# Symptom Cards for "What is My Diagnosis?" Activity

Patient #1 Background

Just got back from vacation in Central America. Problems started about 12 hours after drinking water in a restaurant.

Diarrhea causing dehydration.

Muscles are tender and sore.

Slight fever.

Some nausea and vomiting,

Stomach and abdominal cramps.

Patient #4 Background

Heavy smoker.

Likes it cool, so uses the air conditioner and keeps the windows closed.

Sudden fever that went up to 104°F, with chills.

Very rapid breathing and a cough.

Rattling sound in lungs and pain in chest. General muscle pain and tenderness.

Mental confusion and severe headache.

Patient #2 Background

Problems started about ten days after returning from a camping trip.

The water supply on the trip was from springs. No chlorine tablets or boiling of water was used. Two members of the group had recently recovered from typhoid fever that had been contracted on a

trip in Africa. It became an effort to do any physical work (lethargic) and there were general aches and

pains.

Got weaker (malaise) and lost appetite. Developed high fever and became delirious. Developed rose-colored spots on skin and a tender abdomen

Patient #3 Background

Symptoms started two weeks after a hike in the mountains.

Drank water from a clear, cold mountain stream that had evidence of beaver activity.

Abdominal cramps.

Greasy, foul-smelling bowel movements.

Excessive intestinal gas.

General weakness and discomfort (malaise). Weight loss. Patient #5 Background

Symptoms started about ten hours after eating a poorly cooked hamburger. General discomfort and weakness (malaise). Fever.

Stomach cramps and diarrhea. Nausea and vomiting.

Patient #6 Background Four-year-old child.

Symptoms began the day after a friend's birthday party. Shared food with others at the party. Severe abdominal cramps. Painful, frequent dysentery. Blood and mucous in stool. High fever, chills, dehydration.

Patient #7 Background Went swimming in the local river. General weakness and discomfort (malaise). Loss of appetite. Fever. Mild diarrhea, nausea. Yellowing of the skin and whites of the eyes (jaundice). Sick for a week.

## Answer Key for "What is My Diagnosis?" Activity

#### Patient 1— Gastroenteritis

Caused by E. coli bacteria. Leading cause of infant death worldwide. Visitors to Latin American countries who partake of the food and water occasionally come down with "traveler's diarrhea," also known as "turista" or "Montezuma's Revenge." A large outbreak of this disease occurred in 1975 in Crater Lake National Park, Oregon. About 2,000 park visitors and about 200 park employees became ill after consuming water that had been contaminated by sewage. Campers who drink from springs frequently contract this disease.

### Patient 2— Typhoid Fever

Caused by Salmonellatyphi bacteria. Now uncommon in the United States, this is usually acquired during foreign travel. During the first half of this century it was the most commonly reported cause of waterborne disease in the United States. It can be acquired by contact with contaminated water, swimming, etc. In 1907, Mary Mallon, nicknamed "Typhoid Mary," was identified as a carrier of the disease. She transmitted the disease while working as a cook in restaurants and private homes in New York City. She escaped authorities for eight years, but was finally apprehended in 1915. She infected some 50 people, with three cases resulting in death. In 1973 a major outbreak of typhoid fever affected 225 people in a migrant labor camp in Dade County, Florida. The well that supplied water to the camp was contaminated by surface water.

#### Patient 3—Giardiasis

Caused by Giardia lamblia protozoan. Sickness results with only a low dose of the protozoan. Today it is the most commonly reported cause of waterborne diseases. Normal hosts for the parasite are mammals, such as beavers, muskrats, and raccoons. The giardia protozoan is killed by boiling water for at least five minutes.

#### Patient 4— Legionnaire's Disease

Caused by Legionella pneumophilia bacteria. Found naturally in water environments; bacteria often colonized artificial water systems such as air conditioners and hot water heaters, and can be inhaled with aerosols produced by such systems. Smoking and lung disease increase susceptibility to disease.

#### Patient 5— Salmonellosis

Caused by a species of Salmonella bacteria. Carried by humans and many animals; wastes from both can transmit the organism to water or food. The largest waterborne salmonella outbreak reported in the United States was in Riverside, California, in 1965 and affected over 16,000 people.

#### Patient 6— Shigellosis

Caused by a species of Shigella bacteria. Most infection is seen in children 1-10 years old; a very low dose can cause illness. Waterborne transmission is responsible for a majority of the outbreaks. It is quite common in the United States.

## Patient 7— Hepatitis A

Caused by Hepatitis A virus. Third most common cause of waterborne disease in United States. The term hepatitis relates to inflammation of the liver.