TB Among Farmworkers

## (Children from page 1)

impact as having no seat.

Studies show that the problem lies in poorly written and understood instructions and the lack of uniformity in safety seat and safety belt designs. Engineering may solve the problem in the future, but for now community education efforts will focus on assisting the thousands of safety seat users who may be unaware of the rules of proper installation.

No current effort has targeted the farmworker population on the



Sillita para Niños Si tienes menos de 4 años - O pesas menos de 40 libras...La sillita te abraza con cariño, Chiquilino

#### Playing card from La Loteria Del Manejo Seguro

issue of child safety seats, and no barriers exist for farmworker families.

Many may not be aware of the law, especially if they migrate from Mexico where laws are different.

These families have low literacy levels, little acculturation and virtually no experience with child

Center Assistant Manager ............. Jone Hamiel

safety seats. Child safety seats may be perceived as difficult and expensive.

The collaborative efforts of *¡Maneje Seguro!* addresses the importance of proper child safety seat use among the low-literate, Hispanic farmworker population in California.

Many people do not realize that proper choice among several types of car seats depends on the age and weight of the child.

The highly illustrated bilingual materials describe safe restraint of children and pregnant women, including information on infant seats, convertible seats, booster seats and installation. Color photographs of volunteers from the target audience illustrate each point.

Patricia Mora, public affairs officer for the CHP, says the bilingual *Maneje* Seguro! educational material should be disseminated to labor camps, clinics and ESL classes by late summer this year.

Safety experts emphasize these "safety commandments" for those transporting small children:

- 1. Use proper, legal safety seats for children less than 4 years and less than 40 lbs.
- Always use proper seats for children or safety belts. If you are not sure what to use contact your local law enforcement officials.
- 3. Never place a child in the front seat with air bags
- make sure the seat faces in the proper direction. Seats for children up to 20 lbs. should face rearward. Older children should face forward.
- For help with proper installation of seats, contact the CHP, local law enforcement, or public health department.

STUDY

## TB among farmworkers

by Stephen McCurdy, M.D., M.P.H.

uberculosis (TB) has been a scourge of the human race since antiquity. Even though TB is a preventable and curable disease, worldwide death and suffering from its effects continue in the modern era.

The cycle of infection typically begins when an individual ill with tuberculosis coughs up microscopic droplets laden with Mycobacterium tuberculosis, the causative bacterium.

When inhaled by uninfected persons, the TB bacterium reproduces in the lungs (primary infection site) and seeds the blood stream.

Although the majority of infected individuals have competent immune systems and never develop active tuberculosis disease, a minority (5-10 percent over a lifetime) will be unable to hold the infection in check and will develop active tuberculosis disease.

Persons at particular risk for developing active tuberculosis disease after initial infection include those with underlying illnesses such as malnutrition, cancer, diabetes, kidney disease and prolonged steroid use.

Persons developing active tuberculosis disease usually manifest fever, weight loss, and a productive cough.

Caucasians have the lowest rates of TB skin test reactivity (4 percent), followed by Hispanics (20-36 percent) and African Americans (29-46 percent). Haitian and Caribbean farmworkers are at greatest risk, ranging from 55 to 83 percent.

In the summer of 1995, Center investigators, in partnership with representatives from the Yolo County Department of Public Health, conducted several health "ferias" (fairs) at two local migrant

(see **TB** on page 3)

## (WPS from page 1)

rights to workers, including a basic "right-to-know."

A study, funded by the Center, was conducted to determine whether farmworkers in California are aware of the new regulations, whether and how they have received the required training, and whether they believe they are at risk of pesticide illness in their workplace. Nearly 500 interviews were conducted in Spanish by Celia Prado and Luis Magaña in two California counties last summer. A total of 115 interviews were conducted at 17 sites in Yolo County (Sacramento Valley), including two farm labor camps administered by public agencies. An additional 373 interviews were conducted at nearly two dozen sites in San Joaquin County (San Joaquin Valley), including three public farm labor camps.

Fewer than one in five workers had ever heard of the WPS or of the U.S. EPA. Most of those who claimed to know something about either could not provide anything substantive upon closer questioning. Residents of farm labor camps administered by public agencies were the most likely to have received some training (66 percent), but in most cases it was provided by nonprofit agencies, not their employer. Only a relatively few farmworkers living at private camps had received training. Overall, only about 16 percent of farmworkers said that they had received on-thejob pesticide safety training (see graph). Clearly, these results suggest that the news about WPS has not yet reached most farmworkers in California.

Yolo County Interviews Public labor camps	Yes	No	Total 21
Know of U.S. EPA?	8	13	
Know of WPS.?	3	18	
Pesticide safety training?	14	7	
Private camps/apts.			64
Know of U.S. EPA?	9	55	
Know of WPS.?	9	55	
Pesticide safety training?	16	48	<b>!</b>
Stores/fields			30
Know of U.S. EPA?	9	21	
Know of WPS?	9	21	
Pesticide safety training?	9	21	-
San Joaquin County Interviews	Yes	No	Total
Public labor camps			100
Aware of pesticide health risks?	91	9	
Know of WPS?	51	49	-
Pesticide safety training by employer?	37	63	
Know of employer responsibilities?	86	14	
Know that U.S. EPA is responsible agency?	94	6	
Other locations		<b>.</b> .	273
Aware of pesticide health risks?	189	84	
Know of WPS?	1	272	
Pesticide safety training by employer?	0	273	
Know of employer responsibilities?	145	128	
Know that EPA is responsible agency?	252	21	
Combined Yolo & SJ County Interviews			488
Pesticide safety training?	76	412	

## (**TB** from page 2)

housing centers. The purpose of the ferias was to provide tuberculosis screening and treatment services to the resident migrant farmworkers.

Participants completed a health questionnaire and tuberculin skin test to determine tuberculosis infection status, and follow-up chest radiography and medication was prescribed as necessary. All services were provided at no cost to participants.

Desiree Arretz and Elva Miranda, resident doctors in the UC Davis Department of Internal Medicine and native Spanish speakers, provided important leadership for the project.

More than 470 individuals participated in the program. Among participants, the overall prevalence for tuberculin skin-test reactivity was approximately 17 percent.

The importance of this program was evidenced in a Centers for Disease Control (CDC) survey addressing occupational and residential characteristics of tuberculosis cases from 1985 to 1989.

That study indicated that farmworkers accounted for 5 percent of all employed cases.

A study of 2,206 pulmonary tuberculosis deaths occurring between 1979 and 1990 from the National Occupational Mortality Surveillance data base shows that the chances of farmworkers contracting TB is approximately double that of other employed adults.

These studies may underestimate the true risk for farmworkers if foreign-born workers tend to return to their home country when ill, thus escaping detection in the United States.

The CDC Advisory Committee on the Elimination of Tuberculosis has recommended that the highest priority be given to detection and diagnosis of persons with symptoms

(see **TB** on page 4)

(**TB** from page 3)

of active TB.

- Screening and preventive therapy should be made available for agricultural workers and their families.
- ☐ Tuberculosis control activities should utilize outreach workers with the same cultural and linguistic background as the patient population.
- Clinical practice among farmworkers should consider the increased risk for tuberculosis in this population.
- Tuberculin skin tests should be a regular part of general healthcare maintenance.
- Persons with positive skin tests should be further evaluated to determine whether or not they have active tuberculosis disease.
- Prophylactic treatment should be provided to selected persons with tuberculin reactivity according to accepted clinical criteria. These include recent infection, age younger than 35 years, and the presence of certain underlying conditions.
- ☐ Persons found to have active tuberculosis should be treated according to accepted protocols, and the local health department should be notified so that contact investigation and public-health measures can be initiated.

Education of the patient and family is a critical part of any treatment plan. Many patients with positive skin tests are frightened that they are a danger to family members or children. Health care providers must emphasize to their patients that a positive skin test means only that they have been infected at some time in the past, and that they are not infectious as long as they do not develop active tuberculosis.

Financial support for this project was provided by the California Wellness Foundation and the Yolo County Department of Public Health.

LIST SERVERS

# Share knowledge on aghealth

Ithough the Worldwide Web has taken a leading role on the Internet stage, a fine supporting cast of other communication tools delivers a solid performance. Among those ancillary services are list servers which, though not as glamorous as the web, do a wonderful job of expediting communication between people.

A list server uses e-mail technology to broadcast topical messages to subscribers, each of whom may participate by posting their own messages. List servers, which typically focus on a particular subject, such as agricultural health and safety, allow participants to collaborate regardless of the distance between them.

List servers can offer informative, useful, often silly and sometimes rather repugnant information. In order to have an active and informative list server, it must be "open" to subscribers and to anyone wishing to share information about the particular topic it was created to address. "Open" (as opposed to "closed") list servers generate a greater variety of information, opinions and character, but are also vulnerable to an occasional sales pitch or offensive message.

"One of the most interesting email messages I received was from someone requesting information on California law regarding bringing a pet African pygmy hedgehog into California," said Marti Childs, former Center editor and manager of the aghealth list server. "I guess they thought that was in the realm of ag health and safety, but I referred them to the UC California Veterinary Diagnostic Lab."

Subscribers must understand that the information posted to the list server may not always be of interest to them. That's why giving a good but brief description in the "Subject" line is extremely important when posting messages.

Among its many electronic communications, the UC Agricultural Health and Safety Center has a list server called "aghealth." It is open to anyone interested in agricultural health and safety, and we welcome and encourage everyone involved in aghealth and safety to participate by posting to it.

Some appropriate topics for posting on the aghealth list server include:

- Questions regarding all aspects of ag health and safety.
- Research and findings related to ag health and safety.
- Seminars and other events of interest to ag health and safety professionals worldwide.
- ✓ New programs relating to ag health and safety.
- URLs (web addresses) for ag health and safety-related home pages.

To subscribe to aghealth, send an e-mail message to:

### aghealth-request@epm.ucdavis.edu

Make sure the "Subject" is blank and, in the body of the message, type the word "subscribe" and your name. If you use a signature, make sure it's turned off. An example using the e-mail program Eudora would appear as follows:

TO: aghealth-request@epm.ucdavis.edu FROM: adams@calweb.com Subject:

(c:

Bcc: Attachments:

#### subscribe Mary Adams

By return e-mail you will receive confirmation of your request and more information about using the list server. To post a message to aghealth, simply send your e-mail message to aghealth@epm.ucdavis.edu.

Archives of aghealth postings for the past year can be found on the Center's home page at

#### www-epm.ucdavis.edu/agcenter

To put your news in the spotlight, subscribe to aghealth today.