Lunch Meat



If employees have poor personal hygiene or use contaminated equipment, they can contaminate the lunch meat and make it unsafe for consumption. Pregnant women should not eat cold lunch meat.

Ground Beef



Bacteria can grow in foods that are in the temperature danger zone (41°F-135°F). Raw and undercooked ground beef are in the danger zone, and since ground beef has more surface area for bacteria to contaminate, it can often cause people to become ill. When cooking ground beef make sure it reaches a temperature of 160°F before serving it.

Shellfish



Shellfish are often caught in contaminated waters, and if they aren't cooked or cleaned properly they can cause illness. Make sure that all shellfish and seafood is cooked to a minimum internal temperature of 135°F.

Raw Chicken



Poultry is a TCS food and it requires time and temperature control for safety. Eating contaminated chicken or foods that have been contaminated by juices from raw chicken can cause foodborne illness.

Make sure that chicken is cooked to a minimum temperature of 165°F before serving it.

Pre-Cut Cantaloupe



Pre-cut cantaloupe is a ready-to-eat food and so it can be easily contaminated from poor handling and hygiene of foodservice employees.

Potato Salad



Potato salad can be contaminated from poor personal hygiene such as failure of employees to wash their hands after the using the restroom or if they handle it while sick. It can also become unsafe to eat if left on the counter for too long or if it isn't refrigerated or held at a temperature below 41°F.

El Carne



Si los empleados tienen higiene malo o usan equipo contaminado, pueden contaminar el carne y hacerlo inseguro por el consumo.

La Carne Molida



La bacteria puede crecer en las comidas que están en la zona peligrosa entre 41 y 135 grados. La carne molida cruda y precocinada están en la zona peligrosa. La carne molida tiene más area sobre la superficie. Por lo tanto, la bacteria se puede contaminarla. Al cocinar la carne molida, hay que asegurar que está a las 160 grados antes de servirla.

Las Mariscos



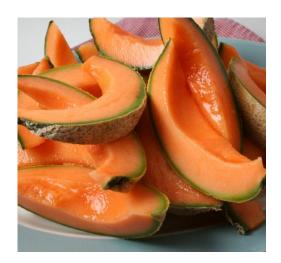
A veces mariscos están capturado en aguas contaminadas y no están cocinados o limpiados y pueden causar enfermedades. Hay que asegurar que los mariscos están cocinado al minimo temperatura de 135 grados.

Pollo Crudo



Hay que prestar atención en el tiempo y la temperatura para mantener la seguridad. Al Comer pollo contaminado o las comidas que han sido contaminado del pollo crudo, se puede causar enfermidades transmitidas por alimentos.

Melón de Pre-Corte



Melón de pre-corte puede estar contaminado de higiene malo de los empleados de la industría de servicios alimentos.

La Ensalada de Papas



La ensalada de papas pueden estar contaminado de higiene malo. Por ejemplo cuando los empleados no lavan sus manos después de usar el baño o si hacen la comida cuando están enfermos. La ensalada de papa podría estar inseguro si está dejado sobre la mesa por demasiado

Professor Hepatitis A



Professor Hepatitis A is a scatterbrained virus that contaminates water and ready-to-eat foods. He is transferred to food when infected food handlers touch food or equipment with fingers that have feces on them. Cooking does not destroy him, and eating only a small amount of him can make a person sick.

Mr. Norovirus



Mr. Norovirus is a smooth talking virus who is transferred to food when infected food handlers touch food or equipment with fingers that have feces on them. He is extremely contagious and only a small amount of him can make a person sick. He likes to hang around ready-to-eat foods and shellfish from contaminated water.

Mrs. Shigella



Mrs. Shigella is an extravagant widowed bacterium found in the feces of humans with the illness. She infects people who eat or drink contaminated food or water. She is also spread by flies that transfer the bacteria from feces to food. She adores foods that are easily contaminated by hands such as salads containing TCS food (food requiring time and temperature control for safety), as well as food that has made contact with contaminated water, such as produce.

Miss Salmonella Typhi



Miss Salmonella Typhi is a spunky flirt of a bacterium who only lives inside of humans. She is found in the bloodstream and intestinal tract of people with typhoid fever. A person can get sick even if they eat only a small amount of her. She remains in a person's feces for weeks after symptoms go away. Miss Salmonella loves ready-to-eat foods and beverages.

Mrs. Listeria



Mrs. Listeria is the maid of the bacteria and she is most often found hanging around the soil and contaminating vegetables. She can be destroyed with pasteurization and sufficient cooking, but she can contaminate foods after cooking and before packaging. She enjoys infecting uncooked meats, uncooked vegetables, fruits such as cantaloupe, and processed foods.

Colonel E-Coli



Colonel *E-coli* is an adventurous bacterium who enjoys spending time in the intestines of cattle and infected people. He most often contaminates meat during slaughtering. Eating only a small amount of him can make a person ill. When he is eaten he proceeds to make toxins in the intestines which cause the illness. Colonel *E-coli* is fond of raw or undercooked ground beef, and contaminated produce.

El Professor Hepatitis A



El Profesor Hepatitis es un virus con una mente revuelta que contamina el agua y comida lista para comer. El se transfiere a la comida cuando las personas infectadas tocan la comida o el equipo con dedos sucios de heces. Cocinarlo no lo destruye, y consumir tan solo una pequeña porción de él puede enfermar a una persona.

El Señor Norovirus



El Señor Norovirus es un seducidor de primera que es transferido a la comida cuando las personas con dedos contaminados con heces tocan la comida o el equipo. El es extremadamente contagioso y tan solo una pequeña parte de él puede enfermarte. Normalmente le gusta divertirse en la comida lista para comer y en los mariscos contaminados por el agua sucia.

La Señora Shigella



La Señora Shigella es una bacteria viuda extravagante, normalmente vista en las heces de las personas enfermas con ella. Ella infecta a las personas que comen o toman agua o comida contaminada. Las moscas la transportan rápidamente entre la comida y las feces. Si hay algo que le encanta, es la comida contaminada por las manos de las personas que tocaron comidas con ingredientes TCS, al igual que la comida que ha tenido contacto con agua contaminada, como verduras y frutas.

La Señorita Salmonella



La Señorita Salmonella es una bacteria coqueta y loquita que solo le gusta vivir adentro de los humanos.

Normalmente se le encuentra en la sangre y en el tracto gastrointestinal de la gente con tifoidea. Una persona puede enfermarse al consumir tan solo una pequeña parte de ella. Se queda en la heces de las personas por muchas semanas aun después de que los síntomas se han ido. Señorita Salmonella ama las bebidas y la comida lista para comer.

La Señora Listeria



La Señora Listeria es la sirvienta de sus amigas las bacterias. Normalmente se le encuentra paseando por la tierra y verduras contaminadas. Ella puede ser destruida por pasteurización y cocción apropiada pero aun así puede contaminar comida después de cocinarla y antes de empacarla.

Disfruta infectar carne cruda, verduras crudas, fruta como el melón y comida procesada.

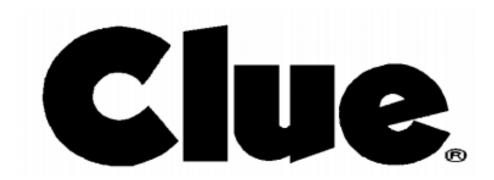
El Coronel E-Coli



El Coronel E-Coli es una bacteria aventurera que disfruta pasar el tiempo en los intestinos de ganado y gente infectada. Regularmente contamina la carne durante la matanza del ganado. Una pequeña parte de él enfermará a las personas. Cuando se le ingiere, el Coronel se defiende produciendo toxinas en los intestinos, lo cual enferma a la persona. Sus lugares favoritas para pasear son la carne molida cruda o mal cocida, y verduras o frutas contaminadas.

SUSPECTS		
Professor Hepatitis A		
Mr. Norovirus		
Miss Salmonella Typhi	i COO	
Mrs. Shigella		
Mrs. Listeria		
Colonel E. Coli		
WEAPONS		
Ground Beef		
Raw Chicken		
Shellfish		
Lunchmeat		
Potato salad		
Cantaloupe		
LOCATIONS		
Sink		
Cutting Board		
Refrigerator		
Stove		
Serving Line		
Receiving Dock		
Dishwasher		
Bathroom		
Production Area		

SOSPECI	HOSOS	
El Profesor Hepatitis		
El Señor Norovirus		
La Señorita Salmonella		
La Señora Shigella		
La Señora Listeria		
El Coronel E. Coli		
ARMAS		
La carne molida		
El pollo crudo		
Las mariscos		
La carne		
La ensalada de papas		
El melón		
LUGARES		
El fregadero		
Tabla de cortar		
El refrigador		
La estufa		
La línea de servir		
El recepción		
El lavaplatos		
El baño		
El producción		



Investigating Germs: A Classic Detective Game

For 3 to 6 players/Ages 8 to adult

Object

Mr. Smith has fallen sick with a foodborne illness in one of the locations of the foodservice operation. Each of the "germs" has the means and motives to cause the foodborne illness. Your job, as the player, is to figure out who acted on that motive and how he or she did it. To win, you must determine the answer to these three questions: Who done it? Where? and with What Weapon?

Equipment

- Clue Game Board: This shows nine locations in the foodservice operation
- 6 colored tokens, each representing one of the Suspects: Colonel *E-coli*—yellow; Miss *Salmonella* Typhi—red; Professor Hepatitis A—purple; Mr. Norovirus—green; Mrs. *Listeria*—white; and Mrs. *Shigella*—blue
- 6 miniature weapons (foods): Ground Beef, Raw Chicken, Shellfish, Lunch Meat, Potato Salad, Pre-cut Cantaloupe
- Pack of cards: One card for each of the six Suspects, six Weapons, and nine Rooms
- Pad of detective 'notebooks' to aid in your investigation
- Confidential "Case File" envelope
- 1 die

Setup

- 1. Look on the board for the START space and Suspect name nearest you. Take that Suspect token as your playing piece and put it on that space. If fewer than six are playing, be sure to place the remaining token(s) onto the appropriate name(s)—they might, after all, be involved in the crime, and they must be on the premises!
- 2. Place each of the weapons in a different location. Select any six of the nine locations.

- 3. Place the empty envelope marked "Case File CONFIDENTIAL" onto the "X" in the center of the board.
- 4. Sort the pack of cards into three groups: Suspects, Locations and Weapons. Shuffle each group separately and place each face down on the table. Then—so no one can see them—take the top card from each group and place it into the envelope. The Case File now contains the answers to the questions: Who? Where? What Weapon?
- 5. Shuffle together the three piles of remaining cards. Then deal them face down clockwise around the table. (It doesn't matter if some players receive more cards than others.) Secretly look at your own cards: Because they're in your hand, they can't be in the Case File—which means non of your cards was involved in the crime!
- 6. Take a detective's notebook sheet and, so no one can see what you write, fold it in half: Check off the cards that are in your hand, if you wish.
- 7. Miss *Salmonella* Typhi—the player with the red token—always plays first. Plan then proceeds, in turn, to the first player's left.

GAME PLAY

Moving Your Token

On each turn, try to reach a different location of the foodservice facility. To start your turn, move your token either by rolling the die or, if you're in a corner location, using a Secret Passage:

Rolling

Roll the diet and move your token the number of squares you rolled.

- You may move horizontally or vertically, forward or backward, but no diagonally.
- You may change directions as many times as your roll will allow. You may not, however, enter the same square twice on the same turn.
- You may not enter or land on a square that's already occupied by another suspect.

Secret Passages

The locations in opposite corners of the mansion are connected by Secret Passages. If you're in one of these locations at the start of your turn, you may, if you wish, use a Secret Passage instead of rolling. To move through a Secret Passage, announce that you wish to do so, then move your token to the location in the opposite corner.

Entering and Leaving a Room

You may enter or leave a location either by rolling the die and moving through a door, or by moving through a Secret Passage.

• A door is the opening in the wall, not the space in front of the doorway. When you pass through a door, do not count the doorway itself as a space.

- You may not pass through a door that's blocked by an opponent's token.
- As soon as you enter a location, stop moving. It doesn't matter if you roll a number that's higher than you need to enter.
- You may not re-enter the same location on a single turn.
- It is possible that your opponents might block any and all doors and trap you in a location. If this happens, you must wait for someone to move and un-block a door so you can leave!

Making a Suggestion

As soon as you enter a room, make a Suggestion. By making Suggestions throughout the game, you try to determine—by process of elimination—which three cards are in the confidential Case File envelope. To make a Suggestion, move a Suspect and a Weapon into the location that you just enter. Then suggest that the crime was committed in that Location, by that Suspect, with that Weapon.

Example: Let's say that you're Miss *Salmonella* Typhi and you enter the Refrigerator. First move another suspect—Mr. Norovirus, for instance—into the Refrigerator. Then move a weapon—Shellfish, perhaps—into the Refrigerator. Then say, "I suggest the foodborne illness was committed in the Refrigerator by Mr. Norovirus with the Shellfish.

Remember two things:

- You must be in the location that you mention in your Suggestion.
- Be sure to consider all tokens—including spare Suspects and including yourself!—as falling under equal suspicion.

Proving a Suggestion True or False

As soon as you make a Suggestion, your opponents, in turn, try to prove it false. The first to try is the player to your immediate left. This player looks at his or her cards to see if one of the three cards you just named if there. If the player does have one of the cards named, he or she must show it to you and no one else. If the player has more than one of the cards named, he or she selects *just one* to show you.

If that opponent has none of the cards that you named, then the chance to prove your Suggestion false passes, in turn, to the next player on the left.

As soon as one opponent shows you one of the cards that you named, it is proof that this card cannot be in the envelope. End your turn by checking off this card in you notebook. (Some players find it helpful to mark the initials of the player who showed the card.) If no one is able to prove your Suggestion false, you may either end your turn or make an Accusation now.

Making an Accusation

When you think you've figured out which three cards are in the envelope, you may, *on your turn*, make an Accusation and name any three elements you want. First say, "I accuse (Suspect) of committing the foodborne illness in the (Location) with the (Weapon)." Then, so no one else can see, look at the cards in the envelope. In a Suggestion, the Location you name must be the Location where your token is located. But in an Accusation, you may name any location. Remember: You may make only one Accusation during a game.

If Your Accusation is Incorrect

If any one of the cards that you named is not inside the Case File:

- Secretly return all three cards to the envelope.
- You may make no further moves in the game, and therefore cannot win, but you do remain involved in the investigation.
- You do continue to try to prove your opponents' Suggestions false.
- Your opponents may continue to move your token into the various Locations where they make Suggestions.
- If after making a false Accusation your token is blocking a door, move it into that location so that other players may enter.

Winning

You win the game if your Accusation is completely correct—that is, if you find in the envelope all three of the cards that you named. When this happens, take out all three cards and lay them out for everyone to see.

Special Notes About Suggestions

- 1. When you make a suggestion, you may, if you wish, name one or more of the cards that you hold in your own hand. You might want to do this to gain information or to mislead your opponents.
- 2. You may, if you wish, make a Suggestion and an Accusation on the same turn.
- 3. You may make only one Suggestion after entering a particular location. To make your next Suggestion, you must either enter a different location or, sometime after you next turn, reenter the location that you most recently left. You may no forfeit a turn to remain in a particular location. But if you're trapped in a location because your opponents are blocking the door(s), you must remain there until a door is unblocked and you can move out of the Location.
- 4. You may make a Suggestion that includes a Suspect or Weapon that's already in your Location. In this case, transferring one or both of those items is not necessary. When a transfer is necessary, leave the item(s) in the new location after the Suggestion is made.
- 5. If yours was the Suspect transferred, you may, on your next turn, do one of two things: Move from the Location in one of the usual ways OR Make a Suggestion for that location. If you decide to make a Suggestion, do not roll the die or move your token.
- 6. There is no limit to the number of Suspects or Weapons that may be in one Location at one time.

