexico, and while many respondents had lengthy backgrounds working with horses others indicated that they had turned to the racetrack after a downturn in the local construction or agricultural industries.

Primary Health Concerns

When asked about primary current health concerns, the most frequent responses related to muscle, joint, bone, or ligament injury and pain. About 30% of all respondents reported having had a serious accident or injury in the past five years, the greatest number of which involved traumatic head injuries. Other common injuries included

broken ribs, hernias, torn rotator cuffs, knee injuries, back pain, repetitive stress injuries, and general comments about being kicked or bitten by horses. The second most frequently mentioned health concern was gastrointestinal illness, ranging from chronic ulcers and heartburn to acute stomachaches and suspected viral, bacterial or parasitic infection. In addition, participants mentioned a varied set of health concerns including hypertension and diabetes, along with eye irritation or respiratory problems. For grooms, airborne dust particles from the sawdust and wood shavings used as bedding in the stables appeared to be a particular hazard. Dermatological complaints included rashes and fungal infections believed to be the result of working and living with animals. In addition, a number reported oral health problems, with just over 32% having visited a dentist in the past year, almost all of

continued on page 2

which were for acute pain and not preventive care. Twenty-one percent of those surveyed had never been to a dentist. Finally, a number of participants mentioned addiction problems, particularly with alcohol, an issue that arose spontaneously and frequently in the course of our interviews.

Nutrition Related Concerns

In addition to the concomitant occupational hazards, working on the backstretch affected respondents' diets. Resident workers experienced constraints regarding income available for food, emphasis on quality nutrition, and purchasing and storage options. Many workers found the food at the racetrack cafeteria to be "too greasy" and, although convenient, too expensive for regular meals. Most preferred to purchase their own food and prepare meals onsite. Lacking electrical appliances, including refrigeration, workers often cooked on charcoal grills or small portable stoves, the use of which was additionally limited to certain areas since they represent a fire hazard near the stables. As a result, the majority of meals consisted of rice and beans, grilled meats, canned soups, and eggs. Several individuals mentioned skipping meals out of economic necessity; in fact, many mentioned eating only one or two meals a day.

Policy and Regulation

High levels of freelancing, a transient workforce, and informal labor contracts in the horse racing industry result in low levels of coverage of labor through workers' compensation. Oversight by the Occupational Safety and Health Administration (OSHA) has been minimal, because the horse racing industry is relatively small and is lumped together with car racing and other forms of entertainment using Standard Industrial Classification codes.

Our study points to some concerns for policy and regulation enforcement in several areas. First, most backstretch workers are paid below minimum wage and do not receive overtime payment as required by law; this is not unlike other forms of employment for migrants working in shadow economy sectors, however low wages are also clearly a key factor in ill health on the backstretch. Second, the living conditions we observed were generally not in keeping with guidelines for human occupation, since the majority of those surveyed lived in small tackrooms within the horse barns, which likely contributes to higher rates of illness. Some more elite tracks have begun to provide dormitories for resident workers. We propose that other tracks follow this example voluntarily or, if necessary, state agencies

adopt stricter regulations on this matter. Third, while some occupational risks are unavoidable in the world of horseracing, industry standards are rarely revisited or revised by governing organizations. Recent efforts by the National Thoroughbred Racing Association's (NTRA) Safety & Integrity Alliance, which implements safety standards on a national level, have focused on horses and jockeys, while the organization remains largely silent on issues of backstretch worker conditions and health. Furthermore, the freelancing nature of backstretch work allows many employers to circumvent mandates to carry worker's compensation insurance. At the same time, it is important to note that the racing industry has always been at the margins of state regulation, and state agencies may be less willing to enforce existing policies at racetracks and other gambling sites because of the vital revenue they provide.

Given these structural constraints inherent to the racing industry, many of the work-related health risks for this population are unlikely to be resolved quickly. Smaller, more immediate solutions such as increased funding for track clinics and support services may address some of the health concerns, but there is a concurrent requirement to increase the visibility of this population so their needs can be understood more fully and finally be met.

Summary

For those working on the backstretch of racetracks across the United States, it is easy to believe the widespread comment that "these horses get treated better than we do." The

multitude of staff employed to ensure horses are healthy and comfortable is in sharp contrast with the dearth of resources for the well-being of the human workers. Life and work on the backstretch directly affects the types of illnesses they experience. Thus, the most commonly cited health concerns included injuries and pain resulting from working with horses, while other health issues reflected the interplay between lifestyle and diet, such as high blood pressure, diabetes, and high cholesterol. Despite these elevated health risks, backstretch workers face numerous barriers to accessing health care services, including language, legal status, transportation, long wait times, and reliance upon already stressed segments of the health care system, such as emergency rooms. Given the structural constraints inherent to the racing industry, many of the work-related health risks for this population are unlikely to be resolved quickly. Smaller, more immediate solutions such as increased funding for track clinics and support services may address some of the health concerns, but there is a concurrent requirement to increase the visibility of this population so their needs can be met. ■

References:

- Castañeda, H, Kline, N, and Dickey, N (2010) Health Concerns of Migrant Backstretch Workers at Horse Racetracks. *Journal of Health Care for the Poor and Underserved* 21(2): 489-503.
- Patton, J. (2005) Horse Track Injuries. *IRE Journal* 28(4):26-28.
- Schefstad, AJ, Tiegel, SA. (1997) An Invisible Population and its Visible Problem: Alcohol and Substance Abuse among Horsecare Workers. *Alcohol Treat Q.* 15(4):1-16.

Honoring Rosemary McKenzie

On March 16th, 2011, the world lost a true champion for the underserved. The Migrant Clinicians Network joins the National Rural Health Association (NRHA), colleagues from around the country, and friends and family in mourning the death of Rosemary McKenzie, NRHA's Minority Liaison and Program Services Manager. For 27 years Rosemary was an innovator, and passionate activist for the healthcare of rural minorities.

Rosemary was instrumental in designing and implementing a pivotal clinical fellowship experience in partnership with MCN. Together we immersed new nurse practitioners, physician's assistants, nurse midwives and dental hygienists within Migrant Health centers where over 50% of them still practice.

Guided by her faith, Rosemary's smile sang with life. We will miss her.



The American Public Health Association Issues Statement In Support of Increased Protection for America's Farmworkers

Editor's Note: In 2010 MCN worked in partnership with the American Public Health Association (APHA) to draft the policy statement below to address the lack of diagnostic tools available for clinicians treating patients who may have been exposed to toxic substances. MCN Director of Environmental and Occupational Health, Amy K. Liebman, MPA, together with Matthew Keifer, MD, MPH, Dean Emanuel Endowed Chair, National Farm Medicine Center, drafted this policy. Ms. Liebman and Dr. Keifer are members of APHA's Occupational Health and Safety Section, the lead sponsor of this policy. APHA officially adopted this Policy Statement on November 9th, 2010. Dr. Keifer and Amy Liebman are working closely with the EPA through the Federal Advisory Pesticide Program Dialogue Committee to address this important issue.

The American Public Health Association (APHA) has a long history of supporting measures to improve worker protection from occupational exposure to toxic substances and surveillance of occupational injury and disease.¹⁻⁹ APHA also has established prior policy in the area of chemical safety for children and the general public.¹⁰⁻¹² This policy affirms the need to protect workers from occupational exposure to toxic substances; improve surveillance of occupational injury and disease; and provide stronger protection of farmworkers, their family members, and the general public from exposure to pesticides.

Pesticides are widely used tools in the production of the world's food supply, in the protection of structures, in the prevention of illness transmission, and in the control of vector-borne diseases. As a group, however, pesticides contain some of the most toxic chemical products produced by modern chemistry. They are also unique among toxic environmental contaminants found in our environment; like no other chemicals except war gases, pesticides are purposefully released into our environment with the intention of doing harm to living beings. The World Health Organization (WHO) estimates that each year 3 million people are poisoned and 200,000 people die from pesticide exposure in the world; these figures reflect only a fraction of the real problem. Other estimates suggest that 25 million agricultural workers in developing countries suffer from pesticides poisonings each year.¹³

In the United States, the US Environmental Protection Agency (EPA) is responsible for the welfare of workers exposed to pesticides in the agricultural workplace, farmworker families, and the health of the public with respect to pesticides in food and the environment.¹⁴⁻¹⁶ The EPA's authority to oversee farmworker pro-

tection from pesticide exposure can be found in its regulatory authority under the Federal Insecticide Fungicide and Rodenticide Act of 1972 (FIFRA).¹⁴ FIFRA mandates that EPA, and not the Occupational Safety and Health Administration (OSHA), promulgate the regulatory standards to protect workers and their families from pesticide exposure.^{14,17} Consequently, EPA and its designated state regulatory agencies oversee the worker protection standard (WPS), the primary regulatory standard that mandates workplace protection for hired agricultural laborers. The WPS involves pesticide safety training, notification of pesticide applications, use of personal protective equipment, restricted entry intervals after pesticide application, decontamination supplies, and emergency medical assistance.⁶ It is notably weaker than similar regulatory standards for occupations other than agriculture, and the WPS is poorly enforced.^{18,19}

Unlike OSHA, which in multiple standards requires that employers conduct medical monitoring of workers exposed to harmful substances,²⁰ EPA has no requirements for monitoring of workers exposed to pesticides. An essential component of the information that EPA uses to make decisions about the removal or restriction of use of a pesticide once on the market is information from surveillance systems.²¹ Several toxic pesticides have lost registration in the United States largely because of the information available to EPA through surveillance of pesticide poisonings. Examples include ethyl parathion and mevinphos.²² However, the ability of clinicians to report exposures through pesticide illness surveillance systems depends on their ability to diagnose pesticide poisonings. With the introduction to the marketplace of new pest-specific chemicals, diagnosis of human overexposure becomes even more difficult, because no human data on the health effects of these chemicals exist.²³ Cholinesterase activity, a marker of overexposure to organophosphate and carbamate pesticides, offers the only easily available confirmatory test for pesticide poisoning, and this marker is nonspecific. Washington and California require cholinesterase biomonitoring for pesticide applicators. These biomonitoring programs have been of substantial value in reducing overexposure by removing workers from ongoing exposure^{24, 25} and identifying flaws in the system of worker protection.²⁵

The Healthcare Information Portability and Accountability Act (HIPPA) and its penalties create barriers for release of protected health information by clinicians who might otherwise participate in surveillance systems. The clinician will no doubt resist reporting public

health information unless diagnosis is certain and reporting is mandated. Although 30 states have rules requiring some form of clinician reporting of pesticide exposure and illness, only 11 states have a surveillance program to act on these reports.²⁶

In the United States, between 1 and 2.5 million hired farmworkers earn their living from agriculture.^{23,27} Farmworkers are the working population most often affected by pesticide overexposure. In 1996, EPA estimated 10,000 to 20,000 occupational pesticide poisonings occurred among agricultural workers annually, based on extrapolation from California poisoning surveillance numbers. (28) More recent estimates are lower than that but are based on an inconsistent and incomplete surveillance system.²⁹ The majority of farmworkers are Latino; as a group, they are therefore disproportionately affected by pesticide exposures. Between 1998 and 2005, 3,281 cases of acute occupational pesticide poisonings among agricultural workers were identified through the National Institute for Occupational Safety and Health (NIOSH) supported Sentinel Event Notification System for Occupational Risks (SENSOR) Pesticides program and the California Department of Pesticide Regulation.[citation?] Of these cases, 727 (22%) had information on race or ethnicity. Of these 727 cases, 502 (69%) were Hispanic.²⁹

Farmworkers are a largely immigrant and marginalized population. They rarely have health insurance and have limited access to healthcare services. The support they receive from worker compensation claims, when state systems require the coverage of farmworkers, is essential to their ability to receive appropriate care. Accurate clinical diagnosis combines history, physical findings, and laboratory testing. In mild to moderate pesticide overexposures, a nonspecific clinical presentation is common. The availability of a diagnostic biomarker in these cases may confirm a clinical impression and may provide the objective confirmation of the work relatedness of an illness. Objective confirmation is essential to worker compensation determination.³⁰ In the absence of confirmatory tests to diagnose pesticide overexposure, farmworkers who suffer a pesticide-related illness are often denied the care they both deserve and have paid for through paycheck deduction to the workers' compensation system.

Exposure assessment is consistently the weak link in the accuracy of results from environmental and occupational epidemiological studies.³¹ Biomarkers for exposure that could

continued on page 4

■ APHA Issues Statement continued from page 3

be applied in epidemiological studies would substantially improve our understanding of the health effects of pesticide exposure in both the short and long term.

The National Academy of Sciences proposed a new model for toxicity testing of chemicals that will limit the use of animals in testing and increase the use of structure activity modeling and cell-based toxicity testing systems. The new model emphasizes the critical importance of human population studies and population surveillance to validate the results of the models, provide information on host susceptibility, and help identify health risks not previously identified in toxicity testing. The ability to effectively develop useful population information will require biomarkers of expo-

sure and confirmatory tests.³²

The US Government Accountability Office (GAO) recently produced two reports critical of EPA's lack of use of biomarkers in estimates of health effects from commercial chemicals. Although these reports focused on chemicals covered by the Toxic Substances Control Act (TSCA) and did not address pesticides specifically, the GAO concluded that EPA should obtain legal authority from Congress to obtain and use biomonitoring data in regulating TSCA chemicals.³³

FIFRA gives EPA wide authority to require extensive information on potential health effects of pesticides from pesticide registrants. Based on this authority, EPA has a rigorous testing regimen that it mandates be complet-

ed for a company to register a pesticide. The regimen includes numerous toxicity tests on animals. It also includes metabolic fate is this fate or rate? I am unfamiliar with "metabolic fate" studies and intense observation of experimental animals for subtle biological changes. EPA does not require that registrants provide either a biomarker or diagnostic tool to identify the negative health consequences of the use of its product.¹⁴

Recommendations

Given—

- The unique nature of pesticides as chemicals released into our shared environment

continued on page 5

References

1. American Public Health Association. APHA policy statement 2005-06: Reducing occupational exposure to benzene in workers and their offspring. Washington, DC: American Public Health Association; 2005. Available at: <http://www.apha.org/advocacy/policy/policysearch/default.htm?id=1322>. Accessed June 12, 2010.
2. American Public Health Association. APHA policy statement 2006-5: Addressing potential environmental and occupational health and safety risks of nanotechnology. Washington, DC: American Public Health Association; 2006. Available at: <http://www.apha.org/advocacy/policy/policysearch/default.htm?id=1329>. Accessed June 12, 2010.
3. American Public Health Association. APHA policy statement 2002-5: Preserving right-to-know information and encouraging hazard reduction to reduce the risk of exposure to toxic substances. Washington, DC: American Public Health Association; 2002. Available at: <http://www.apha.org/advocacy/policy/policysearch/default.htm?id=279>. Accessed June 12, 2010.
4. American Public Health Association. APHA policy statement 2009-6: Elimination of Asbestos. Washington, DC: American Public Health Association; 2009. Available at: <http://www.apha.org/advocacy/policy/policysearch/default.htm?id=1380>. Accessed June 12, 2010.
5. American Public Health Association. APHA policy statement 90-06: Occupational lead poisoning. Washington, DC: American Public Health Association; 1990. Available at: <http://www.apha.org/advocacy/policy/policysearch/default.htm?id=1217>. Accessed June 12, 2010.
6. American Public Health Association. APHA policy statement 88-07: Surveillance of occupational disease and injury. Washington, DC: American Public Health Association; 1988. Available at: <http://www.apha.org/advocacy/policy/policysearch/default.htm?id=1169>. Accessed June 12, 2010.
7. American Public Health Association. APHA policy statement 87-26: Toxic chemicals in agricultural products. Washington, DC: American Public Health Association; 1987. Available at: <http://www.apha.org/advocacy/policy/policysearch/default.htm?id=1155>. Accessed June 12, 2010.
8. American Public Health Association. APHA policy statement 88-15: Emergency temporary standard for worker exposure to ethylene oxide. Washington, DC: American Public Health Association; 1988. Available at: <http://www.apha.org/advocacy/policy/policysearch/default.htm?id=987>. Accessed on June 12, 2010 ;
9. American Public Health Association. APHA policy statement 96-06: The precautionary principle and chemical exposure standards for the workplace. Washington, DC: American Public Health Association; 1996. Available at: www.apha.org/advocacy/policy/policysearch/default.htm?id=124. Accessed June 12, 2010.
10. American Public Health Association. APHA policy statement 2007-7: Calling on the US congress to restructure the Toxic Substances Control Act of 1976. Washington, DC: American Public Health Association; 2007. Available at: <http://www.apha.org/advocacy/policy/policysearch/default.htm?id=1350>. Accessed June 12, 2010.
11. American Public Health Association. APHA policy statement 2000-11: The precautionary principle and children's health. Washington, DC: American Public Health Association; 2000. Available at: www.apha.org/advocacy/policy/policysearch/default.htm?id=216. Accessed June 12, 2010.
12. American Public Health Association. APHA policy statement 89-09: Reducing health risks related to environmental lead exposure. Washington, DC: American Public Health Association; 1989. Available at: <http://www.apha.org/advocacy/policy/policysearch/default.htm?id=1188>. Accessed June 12, 2010.
13. Jeyaratnam J. Acute pesticide poisoning: a major global health problem. *World Health Stat Q*. 1990;43(3):139-144.
14. The Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) of 1972; 7 USC §§136 et seq. (1972). Available at: [http://www.access.gpo.gov/nara/cfr/waisidx_01/40cfrv20_01.html](http://www.epa.gov/oeaerth/civil/fifra/fifraen-fstareq.html). Accessed June 12, 2010.
15. Food Quality Protection Act of 1996 (FPQA). Pub L No. 104-170. Available at: <http://www.epa.gov/opp00001/regulating/laws/fqpa/backgrnd.htm>. Accessed June 12, 2010.
16. The Worker Protection Standard. 40 CFR §170. Available at: <http://www.epa.gov/oppfeed1/safety/workers/amendmnt.htm>. Accessed June 12, 2010.
17. *Organized Migrants in Community Action, Inc. v Brennan*. 520 F.2d 1161 (1975).
18. Arcury TA, Quandt SA, Austin CK, et al. Implementation of EPA's Worker Protection Standard training for agricultural laborers: an evaluation using North Carolina data. *Public Health Rep*. 1999;114(5):459-468.
19. US General Accounting Office. Pesticides: improvements needed to ensure the safety of farmworkers and their children. GAO/RCED-00-40. Washington, DC: US General Accounting Office; 2000. Available at: <http://www.gao.gov/archive/2000/rc00040.pdf>. Accessed March 31, 2010.
20. Silverstein M. Analysis of medical screening and surveillance in 21 Occupational Safety and Health Administration standards: support for a generic medical surveillance standard. *Am J Ind Med*. 1994;26(3):283-295.
21. Mevinphos. Proposed Amendment and Revocation of Tolerances. Federal Register. August 2, 1995;60(148). Available at: <http://www.epa.gov/EPA-PEST/1995/August/Day-02/pr-357.html>. Accessed June 14, 2010.
22. Skeers V, Morrissey B. Acute organophosphate pesticide poisoning in Washington orchards. *J Env Health*. 1995;58(2):18-23.
23. Martin, P. Immigration Reform: Implications for Agriculture. Agricultural and Resource Economics Update. Davis, Calif: University of California, Giannini Foundation; 2006.
24. Ames RG, Brown SK, Mengle DC, et al. Cholinesterase activity depression among California agricultural pesticide applicators. *Am J Ind Med*. 1989;15(2):143-150.
25. Hofmann JN, Keifer MC, De Roos AJ, et al. Occupational determinants of serum cholinesterase inhibition among organophosphate-exposed agricultural pesticide handlers in Washington state. *Occup Environ Med*. 2010;67:375-386.
26. National Institute for Occupational Health and Safety. Pesticide-related illness and injury surveillance: a how-to guide for state-based programs. DHHS (NIOSH) Publication Number 2006-102. Washington, DC: National Institute for Occupational Health and Safety; 2005. Available at: <http://www.cdc.gov/niosh/docs/2006-102/2006-102a.html>. Accessed December 29, 2010.
27. Kandel W. Profile of Hired Farmworkers, a 2008 Update. Economic Research Report No. 60. Washington, DC: Economic Research Service, U.S. Department of Agriculture; 2008.
28. Blondell, J. Epidemiology of pesticide poisonings in the United States, with special reference to occupational cases. *Occup Med*. 1997;12(2):209-220.
29. Calvert GM, Karnik J, Mehler L, et al. Acute pesticide poisoning among agricultural workers in the United States, 1998-2005. *Am J Ind Med*. 2008;51(12):883-898.
30. *Attending Doctor's Handbook*. Olympia, Wash: Washington Department of Labor and Industries; 2005. Available at: <http://www.lni.wa.gov/ipub/252-004-000.pdf>. Accessed December 30, 2010.
31. Jurewicz J, Hanke W. Exposure to pesticides and childhood cancer risk: has there been any progress in epidemiological studies? *Int J Occup Med Environ Health*. 2006;19(3):152-169.
32. National Academy of Science. Toxicity Testing in the 21st Century: A Vision and a Strategy. Washington, DC: Committee on Toxicity Testing and Assessment of Environmental Agents, National Research Council; 2007.
33. US GAO. Biomonitoring: EPA Could Make Better Use of Biomonitoring Data. GAO-10-419T. Washington, DC: US Government Accountability Office; 2010.

Clinicians Helping to Reduce Occupational Pesticide Illnesses through Improved Personal Protective Equipment Practices

By: Kim Faulkner (Epidemiologist, NIOSH NPPTL), Dennis W. Groce (Industrial Hygienist, Federal Occupational Health), James Carrabba (Agricultural Safety Specialist, NY Center for Agricultural Medicine and Health)

There are an estimated 20,000 pesticide poisonings each year among United States farm crop workers. There are potentially many more unquantified chronic illnesses among these workers due to their exposure to pesticides on the job that can take years before signs and symptoms develop. In an attempt to reduce preventable illnesses in these workers, the National Institute for Occupational Safety and Health (NIOSH) hopes to partner with clinicians, who are an important resource in identifying potential pesticide exposures among farm crop workers.

NIOSH is currently conducting a nationwide study, "Surveillance and Intervention of Personal Protective Equipment Practices among Agricultural Pesticide Handlers". This study identifies the extent of inappropriate pesticide personal protective equipment (PPE) use practices. It also identifies and addresses barriers that keep agricultural pesticide handlers (anyone who mixes, loads or applies pesticides on the job) from using the appropriate type of personal protective equipment and from using PPE appropriately. In order for appropriate personal protective equipment to be effective, it must fit the person, be properly inspected, worn, decontaminated or disposed of, stored, and maintained.



Clinicians can help NIOSH in a couple of ways. First, clinicians can post the NIOSH Agricultural Pesticide PPE Hotline Flyer in their clinics and distribute copies to their patients whom they think may be at risk for pesticide exposure. Clinicians should also encourage their patients to call if they are concerned about possible pesticide exposures on the job due to inappropriate PPE. All calls are treated anonymously. NIOSH will help to address any concerns for PPE use. The NIOSH Agricultural Pesticide PPE Hotline number is 1-888-654-2294 and email is PesticidePPE@cdc.gov. This is a bilingual hotline available in English and Spanish. The flyer can be found at www.cdc.gov/niosh/npptl/pdfs/AgPesticideHandlers.pdf.

A second way clinicians can help is by partnering with NIOSH on the program. If you

would like to partner with NIOSH, contact Kim Faulkner for more information. Her contact information is indicated below. In addition, NIOSH held a Personal Protective Technology (PPT) stakeholder meeting in Pittsburgh, PA on March 29, 2011. The theme for meeting was "A safety roadmap for pesticide handlers: Getting from PPE use barriers to solutions". For more information about the results from this meeting, please see www.cdc.gov/niosh/npptl/.

Kim Faulkner, PhD, MPH
National Personal Protective
Technology Laboratory
PO Box 18070
Pittsburgh, PA 15236-0070
E-mail: KFaulkner@cdc.gov
Phone 412-386-6609 (toll) or
1-888-654-2294 (tollfree)

Patient Education Resources Now Available for a Limited Time!

The Migrant Clinicians Network (MCN) and the National Association of State Departments of Agriculture (NASDA) Research Foundation announce the availability of three pesticide educational comic books in Spanish. These full color publications are available free of charge and can be ordered via http://www.migrantclinician.org/clinical_topics/pesticide-comic-books.html. The comics include:

1. *Aun Que Cerca... Sano* educates parents about children's risks to pesticide exposure and ways to minimize these risks.
2. *Lo Que Bien Empieza... Bien Acaba* helps women of reproductive age and pregnant women in rural and urban areas understand the risks associated with pesticide exposure and ways to minimize exposure.
3. *Poco Veneno...¿No Mata?* offers family-based information on what pesticides are, why one should be concerned about pesticide exposures, how to minimize pesticide exposures and how

to respond to a pesticide poisoning.

The comic books were developed by MCN and partners to help educate farmworkers and their families as well as other Spanish speaking populations about pesticides and ways to minimize exposures. They offer protective concepts through illustration and

conversation-style text and are an effective way to disseminate health information to populations with limited formal education.

The comic books are printed and distributed by the NASDA Research Foundation under Cooperative Agreement X8-83456201, awarded by the U.S. Environmental Protection Agency.

■ APHA Issues Statement continued from page 4

- to control or kill living creatures;
- The importance of clinical diagnosis and exposure assessment to develop our understanding of the health effects of pesticides through surveillance and research;
- The value demonstrated by the biomarker, cholinesterase, in surveillance efforts;
- The essential nature of surveillance and biomonitoring in validating new models of toxicity testing; and
- The regulatory strength of FIFRA that empowers the EPA to regulate pesticides—

APHA recommends that EPA require pesticide registrants, as a requirement for registration, to develop and provide to the public—

- A sensitive and specific diagnostic test or biomonitoring tool to detect either chemical-specific levels in humans, the human health effects caused by their exposures, or both
- A sensitive diagnostic test or biomonitoring tool to detect their chemical or its effects in human beings, the cost of which will be covered by the registrant

Dispensary of Hope Provides Important Access to Affordable Medications

Too often, an uninsured patient's health depends on obtaining prescriptions they can't afford. These patients need help with the first 7 to 30 day prescription, as well as ongoing refills for chronic illnesses like diabetes, hypertension, depression and asthma. Many healthcare providers want to help, but can't afford expensive purchasing, can't sustain resources to fully support and scale patient assistance programs (PAP), and can't efficiently leverage fragmented approaches into a cohesive strategy. "Helping" can seem overwhelming and unaffordable.

The Dispensary of Hope was started in response to this health care challenge. The Dispensary of Hope is a not-for-profit social venture that provides sustainable access to the most affordable medications for underinsured communities and their patients. The organization has developed a turn-key web portal that provides access to the 1st prescription and simplified PAP enrollment, fulfillment, and medication management.

How It Works

The Instant Access Program

The Instant Access Program provides immediate access to select medications when the patient presents at a clinic or pharmacy – filling the gap between diagnosis and long-term prescription assistance.

This is the program that started the Dispensary of Hope and remains the cornerstone of their day-to-day mission. This program provides community pharmacies with a new source of medicine and empowers clinics to ensure patients leave with an initial 30 day supply in hand.

Table 1 shows the medications that Dispensary of Hope currently stocks in the Instant Access Program.

The Continued Access Program

The Continued Access Program provides access to medications on an ongoing basis. Patients anywhere in the country can fill out the simple Enrollment Packet and the Dispensary of Hope will enroll them in all the national prescription programs available to them based on individual medications, income level, and geography. For patients in some states, Dispensary of Hope will be able to fill the prescription directly within their Central Fill pharmacy and send the medication to their home or designated pickup location within a week of approved enrollment.

To meet patients' long-term needs, the

Dispensary of Hope has made it easy to access the 700 medications available through manufacturer PAP via an online Automated PAP process. Dispensary of Hope provides either a full-service or self-service option through which they offer a single universal application process to facilitate unlimited prescriptions and improved health outcomes. Additional options include: year round medication management for all refills, MTM, and a 3-day "Express" delivery. These options are available to sites and direct to

consumers via www.dispensaryofhope.org. The Dispensary of Hope supports each site by assisting them with training, posters and co-branded materials, educational webinars, press releases, grant writing, an annual conference, and the free use of eHope's turnkey IT solution.

To find out more about this innovative service go to www.dispensaryofhope.org and sign up to attend Friday morning Informational Webinars or call 1-800-428-HOPE.

Table 1

Instant Access (700+)	Strength	Category	Order Type	Continued Access (700+)
Lisinopril	20 MG	Cardiovascular	Standard Monthly Order	No - use low cost generic
Metformin	500 MG	Diabetes	Standard Monthly Order	No - use low cost generic
Omeprazole	20 MG	Gastrointestinal	Standard Monthly Order	No - use low cost generic
Simvastatin	20 MG	Cardiovascular	Standard Monthly Order	No - use low cost generic
Gabapentin	300 MG	Neurologic	Standard Monthly Order	Yes (Neurontin)
Albuterol	2.5/3 mL	Asthma	Standard Monthly Order	No - use low cost generic
Amlodipine	5 MG	Cardiovascular	Standard Monthly Order	Yes (Norvasc)
Hydrochlorothiazide	25 MG	Cardiovascular	Standard Monthly Order	Yes (Several Brand Alts)
Levothyroxine	100 MCG	Thyroid	Standard Monthly Order	Yes (Levoxyol, Synthroid)
Glyburide	5 MG	Diabetes	Standard Monthly Order	No - use low cost generic
Astepro	0.15%/205.5 mcg	Allergy	First come, First Serve	Yes (Standard Delivery)
Symbicort	160/4.5 mcg	Asthma	First come, First Serve	Yes (Express Delivery)
Singulair	10 mg	Asthma	First come, First Serve	Yes (Express Delivery)
Tekturna	150 mg	Cardiovascular	First come, First Serve	Yes (Express Delivery)
Tekturna	300 mg	Cardiovascular	First come, First Serve	Yes (Standard Delivery)
Aggrenox	25/200 mg	Cardiovascular	First come, First Serve	Yes (Standard Delivery)
Benicar HCT	20/12.5 mg	Cardiovascular	First come, First Serve	Yes (Standard Delivery)
Benicar HCT	40/25 mg	Cardiovascular	First come, First Serve	Yes (Standard Delivery)
Benicar HCT	40/12.5 mg	Cardiovascular	First come, First Serve	Yes (Standard Delivery)
Avalide	300/12.5 mg	Cardiovascular	First come, First Serve	Yes (Standard Delivery)
Azor	5/40 mg	Cardiovascular	First come, First Serve	Yes (Standard Delivery)
Azor	10/40 mg	Cardiovascular	First come, First Serve	Yes (Standard Delivery)
Benicar	40 mg	Cardiovascular	First come, First Serve	Yes (Standard Delivery)
Benicar	20 mg	Cardiovascular	First come, First Serve	Yes (Standard Delivery)
Micardis	80 mg	Cardiovascular	First come, First Serve	Yes (Standard Delivery)
Micardis	40 mg	Cardiovascular	First come, First Serve	Yes (Standard Delivery)
Valturna	150 mg/160 mg	Cardiovascular	First come, First Serve	Yes (Express Delivery)
Valturna	300 mg/320 mg	Cardiovascular	First come, First Serve	Yes (Standard Delivery)
Bystolic	10 mg	Cardiovascular	First come, First Serve	Yes (Standard Delivery)
Bystolic	5 mg	Cardiovascular	First come, First Serve	Yes (Standard Delivery)
WelChol	625 mg	Cardiovascular	First come, First Serve	Yes (Standard Delivery)
TriCor	145mg	Cardiovascular	First come, First Serve	Yes (Standard Delivery)
Zetia	10 mg	Cardiovascular	First come, First Serve	Yes (Express Delivery)
Crestor	10 mg	Cardiovascular	First come, First Serve	Yes (Express Delivery)
Crestor Calcium	20 mg	Cardiovascular	First come, First Serve	Yes (Express Delivery)
Lipitor	20 mg	Cardiovascular	First come, First Serve	Yes (Standard Delivery)
Lipitor	40 mg	Cardiovascular	First come, First Serve	Yes (Standard Delivery)
Vytorin	10/40 mg	Cardiovascular	First come, First Serve	Yes (Express Delivery)
Vytorin	10/20 mg	Cardiovascular	First come, First Serve	Yes (Express Delivery)
Janumet	50/1000 mg	Diabetes	First come, First Serve	Yes (Express Delivery)
Janumet	50/500 mg	Diabetes	First come, First Serve	Yes (Express Delivery)
Januvia	100 mg	Diabetes	First come, First Serve	Yes (Express Delivery)
Vimovo Delayed-Release	500 mg/20 mg	Gastrointestinal	First come, First Serve	No - use low cost generic
Enablex Ext. Release	7.5 mg	Genitourinary	First come, First Serve	Yes (Express Delivery)
Enablex Ext. Release	15 mg	Genitourinary	First come, First Serve	Yes (Express Delivery)
Toviaz Ext.-Release	4 mg	Genitourinary	First come, First Serve	Yes (Standard Delivery)
Cymbalta Delay-Release	30 mg	Neurologic	First come, First Serve	Yes (Standard Delivery)
Pristiq	50 mg	Psychiatric	First come, First Serve	Yes(Standard Delivery)
Lexapro	10 mg	Psychiatric	First come, First Serve	Yes(Standard Delivery)

Story of Raul, Son of Luis

Edward Zuroweste, MD

Editor's Note: As the political debate over immigration to the United States becomes more heated, the personal stories of individuals involved in the immigration experience are often lost. Dr. Zuroweste, MCN's Medical Director, spends several months a year in Honduras leading groups of health professions students and working in small, rural clinics. Through this experience, Dr. Zuroweste has the opportunity to meet a number of fascinating people. This is the story of one of those individuals.

Raul left his village in rural Honduras at the age of 17 to join his father who was working construction in Virginia.

Raul started his journey with \$3,500 that his father had sent him to pay for the trip. The cash was divided into bundles which he stowed away in his socks, underwear and pockets. He was alone when he left Santa Lucia, first taking a bus to San Pedro Sula and finally to the border between Honduras and Guatemala where he paid for and boarded another bus that would take him all the way to the border between Guatemala and Mexico.

At the Guatemala/Mexico border he paid a coyote \$1,000 in cash for the trip across the entire length of Mexico. To traverse the country, he entered a large trailer attached to an 18-wheeler along with 300 other individuals, including 40-50 women and about 8-10 children, the youngest of which was 9 months old.

It was dark, hot and so crowded in the trailer that there was no room to lie down; all of the travelers had to stand for the entire trip. There was a hole about a foot in diameter that had been cut in the floor in the middle of the trailer that everyone had to use for defecation; they were given plastic bags to urinate into and then pour out the hole. They had no food and very little water and the trip took 3 days and 3 nights. During



this horrible trip no one died but several people passed out, causing others to panic. They then had to be calmed by the other inhabitants of the trailer. It was especially hard on the women and young children.

The trailer finally made it to the Mexican side of the US/Mexico border. When the back door of the trailer opened there was tremendous relief to finally be able to breathe fresh air.

The migrants were all exhausted, hungry and thirsty. They were allowed to recover in a safe house for about a week.

Raul then paid another coyote \$1,000 to

cross the US/Mexico border. Late one afternoon about 30 men, women and children went to the banks of the Rio Grande River and swam across; those who could not swim were put on large truck innertubes and floated across the river. They entered New Mexico in a desert area and for the next three days and nights they traveled, led by the coyote on foot through the desert; many of the group got separated and were lost, especially at night. They had inadequate water and little food and were constantly running and hiding from the border guards and avoiding poisonous snakes.

About a dozen of them arrived in Texas where the coyote left them to their own devices. Raul called his father in Virginia and checked into a cheap hotel with a few of the other immigrants to wait for his father who left Virginia immediately to drive to Texas to pick his son up.

Three days later he was joyfully reunited with his father. This 17-year-old had traveled for 25 days, spent almost the entire \$3,500 his father had sent to him and lost an estimated 15-20 lbs from his already thin frame.

When he and his father arrived in Virginia he rested for 2 days and then began working on the construction site with his father. He worked in Virginia at many jobs for the next 7 years.

Both Raul and his father are now back in Santa Lucia working full time as truck drivers for a US/Honduras non-governmental organization. With the money they saved working in the US, Raul and his father were able to build a beautiful home for their family and purchase trucks which they use for their employment.

Raul still has two brothers working as undocumented employees in the US but he has no desire to return to the US. He says that now he has a good job, a house and a good life back in his home in Honduras. ■

AAP Releases Free Online Culturally Effective Care Toolkit for Practicing Pediatricians!

Learning to deliver culturally effective care is considered by many to be a lifelong journey. The new AAP Culturally Effective Care Toolkit is a practical, hands-on resource to help practicing pediatricians and their office staff provide culturally effective care to their patients and families.

Information, resources, and tools are included for the following topics in this free online toolkit:

- What is culturally effective care?
- Health beliefs and practices
- Nutrition, feeding, and body image perspectives
- Behavior and child development
- Interpretive services
- Literacy and health literacy
- Medical education
- Tips, tools, and resources for implementation in an office setting
- Continuing Medical Education opportunities

To access the Culturally Effective Care Toolkit, visit the Practice Management Online Web site at: <http://practice.aap.org/content.aspx?aid=2990>. ■



Migrant Clinicians Network

P.O. Box 164285 • Austin, TX 78716

Non Profit Org.
U.S. Postage
PAID
PERMIT NO. 2625
Austin, TX



Acknowledgment: *Streamline* is published by the MCN and is made possible in part through grant number U30CS09742-02-00 from HRSA/Bureau of Primary Health Care. Its contents are solely the responsibility of the authors and do not necessarily represent the official views of HRSA / BPHC. This publication may be reproduced, with credit to MCN. Subscription information and submission of articles should be directed to the Migrant Clinicians Network, P.O. Box 164285, Austin, Texas, 78716. Phone: (512) 327-2017, Fax (512) 327-0719. E-mail: jhopewell@migrantclinician.org

Venkat Prasad, MD

Chair, MCN Board of Directors

Karen Mountain, MBA, MSN, RN

Chief Executive Officer

Jillian Hopewell, MPA, MA

Director of Education, Editor

Editorial Board — Marco Alberts, DMD, DeSoto County Health Department, Arcadia, FL; Matthew Keifer, MD, MPH, University of Washington, Harborview Occupational Medicine Clinic, Seattle, WA; Kim L. Larson, PhD, RN, MPH, East Carolina University, Greenville, North Carolina

calendar

2011 National Farmworker Health Conference

Delray Beach Marriott
Delray Beach, FL
May 11-13, 2011
www.nachc.com

American College of Nurse Midwives

56th Annual Meeting and Exposition
San Antonio, TX
May 24-28, 2011
<http://am.midwife.org/>

Global Health Council

Securing a Healthier Future in a Changing World
Washington, DC
June 13-17, 2011
www.globalhealth.org

American Public Health Association

139th Annual Meeting & Exposition
Washington, DC
October 29- November 2, 2011
www.apha.org