

# LESSON PLAN

## Topic: Farmer's Lung Hypersensitivity Pneumonitis

KERA Goals	Goal 1
Accessing Sources of Info	*
Reading	*
Observing	*
Listening	*
Quantifying	
Computing	
Visualizing	
Measuring	
Mathematical Reasoning	
Classifying	
Writing	
Speaking	
Visual Arts	
Music	
Movement	
Using Electronic Tech.	
	Goal 2
Nature of Scientific Activity	
Patterns	*
Systems and Interactions	*
Models and Scale	
Constancy	
Evolutionary Change	
Number	
Mathematical Procedures	
Space and Dimensionality	
Measurement	
Change	
Mathematical Structure	
Date	*
Democratic Principles	
Political System	
Social Systems	
Cultural Diversity	
Economic Systems	*
Geography&Human Activity	
Historical Perspective	

**Background:** Hypersensitivity Pneumonitis is an inflammation of the lungs caused by a foreign substance such as dust, gases, or molds. Symptoms may be resolved if allergen exposure is avoided, but can require occupational changes. Hypersensitivity Pneumonitis is often referred to as Farmer's Lung due to the association of the disease with agricultural occupations.

**Objectives:** For the student to recognize the prevalence of Farmer's Lung in agricultural occupations and be able to complete the following tasks:

- Name farm tasks that are associated with high-risk exposure to disease-causing agents.
- Exhibit a general knowledge of the causes and health risks of Farmer's Lung.
- Analyze the long-term effects of the disease, associated health problems, and lifestyle changes.
- List adequate preventive measures, including personal protective equipment.

**Situation Development:** Things to be brought out by the teacher in discussion to generate interest and introduce the lesson:

(See fact sheet.)

- Do any of you know what Hypersensitivity Pneumonitis is? A more common name you might recognize is Farmer's Lung.
- Just given the name, what do you think Farmer's Lung is?
- What could be some effects of having a lung problem for a farmer?

Interpersonal Relationships	
Production	
Analysis of Forms	
Aesthetics	
Cultural Heritage	
Cultural diversity	
Language	
Second Language	
Family Life/Parenting	*
Consumerism	*
Physical Wellness	*
Mental/Emotional Wellness	
Community Health Systems	*
Psychomotor Skills	
Lifetime Physical Activities	
Career Paths	
Employability Attributes	*
Post-Secondary Options	
	Goal 3
Positive Self -concept	
Healthy Lifestyle	*
Adaptability/Flexibility	*
Resourcefulness/Creativity	
Self-control/Self -discipline	*
Ethical Values	
Independent Learning	*
	Goal 4
Interpersonal Skills	*
Team Membership	*
Consistent, Caring Behavior	
Rights & Responsibilities	*
Multicultural/World View	
Open Mind	
	Goal 5
Critical Thinking	*
Creative Thinking	*
Conceptualizing	
Decision Making	*
Problem Solving	*
	Goal 6
Multiple Perspectives	*
Developing New Knowledge	
Expanding Knowledge	*

**Problem Statement:** Identify the lesson topic and what the students will be answering in their activities.

- What is Farmer's Lung, and how might we prevent it in agricultural occupations?

**Analysis:** Things to consider in analyzing the topic and reaching the conclusion:

- common causes of the disease and incidents in which lung damage occurs
- effects of Farmer's Lung on lifestyle, economic situation, community and the future
- prevention of farm-related incidents that result in Farmer's Lung

**Directed Study:** Listed below are activities that will present the concepts of Farmer's Lung. Choose the activities which best fit your time restraints, student abilities, and resource availability. Student reference sheets are enclosed which provide information about Farmer's Lung. Duplicate these and use as a reference when conducting the activities.

- Narrative Simulation
- Physical Simulation
- Supplemental Activities:  
Case Report  
Guest Speaker  
Personal Protective Equipment (PPE)  
Mask Comparison  
Study Sheet

**Group Conclusion:** After completing the activities, the teacher will lead in discussion of the topic with the class, approaching the points outlined in the analysis. The students should provide information and knowledge as gained from the activities and reference materials.