Activity 1.1.6.

When analyzing the BLAST tests, Sue had the darkest set of wells. When analyzing blast tests, those that have the darkest wells in color tend to mean there are more antigens present in her body and means it was the start of the disease. The sequence provided by the curriculum was blasted electronically as well to specify what illness Sue actually had. It turned out to be bacterial meningitis. It is clear that Sue gave the illness to Jill first since they are roommates. Maria obviously got the bacterial meningitis from Jill or Sue because she basically lives in Jill/Sue’s dormitory. Marco caught meningitis from Sue because they share snacks in class since they are lab partners. They all had similar symptoms of headaches, tiredness/lethargy, body aches, and fever. Specifically Sue had a headache, felt tired, and had a fever. Jill felt tired and her body felt sore. Maria was tired, her forehead felt as if it was on fire, and she had a fever. Marco felt fatigue and a terrible headache. There are multiple ways to treat meningitis such as prompt treatment, cortisone to help relieve pain, rest, and the most important are antibiotics.

People that have not yet been diagnosed are Anthony, Alvin, Arnie, Maria, Maggie, Wanda, and Ray.

Anthony has dry cough, has been feeling tired, and muscle aches. His symptoms most likely point to the flu. The only thing that can be done when a person has the flu is to relieve the symptoms go away because antibiotics are useless in fighting the virus itself. Although, antibiotics can be prescribed if there are secondary bacterial infections present.

Alvin has been experiencing headache and a sore throat. Marco is also Alvin’s neighbor. Alvin’s symptoms point to HIV. It is critical to treat HIV quickly considering it is most infectious at its earliest stage. The body hasn’t created an antibody for HIV yet, so most likely, an antibody test will probably pick anything up. RNA tests detect the virus itself, but it expensive. There is no absolute cure for HIV, but one can obtain/take non-nucleotide reverse transciptase inhibitiors (NNRTIs), protease inhibitors (PIs), fusion inhibitors, and integrase inhibitors.

Arnie hangs out with Anthony a lot helping him pick shots to submit. Arnie has been coughing, has had a runny nose, and fever. Arnie symptoms are those of a common cold. Common colds can be obtained from simply touching the same surface as someone who also has the virus. There is no cure for the common cold, one must simply wait it out. Although, one can take over-the-counter medicine such as decongestants containing pseudoephedrine make the person feel better and help fight off the virus. Gargling salt water, getting around twelve hours of sleep, staying in a warm humid place, and staying hydrated.

Maggie lives on the same floor as Sue and Jill. Lately, she has been experiencing changes in body temperature and a scratchy throat. These symptoms leads to the conclusion that she may have influenza. The only thing that can be done when a person has the flu is to relieve the symptoms go away because antibiotics are useless in fighting the virus itself. Although, antibiotics can be prescribed if there are secondary bacterial infections present.

* Wanda and her boyfriend, Ray, have swollen neck glands and sore throat. Wanda
* Is pledging to the same sorority as Jill. The symptoms are the same symptoms as
* mononucleosis. It is also called “mono” and “the kissing disease” but it can also be
* spread by sharing a food or drink with someone. Also, it can be exposed through a
* cough or sneeze. When one has mono it is important to drink plenty of fluids, gargle
* with salt water to ease a sore throat, get plenty of rest, take ibuprofen for
* pain/fever, rest, steroid medicine such as prednisone can be given if symptoms
* become severe. Although, the may goal of treatment is relieving symptoms.

Medical interventions play a huge role in preventing the spread of illness. Some include face masks, hand soap/sanitizers, gloves, not sharing drinks or food, be cautious of who you are sharing close-quarters with, etc. It is important in life and very important in life to be careful with who one has relations with, drinks and eats after, shares razors/toothbrushes/makeup with, etc. It is important to consider these things when trying to prevent illness on campus. On campus, the college could provide more sanitizing stations, clean bathrooms, and cheap vaccinations.

General vacations that are good for college students:

* [**Meningococcal disease**](http://www.healthychildren.org/english/health-issues/vaccine-preventable-diseases/Pages/Meningococcal-Infections.aspx):
* [**Human Papillomavirus (HPV)**](http://www.healthychildren.org/English/health-issues/vaccine-preventable-diseases/Pages/Human-Papillomavirus-%28HPV%29.aspx):
* Pertussis ([**Whooping Cough**](http://www.healthychildren.org/english/health-issues/vaccine-preventable-diseases/Pages/Whooping-Cough-%28Pertussis%29.aspx))
* [**Polio**](http://www.healthychildren.org/English/safety-prevention/immunizations/pages/Polio-Vaccine-What-You-Need-to-Know.aspx)
* [**Varicella**](http://www.healthychildren.org/English/safety-prevention/immunizations/pages/Chickenpox-Vaccine-What-You-Need-to-Know.aspx)
* [**Influenza**](http://www.healthychildren.org/English/safety-prevention/immunizations/pages/Inactivated-Influenza-Vaccine-What-You-Need-to-Know.aspx)
* [**Pneumococcal disease**](http://www.healthychildren.org/english/health-issues/vaccine-preventable-diseases/Pages/Pneumococcal-Infections.aspx)
* [**Hepatitis A**](http://www.healthychildren.org/English/safety-prevention/immunizations/pages/Hepatitis-A-Vaccine-What-You-Need-to-Know.aspx)