The clinical features of measles are fairly distinct, at least AFTER the rash appears. Unfortunately, most of the transmission takes place BEFORE the rash appears. After an incubation period of 10 to 12 days, there is a stepwise increase in temperature to 103 degrees Fahrenheit, or higher. What usually follows is the classic triad of cough, coryza- or runny nose- and conjunctivitis or pink eye. An astute observer may see Koplik spots- a rash found on mucous membranes a day or two before the cutaneous rash. This prodrome usually lasts 2 to 4 days. The rash appears about 14 days after exposure and is caused by deposits of measles antibody in the skin. The rash is maculopapular, and appears first on the face. During the next 2 or 3 days it descends to the trunk and then to the arms and legs. The rash fades in the order of appearance. You may have seen measles when it was more common in the late 1980s and early 1990s. For those of you who have not seen it, here is a visual aid.

This is a child with measles prodrome. Measles prodrome usually produces a moderate illness. Notice the coryza, or runny nose, and her red teary eyes, indicative of conjunctivitis. This is measles at about 2 days into the rash, or 5 to 6 days into the illness. The rash is maculopapular and demonstrates coalescence, when the discrete macules combine into a larger red skin lesion. Cough is almost universal with measles. The rash is typically most intense on the head and upper chest, but is usually present on the lower chest and arms. This is a dark skinned child with measles. The child has conjunctivitis and coryza. The rash is papular, or raised, not flat. A measles rash is more difficult to see with dark skin. If the rash is accompanied by other symptoms, such as cough or conjunctivitis, measles is easier to diagnose.

If you see or hear about a person who had an influenza- like prodrome of cough, coryza, and fever, who then developed a rash, you should suspect measles. You should be REALLY suspicious of measles if that person is unvaccinated or has a history of recent international travel. If you suspect that someone has measles you should obtain a blood sample for serology, and a nasopharyngeal specimen for viral isolation, and notify your local or state health department as soon as possible. DO NOT wait until lab tests come back. Control measures must be started immediately, not a week or two later.