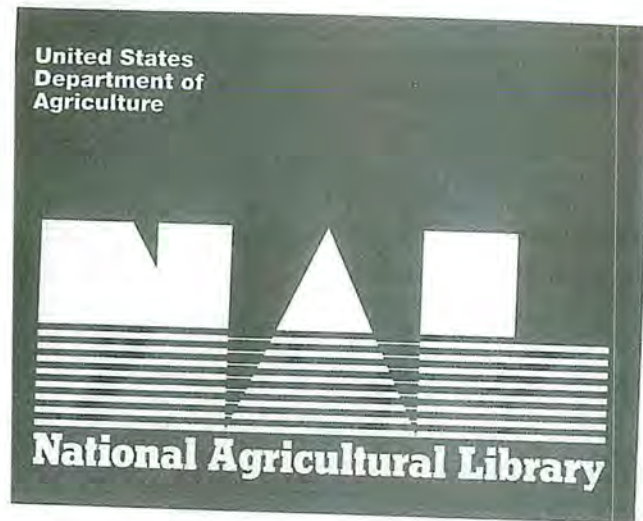


# A GUIDE TO USING LA LOTERÍA DE LOS PESTICIDAS

University of California  
Statewide Integrated Pest Management Project  
Division of Agriculture and Natural Resources



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## **INTRODUCTION TO SAFETY TRAINING GUIDES**

*La Lotería de los Pesticidas*, the "Pesticide Safety Lottery," can be used in a variety of ways. It can be played as a game to reinforce information that workers receive at pesticide safety training presentations. It is an excellent educational tool for schools, rural health clinics and other organizations or agencies which are involved in providing health and safety education to the Spanish-speaking public.

*La Lotería* can also be used to provide direction and focus to a pesticide safety training session. This pamphlet contains two pesticide safety training guides which make use of the figures and sayings from *La Lotería de los Pesticidas*. Both are designed to provide a complete general safety presentation for people who work with or around pesticides. The first guide, "Training Outline for Use with *La Lotería*" (pages 2-7), should be used by experienced trainers who already have a good knowledge of pesticide safety. The second guide, "Using the Sayings to Lead a Discussion" (pages 8-28), can be used by less experienced trainers. It provides more detailed trainer instructions to assure that all the important information is provided to the trainees. Using either guide, the training session should take approximately an hour.

Both of the guides present the figures in a specific order. If you are using the *La Lotería de los Pesticidas* slide set, the slides are already arranged in the correct order. (The slide set may be purchased by writing Visual Media, University of California, Davis, CA 95616-8748, or by calling 916-757-8980, and requesting slide set #94-101.) If you are working from the deck, for example if you are playing the game while giving the presentation, you can arrange your deck in the correct order by referring to either guide, using the numbers of the cards which are given right after the name of each figure.

You may find that when you train a large group of people, it is better to use the figures and sayings as part of your presentation, then play the game at the end of the presentation. When the game is played as part of the presentation, trainees are likely to be distracted and to focus more on winning than on learning. With groups of 16 people or less, it is easier to maintain order and to keep the presentation on track, so it may be practical to actually play the game while providing the training.

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# TRAINING OUTLINE FOR USE WITH LA LOTERÍA

## I. PESTICIDES

A. Definition of pesticides — chemical substances that control pests (**La Plaga**, card #24)



1. Types of pests:

a. Insects, such as caterpillars (**El Gusano**, card #38)



b. Slugs and snails (**El Caracol**, card #52)



c. Fungus and bacterial diseases, nematodes, weeds (**El Zacate**, card #30), etc.



2. Types of pesticides:

a. Herbicides (**El Herbicida**, card #23)



b. Insecticides (**El Rodenticida**, card #44), etc.



## B. Types of formations

1. Directly from container

- Slug baits
- Aerosols
- Foggers

2. Mixed, usually with water

- Dry formulations, for example, wettable powders (**El Polvo Mojable**, card #11) which must be stirred constantly



b. Liquid formulations

## II. PESTICIDE POISONING

### A. Modes of entry

1. Through lungs, if you inhale vapor from nearby applications (**Los Vapores**, card #22)



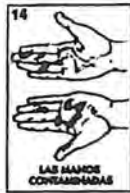
2. Through mouth

- If you mistake a pesticide for something edible or drinkable

- If you eat or drink from contaminated surfaces or containers, or eat food from the field that still has a pre-harvest interval in effect, and consume toxic residues (**Los Residuos**, card #48)



- c. If you eat with contaminated hands  
(**Las Manos Contaminadas**, card #14)



- d. If you try to clean plugged nozzles by blowing on them, you are being foolish  
(**El Tarugo**, card #18)



3. Through eyes

- a. If there is a splash  
(**La Salpicadura**, card #28), dust, or vapors
- b. If you rub your eyes with contaminated hands



4. Through skin — by far the most common route of exposure

- B. Poisoning and injury — if you don't follow all the safety precautions you could easily become a victim of pesticide poisoning (**El Envenenado**, card #1) or pesticide-related injury.



1. Acute effects happen soon after exposure and are short-lived.
2. Chronic effects are long-term health problems that may affect you for the rest of your life. We have limited knowledge about the potential for chronic effects from excessive exposure to most pesticides.

- a. Types of possible chronic illnesses and injuries
- b. Can result from on-going low level exposure or from a single exposure and are a good part of the reason you should work with care

3. The symptoms (**Los Síntomas**, card #25) of acute poisoning or injury



- a. OPs and N-methyl carbamates

1. Mild
2. Moderate, includes pinpoint pupils  
(**Las Pupilas Pequeñas**, card #16)



3. Severe

- b. Symptoms from other types of pesticides

**III. FIRST AID (Los Primeros Auxilios, card #39) AND EMERGENCY RESPONSE**

- A. What to do in case of
  1. Skin contamination
  2. Eye contamination
  3. Inhalation
  4. Swallowing



- B. Take the victim to the doctor quickly. Unless the victim needs immediate attention which no one at workplace can provide, it is better to take the victim to a medical facility than to wait for an ambulance (**La Ambulancia**, card #15).



#### IV. UNDERSTANDING THE PESTICIDE LABEL

- A. The pesticide label (**La Etiqueta**, card #49) contains safety information and correct handling instructions. It has statements about protecting the environment, water sources, and beneficial animals such as bees (**Las Abejas**, card #34).

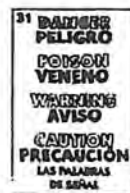


- B. Labels are in English, but the training your employer is required to give you should include all the safety information on the pesticide label.

- C. The precautionary statements don't always directly list the protective equipment you'll need.

1. "Avoid eye contact" means use safety glasses, at least.
2. "Avoid skin contact" means use chemical resistant gloves, long pants and long sleeves, at least.
3. "Avoid inhalation" means that you should use a respirator — later on more details about protective equipment.

- D. Signal words (**Las Palabras de Señal**, card #31) are one thing you should be able to recognize, even if you don't read English.



1. Indicate level of danger to people, usually, but not always level of toxicity.

- a. DANGER
- b. POISON (with a skull and crossbones (**La Calavera**, card #9))
- c. Warning
- d. Caution



- V. **PROTECTIVE EQUIPMENT** is for applicators (**El Rociador**, card #33) and other handlers, including equipment cleaners and flaggers (**El Banderero**, card #42).



- A. Body protection, from long pants and shirts or coveralls (**El Traje Enterizo**, card #36) to rain suits, and a chemical resistant apron (**El Delantal**, card #21) if you mix and load and aren't wearing a rain suit.



B. Eye protection can be either goggles (**Las Gafas**, card #3), a face shield (**La Careta**, card #10), or at minimum, safety glasses.



C. Chemical resistant gloves (**Los Guantes**, card #7)



D. A respirator (**El Respirador**, card #54)



1. Make sure it fits.
2. Replace respirator cartridges (**Los Cartuchos**, card #5) daily under most circumstances.
3. Maintain the respirator in good working order.



E. Rubber boots (**Las Botas**, card #2) or other chemical resistant footwear



F. A baseball type cap (**La Cachucha**, card #4) isn't going to protect you. Use a chemical resistant hood or helmet (**El Casco**, card #8).



G. Your employer has to provide you with adequate protective equipment, but it is up to you to wear it. Don't play (**El Macho**, card #19) and risk poisoning yourself or ruining your health.



H. Be the intelligent worker (**El Aguzado**, card #32) who wears the right protection, works safely, and isn't afraid to tell his boss when he needs something fixed or replaced.



I. Equipment maintenance and storage

1. Wash protective equipment at end of the day, and store it in a clean place.
2. Inspect your equipment regularly to make sure it is still protecting you.

## VI. RESPONSIBILITIES OF THE EMPLOYER (**El Patrón**, card #17)

A. To handlers

1. Provide training
2. Provide protective equipment (**El Equipo de Protección**, card #12)
3. Launder outer clothes and provide clean outer clothing at the beginning of each workday when workers handle highly or moderately dangerous pesticides



4. Provide a cleanup and storage area for protective equipment

5. Medical assistance and surveillance

a. Transport to medical facility or doctor (**El Médico**, card #43)



b. Arrange for cholinesterase testing (**La Colinesterasa**, card #46)



1. Why it is done

2. Who needs it

B. To all workers

1. Make sure workers don't get exposed during or after an application, for example during an aerial application (**La Avioneta**, card #41)



2. Post restricted entry signs (**El Intervalo de Espera**, card #51)



3. Arrange for emergency medical treatment and post name, phone number, and location of the medical facility

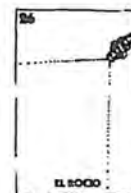
C. State and local government inspectors (**El Inspector**, card #6) go out and observe agricultural practices, and both your employer and you are expected to comply with the regulations.



## VII. WORKING SAFELY AND STAYING CLEAN

A. Protective equipment isn't the whole answer to working safely.

B. Avoid walking into the spray (**El Rocío**, card #26) from your own application.



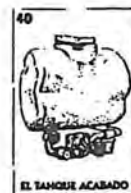
C. Don't eat, drink, smoke, or use the bathroom until you have washed your hands.

D. Use a toothpick, a brush, or some other instrument to clean out plugged nozzles. Never blow on them.

E. Don't apply if there is a wind (**El Viento**, card #20). You will contaminate people and property with the drift (**El Desvío**, card #29), and will be wasting your time and your employer's pesticide with an application that ends up somewhere other than on the crop you are treating.



F. Keep your application equipment in good working order; a worn out tank (**El Tanque Acabado**, card #40) will leak (**La Fuga**, card #35) and so will a ruptured hose (**La Manguera**, card #47).



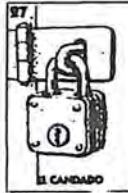
## VIII. CONTAINER RINSING, STORAGE AND DISPOSAL

### A. Triple rinsing (El Triple Enjuague, card #45)

1. Smaller than 5 gallons
2. Larger than 5 gallons



### B. Store pesticides in an area that can be secured with a lock (El Candado, card #27).



### C. Storage of empty containers (El Envase Vacío, card #13)

1. Lock them up immediately.
2. Make holes in them, if they can't be returned to the manufacturer, so no one will take them home or use them for other purposes.



## IX. CLEANING UP LEAKS AND SPILLS (El Derrame, card #37)

- A. Liquid spills, small and large
- B. Dry spills



## X. PERSONAL CLEANUP

- A. Wash hands before eating, drinking, etc.
- B. At the end of the day, shower or take a bath (El Baño, card #53) immediately.



## XI. CONCLUSION:

Competent, confident, healthy workers are important to the production of a good crop (El Cultivo, card #50). Remember, as a worker, a safe work environment is not only your right, it is also your responsibility.



# USING THE SAYINGS TO LEAD A DISCUSSION

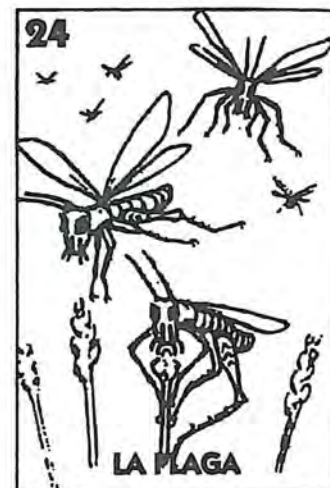


## GENERAL PESTICIDE INFORMATION

### ➤ 1. La Plaga - card #24

*"Si no está controlada, acaba con todo lo que se traga."* (If they're not controlled, they can wipe out the crop.) Use this figure to start your presentation.

- Ask workers to define "pesticide." (Chemicals that control pests)
- Ask them why pesticides are used.
- What kind of pest do they see depicted on "La Plaga"? (Insects) Are there other kinds of pests? (There are many kinds of pests)



### ➤ 2. El Gusano - card #38

*"Atarántamelo a chisquetes, no me lo dejes llegar."* (Zap it with your spray gun and make it go away!)

- What about this pest; what pest group does it belong to? (Insect)
- Is it really a worm? Is there another name for this type of pest? (Caterpillar, larva) What will it turn into when it is an adult? (Moth, butterfly)



➤ **3. El Caracol - card #52**

*"Cargando siempre su casa y buscando que comer." (He carries his house on his back and eats everything in sight.)*

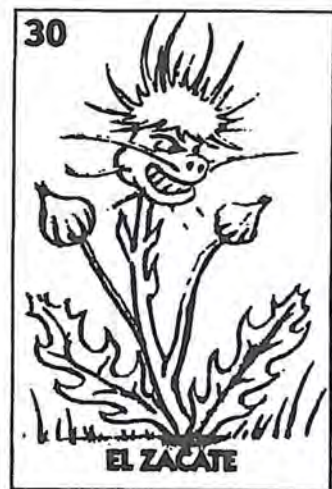
- A. What about the snail; is it an insect? (No)
- B. What other pest is closely related? (Slug)
- C. Do you spray for snails and slugs? (Not usually; baits are more common.)
- D. If there are deccolate snails used at your operation as a biocontrol, this is the place to mention this to workers and to tell them to avoid killing these beneficials.
- E. Ask workers to name other types of pests: vertebrates, plant diseases, nematodes, etc.



➤ **4. El Zacate - card #30**

*"El que nace para metiche y siempre estorba en el campo." (This butt-inski always turns up in the middle of the field.)*

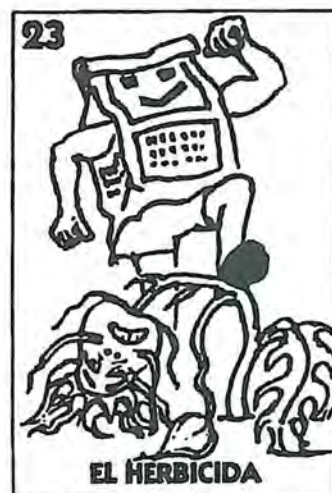
- A. Is the weed another kind of pest that can be controlled by a pesticide? (Yes)
- B. Different kinds of pesticides are needed to control different kinds of pests. What kind of pesticide do you use to control weeds?



➤ **5. El Herbicida - card #23**

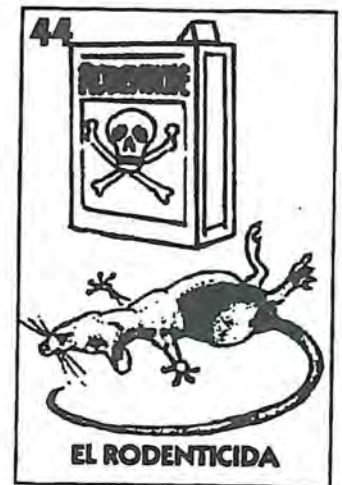
*"Al ver al verde zacate, atacó y ganó el combate." (It saw its weedy opponent, it attacked, and won the war.)*

- A. What other kinds of pesticides are there? For example, what is used to kill insects? (Insecticides)
- B. What about plant diseases? (Fungicides)
- C. Name some other kinds of pesticides and what they control. (Defoliants, growth regulators, nematicides, etc.)
- D. What about mice and other rodents?



➤ **6. El Rodenticida - card #44**

*"Ratón que se duerme, no come el grano." (A dead mouse eats no grain.)*



*We can see that pesticides can be divided into groups according to the type of pest they control. They can also be grouped according to type of formulation.*

*Some types of formulations are used directly from the container:*

- *Slug and rodent baits*
- *Aerosols*
- *Foggers*

*Others are mixed with water — some are soluble and some are not:*

- *Liquid formulations*
- *Dry formulations*

➤ **7. El Polvo Mojable - card #11**

*"El polvo que no se disuelve, muy pronto se puede asentar." (If it's not soluble, it will settle out.)*

- How do you keep a wettable powder from settling out during application? (Constant agitation)*
- Are there liquid formulations that also settle out? (Emulsifiables and flowables)*
- Why is it important that the applicator know the difference between soluble and nonsoluble formulations? (To keep them mixed, for example, if the application is interrupted and then continues.)*





## PESTICIDE POISONING AND INJURY

*Pesticides can get into your body a number of ways. For example, they can be inhaled into the lungs.*

### ➤ 8. Los Vapores - card #22

*“Con lo que flota en el aire, no te vayas a marear.” (When this comes wafting through the air, stay out of its way.)*

- How else can pesticides get into your body? (Mouth)
- What are some of the ways you could get pesticides into your mouth? (By mistaking a pesticide for something to eat or drink, by eating or drinking from contaminated surfaces or containers, by eating recently treated fruits or vegetables.)



### ➤ 9. Los Residuos - card #48

*“Ni se ven ni se huelen, pero si comes cosas del campo sin preguntar, te pueden enfermar.” (You may not see them or smell them, but if you eat food from the field without checking first, they can make you sick.)*

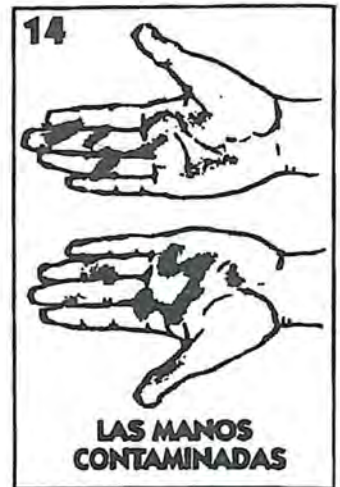
- There is often a waiting period after a pesticide application during which it is not safe to harvest and eat the treated produce. What is this period called? (Pre-harvest Interval)
- Is it okay to eat treated produce during the pre-harvest interval if you wash it first? (No)
- What about taking recently treated produce home to the family? (Don't do it.)
- How can you find out if a field has a pre-harvest interval in effect? (Ask your supervisor or boss, and if you can't find out for sure, don't take chances.)



➤ **10. Las Manos Contaminadas - card #14**

*"Con éstas ni comes, ni fumes, ni uses el baño."  
(Don't eat, smoke or use the bathroom with these.)*

- A. What do you need to do before you do any of the above? (Wash your hands.)



➤ **11. El Tarugo - card #18**

*"El que por su gusto se expone, hasta la boquilla sopla."  
(The guy who blows on the spray nozzle to clean it out is looking for trouble.)*

- A. How should you clean out a plugged nozzle? (With a special brush or a toothpick. Not with a wire, and never with your mouth.)
- B. We have mentioned inhaling pesticides and swallowing them. How else can they get into your body?



➤ **12. La Salpicadura - card #28**

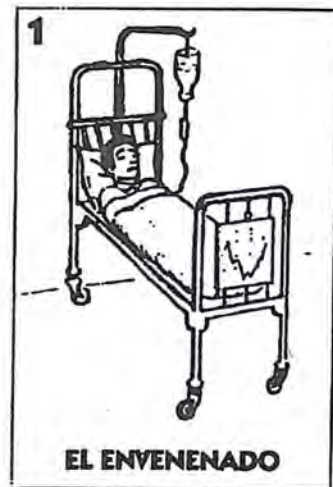
*"La que hace que los pesticidas chacualean hasta los ojos y la cara."  
(If this takes place, you may get pesticides in your eyes and on your face.)*

- A. This is one way eye contamination can happen. Ask them to name other ways. (Rubbing the eyes with contaminated hands.)
- B. What other kind of exposure can splashing cause? (Mouth and skin exposure)
- C. Ask them to list the 4 modes of entry. (Lungs, mouth, eyes and skin)
- D. Which is the most common among agricultural workers? (Skin exposure)
- E. By working carefully, you can usually avoid these kinds of exposures. If you aren't careful, you may become... (See next card.)



➤ **13. El Envenenado - card #1**

*"El que trabaja sin cuidado." (The person who works carelessly may become...)*



*There are two types of pesticide poisoning and injury we must consider. Chronic or long-term illness from pesticide exposure stays with you for a long time, perhaps for life. It may result from a single, high-level exposure, but is often the result of ongoing, low-level exposures. The possibility of chronic illness is one of the reasons you should work very carefully and cleanly. The other kind of poisoning, acute poisoning or injury, occurs very soon after exposure, and the effects are usually short-lived.*

➤ **14. Los Síntomas - card #25**

*"Náuseas, dolor de cabeza, mareos y más. Si los sientes, algo anda mal." (Nausea, headache, dizziness and more. If you feel these symptoms, something is wrong.)*

- A. These are some of the general symptoms of acute pesticide poisoning.
- B. What other symptom is very specific to poisoning with certain kinds of insecticides? (See next card.)



➤ **15. Las Pupilas Pequeñas - card #16**

*"Si ves a los ojos cambiados, sabrás que te has envenenado. (If your eyes look funny, you'll know you've been poisoned.)*

- A. Are there many other illnesses that cause pinpoint pupils? (No)
- B. Ask them what kind of insecticides can cause this symptom. (Organophosphates and N-methyl carbamates; list ones that they use.)



*There are a number of other kinds of acute illness and injury that can result from pesticide exposure. Many fumigants can cause dizziness, too, but they can also cause behavior changes, similar to being drunk. They can cause a change in body temperature as well. There are a number of pesticides, especially herbicides, fungicides, and some miticides, that can cause serious skin and eye irritation or injury.*

*If you act rapidly when you or a work companion get exposed, you can often avoid illness and injury.*

➤ **16. Los Primeros Auxilios - card #39**

*"El saberlos administrar, a un compañero le puede salvar." (If you know how to do this you could save a friend's life.)*

- A. Ask your audience what to do in case of skin and eye contamination, ingestion or inhalation of pesticides. (For skin contamination, take off contaminated clothes and wash skin. For eye contamination, rinse eyes for 15 minutes. For inhalation, get victim to fresh air and give CPR if necessary. For ingestion, consult label, but get to medical facility as soon as possible.)
- B. After you give first aid, if the exposed person has signs of injury or even if the person appears okay but has had a serious exposure, the person should be taken to a medical facility.



➤ **17. La Ambulancia - card #15**

*“Cúdate bien. Si no, te lleva esta carrucho.”  
(Take care or you may find yourself taking a trip  
in this van.)*

- A. Call an ambulance if special life support will be needed on the way to the hospital or if there is no other way to transport the victim.
- B. Otherwise, drive the person to the medical facility if this is quicker.
- C. Is it okay to let the person drive alone if there appears to be no serious illness? (Never; the person should be accompanied, and someone other than the victim must be driving.)



**THE PESTICIDE LABEL**

➤ **18. La Etiqueta - card #49**

*“A la que todos van a ver cuando algo quieren saber.” (If you want information about a pesticide,  
this is what you need to read.)*

- A. Discuss with workers some of the information found on labels. (Health and safety information, application instructions)
- B. If they can't read English, how do they know what the label says about safety? (From employer training at beginning of work season)
- C. Other than safety information and application instructions, what else is on the label? (Environmental protection information; for example, warnings against harming bees) (See next card.)



➤ **19. Las Abejas - card #34**

*"A otros insectos los matas, pero a éstas vivas las dejas." (You kill the pest insects, but you don't want to kill these guys.)*



*Pesticide handlers have to know what the label says about correct and safe handling of the pesticide. Labels are almost always only available in English. Even if you don't read English, the training which you receive from your employer at the beginning of the work season should provide you with all the label information you need to keep yourself and fellow workers safe. There are certain things on the label that are easy to recognize even if you don't read English.*

➤ **20. Las Palabras de Señal - card #31**

*"Te dan un AVISO del PELIGRO para que uses PRECAUCIÓN." (This gives you WARNING of the DANGER, so that you work with CAUTION.)*

- A. Discuss the three pesticide categories and their corresponding signal words.
- B. Mention to workers that the most toxic pesticides have a symbol along with the signal word. (See next card.)



➤ **21. La Calavera - card #9**

*"Al revisar la etiqueta, me encontré esta cabeza huesuda." (While looking at the label [of a toxic pesticide], I came across this creepy cranium.)*





## PROTECTIVE EQUIPMENT

Who needs to wear it, and what does it consist of?

➤ **22. El Rociador card #33**

*“El que con su tanque echa el veneno.” (The man with the killer tank.)*

- A. Applicators aren't the only ones who need protective equipment.
- B. Mixers and loaders need it too, as do the people who repair and clean application equipment.
- C. And what about flaggers?



➤ **23. El Banderero - card #42**

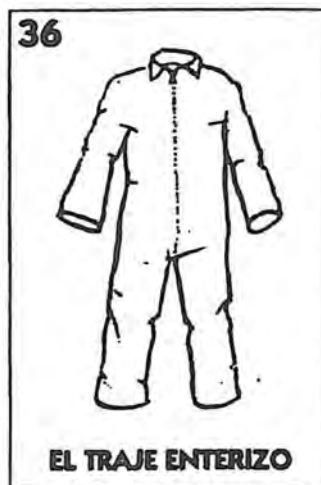
*“Con su bandera en la mano, necesita protección, igualito que el aplicador.” (This guy with the flag must use the same protection as an applicator to keep himself safe.)*



➤ **24. El Traje Enterizo - card #36**

*"Te cubre el cuerpo desde el cuello hasta los pies." (This will protect you from your neck to your feet.)*

- A. Ask workers to describe the minimum body protection they might need. (For low toxicity pesticides, a long sleeve shirt and long pants are considered adequate outer clothing.)
- B. What clothing is needed for more hazardous pesticides? (Coveralls of tightly woven cotton, disposable Tyvek, or waterproof material can be used, depending on the toxicity of the pesticide, the work situation, and label requirements.)
- C. If time allows, describe specific handling situations, for example, mixing a category I liquid, applying a category II herbicide, etc., and have them choose the correct outer clothing for the job.



➤ **25. El Delantal - card #21**

*"Este mandil de hule, no me lo puedo quitar." (This is one apron I'm willing to wear!)*

- A. Who needs to wear it? (Mixers and loaders, so that if a spill occurs during loading activities, the apron protects the front of the body.)



➤ **26. Las Gafas - card #3**

*"Con éstas los ojos te tapas." (What do you use to protect your eyes?)*



➤ **27. La Careta - card #10**

*“El amparo de la cara es su meta.” (It’s there to protect your face.)*

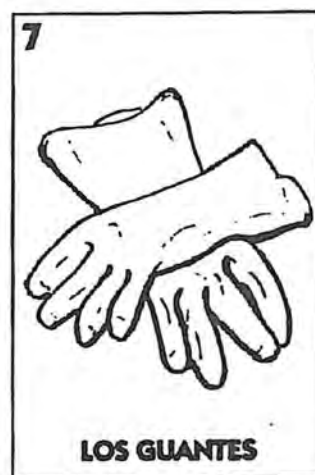
- A. When should goggles or a faceshield be worn? (When the label specifies goggles or a face shield. Faceshields protect against splashes, but do not keep dusts or mists out of the eyes.)
- B. What if the label doesn’t specify eye protection? (All handlers must at least wear a pair of safety glasses with brow and temple protection.)



➤ **28. Los Guantes - card #7**

*“Si no quieres contaminarte las manos, aunque haga calor más vale que los aguantas.” (If you want to avoid contaminating your hands, you’ll wear them even though it’s hot outside.)*

- A. When should handlers use gloves? (Always, unless the label specifically prohibits them, as is the case with most fumigants.)
- B. What should gloves be made of? (A chemical resistant, unlined material, such as rubber or polyethylene)



➤ **29. El Respirador - card #54**

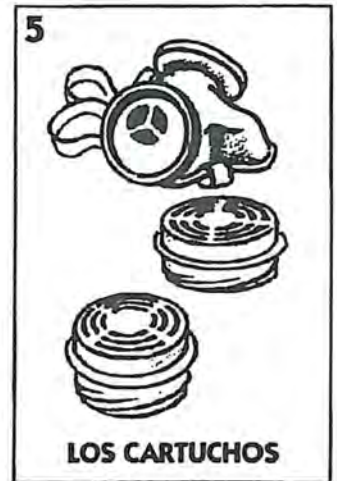
*“Cuando trabajas con pesticidas, esto protege los pulmones.” (When you work with pesticides, this protects your lungs.)*

- A. It has to fit your face.
- B. Will it protect you if you have a beard, sideburns or a mustache which comes between your skin and the facepiece? (No)
- C. How and why do you check it? (Make sure the valves and straps are not worn out, make sure it fits; rubber and elastic wear out.)



➤ **30. Los Cartuchos - card #5**

*"Dos días de usar el respirador sin cambiarlos ya son muchos." (If you go two days without replacing these, you've waited too long.)*



➤ **31. Las Botas - card #2**

*"Las que protegen los pies de las gotas." (These protect your feet from the spray.)*

- A. What should they be made of? (Rubber or other impermeable material)
- B. Where do the pant legs go? (Outside the boots, to keep runoff from contaminating your feet)



➤ **32. La Cachucha - card #4**

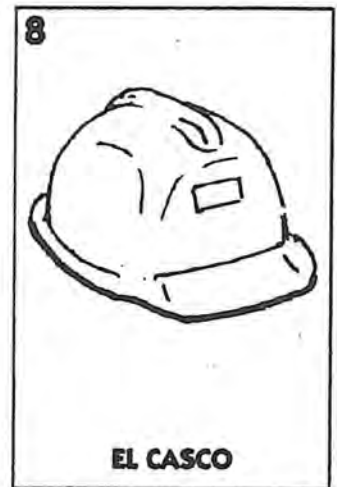
*"Quien cree que ésta le protege la cabeza no es trucha." (If you think this is going to protect your head, you're wrong.)*

- A. When do you need head protection? (When spraying in a way that results in overhead spray, mist, or dripping)
- B. Why doesn't a cloth cap or a straw hat protect you? (Not water resistant)
- C. What should you use to protect your head? (A protective rubber hood or...) (See next card)



➤ **33. El Casco - card #8**

*"Al sombrero que te protege le penetra poco."*  
(Not much gets through this hat!)



➤ **34. El Macho - card #19**

*"Teniendo tan buen equipo, no te lo quieres poner."* (He's been given all the protection he needs to stay safe, but he doesn't bother using it.)

- A. Who supplies it? (Your employer)
- B. What is your responsibility? (Wear it, maintain it, keep it clean, and tell your boss when it needs replacing.)
- C. Why do you need to wear it? (To avoid illness and injury, and also to protect your job and to protect your employer from being fined for noncompliance.)



➤ **35. El Aguzado - card #32**

*"Este usa el equipo de protección, trabaja con precaución, y si algo le falta, se lo exige al patrón."* (He works carefully, wears his protective equipment, and when he needs something replaced, he lets his boss know.)

- A. Be the wise worker who works intelligently and safely. If you play the Macho, you're being foolish.



*Apart from wearing your personal protection, you also need to make sure it is clean and in working order at the beginning of the day.*

- *Wash protective equipment at the end of the day, and store it in a clean place.*
- *Inspect your equipment regularly to make sure it is not worn or ripped.*



## EMPLOYER RESPONSIBILITIES

### ➤ 36. El Patrón - card #17

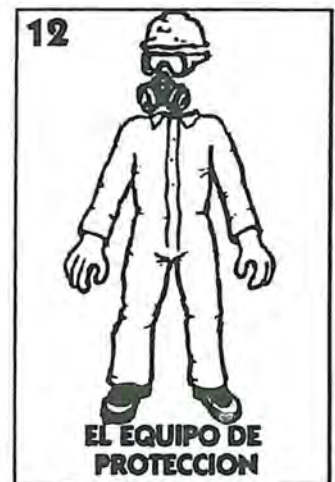
*"Al que le toca darte tu equipo de protección."  
(Who provides you with your protective equipment?)*



### ➤ 37. El Equipo de Protección - card #12

*"Para el polvo y para el rocío." (To shield you from the dust and the spray...)*

- A. Ask audience to list some employer responsibilities besides supplying protective equipment.
  - 1. Must replace protective equipment when it wears out.
  - 2. Must provide a place to clean and store other protective equipment such as gloves, goggles, respirator, etc.
  - 3. Must provide safety training for pesticide handlers.
  - 4. Must make arrangements for emergency medical care.
- B. Who cleans contaminated outer clothing?  
(Employer is responsible for laundering of outer protective clothing, and must provide pesticide handlers of Category I and II pesticides with clean outer clothing at the beginning of each workday.)



➤ **38. La Colinesterasa - card #46**

*“Si te expones a ciertos insecticidas, el nivel de ésta se te baja.” (Exposure to certain insecticides will make this go down.)*

- A. Ask workers if they understand what cholinesterase is. (A substance in the body that is important in the functioning of the nervous system.)
- B. Ask them if they have been sent by employer for blood tests. If yes, ask them to name some of the insecticides they use, and help them to identify the ones that are cholinesterase inhibitors.
- C. Ask them if they know what these pesticides do to cholinesterase. (They bind up cholinesterase so that it is not able to do its job.)
- D. Who arranges and pays for cholinesterase testing and who needs to be tested? (Medical monitoring of cholinesterase must be arranged and paid for by employers for all workers who handle Category I and II organophosphates and N-methyl carbamates for more than 6 days in any 30-day period.)



➤ **39. El Médico - card #43**

*“Al sentirte mal en el trabajo, es mejor que vayas a verlo. (If you feel sick at work, it's time to make an appointment.)*

- A. If you suffer an illness related to an exposure or injury at work, how are medical fees paid? (Your employer's workers' compensation insurance will cover the medical costs.)
- B. Ask them about posting of emergency phone numbers at their workplace. (The medical facility name, address, and phone number should be posted by your employer at your workplace so that you'll know where to go and who to call in case of an emergency.)
- C. Who is responsible for getting a sick or injured worker to a medical facility? (If you or someone else gets sick or injured due to pesticide exposure while at work, your employer is required to provide transportation to a medical facility. This is true for fieldworkers as well as pesticide handlers.)



Employers have pesticide-related responsibilities for fieldworkers as well as for pesticide handlers.

➤ **40. La Avioneta - card #41**

*"Desde arriba desparrama el pesticida." (It sprays from above.)*

- A. Ask them if any of them have ever been sprayed by an aerial applicator.
- B. Is this allowed? (It is illegal to spray in a way that will contaminate people.)
- C. Who is responsible for preventing spraying of people in the field? (Employer and pilot. If you are working in an area and a nearby aerial application is contaminating you, get out of the area immediately; don't wait for permission to leave.)



➤ **41. El Intervalo de Espera - card #51**

*"Si ves un rótulo colocado, no entres al campo tratado." (If you see a warning sign in the field, say out!)*



➤ **42. El Inspector - card #6**

*"Para asegurar que todo va bien, vigila al patrón y al trabajador." (The person who makes sure that both worker and employer are complying with the rules.)*

- A. Ask them if they've seen inspectors at work.
- B. Have they ever been asked questions by inspectors at work?





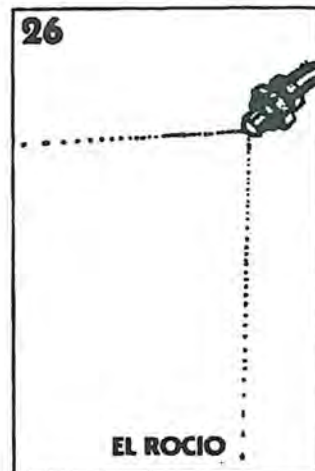
## WORKING SAFE AND STAYING CLEAN

*Protective equipment alone won't keep you healthy. And remember, you as well as your employer are responsible for your safety.*

### ➤ 43. El Rocío - card #26

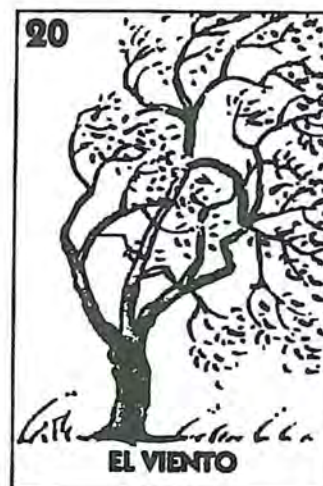
*"Rocia, rociando, roció." (Spray, spraying, sprayed)*

- A. Ask applicators how they should move in relation to the spray or dust they are applying. (Away from spray or dust)
- B. When is it necessary to wash your hands? (Before using the bathroom, eating, or drinking)



### ➤ 44. El Viento - card #20

*"Cuando esto está soplando, no debes andar rociando." (When this starts to blow, don't start to spray!)*



### ➤ 45. El Desvio - card #29

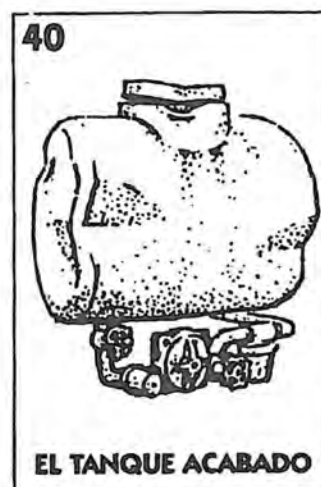
*"Esto puede llevar el pesticida hasta donde nadie lo quiere." (This will carry the pesticide to places where it isn't welcome.)*

- A. Why shouldn't you spray on a windy day? (The drift may contaminate nearby property and people, and instead of effectively treating the intended target, the majority of pesticide will be blown away, and the application will be a waste of time and pesticide.)



➤ **46. El Tanque Acabado - card #40**

*"Si lo llenas y gotea, ya no debe ser usado." (If it leaks when it's filled, it's no good.)*



➤ **47. La Fuga - card #35**

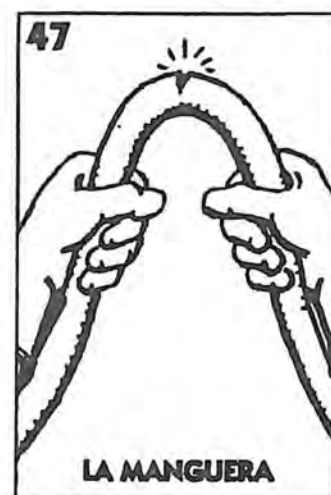
*"Ay que gotera tan latosa, ya no la puedo permitir." (This dripping is driving me crazy; I've got to make it stop.)*

- A. Why must leaky equipment be repaired or replaced? (Leakage is wasteful and causes unnecessary contamination and possible injury to people.)
- B. Who should look out for problems with the application equipment? (If you are the person who is doing most of the spraying, you are the one who should make sure that everything is in good working order by regularly inspecting it.)
- C. What do you do if something needs to be repaired or replaced? (Tell your supervisor.)



➤ **48. La Manguera - card #47**

*"Larga y flaca, se le debe revisar, si una gotera quieres evitar." (This long, skinny tube needs to be checked if you want to avoid leaks.)*



➤ **49. El Triple Enjuague - card #45**

*"Uno, dos, tres, enjuaga el envase otra vez." (1, 2, 3—that's how many times you should rinse that container!)*

- A. Ask them how much water is added to the empty container. (For containers of less than 5 gallons, fill 1/4 full, for containers of more than 5 gallons, fill 1/5 full)
- B. Ask them to describe the rinsing process. (Put the cap on, agitate the container, or roll larger containers on ground. Add rinsate to spray tank, letting container drip 30 seconds.)



➤ **50. El Envase Vacío - card #13**

*"El que contenía pesticida no debe volver a contener nada." (If it contained pesticides, don't reuse it.)*

- A. What do you do after rinsing an empty container? (Store in locked area.)
- B. How can you make sure containers don't get used for another purpose? (Puncture them.)



➤ **51. El Derrame - card #37**

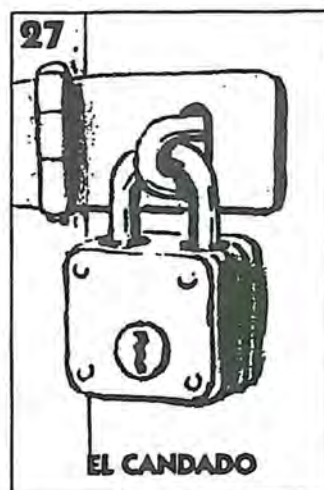
*"¡Detenlo! No lo dejes desparramar." (Stop it from spreading.)*



➤ **52. El Candado - card #27**

*"Con esto, el almacén de pesticidas queda cerrado." (This keeps the pesticide storage area secure.)*

- A. Why are pesticides stored in a locked place? (Safety)
- B. What should you do when you leave the pesticide storage area? (Lock the door.)



➤ **53. El Baño - card #53**

*"Al fin del día te quita los residuos que quedan en la piel y pueden hacerte daño." (At the end of each day this washes away any pesticides left on your skin.)*

- A. Take a shower as soon as you can after work.
- B. Wash your hair, and clean your nails carefully.



➤ **54. El Cultivo - card #50**

*"Verde, bonito y bien regado queda el campo sembrado." (Lovely and green is the well tended field.)*



*Pesticides are important tools in agriculture, but you, the worker, are important too. In order to protect yourself, your fellow workers, and your family, you and your employer must do everything necessary to assure that your workplace is a safe place to work.*

