How to Identify an Outbreak of Communicable Disease

Every disease has an expected level of activity, or a “baseline” number of cases that occur over a given time period. For some diseases, you might expect a handful of cases within a month or year, while you might never expect to see other diseases in that same length of time.

An outbreak happens when a population experiences a greater than expected level of disease activity for a certain time period. Population is defined as a group of people who live and/or work in a given place. In a healthcare facility, “place” may be defined in several ways, including building, floor, ward, wing, unit, or the entire facility.

Ask yourself the following questions to help identify an outbreak within your facility:

1. How many people are ill? Is the number of cases higher than what you would expect?
2. What are the signs and symptoms? Do all ill persons have the same or similar symptoms? Has anyone received a specific diagnosis from a doctor or based on a lab result?
3. When did the first person get sick with this illness? How many more have gotten sick each day since then? Did a lot of people get sick around the same time, or has onset occurred more gradually over time?
4. What is the duration of illness (how long are people staying sick)?
5. Are people still getting sick? If so, how long is it taking new cases to develop symptoms?
6. Is unusual illness occurring?
7. Is there a suspected exposure that may have caused illness, such as a group activity, travel, or shared meal? If so, how many people had that exposure and how many of them are ill?
8. Are there similar characteristics among sick persons, such as time, place (e.g., unit, room, and/or floor), age, sex, medical procedures, etc.?
9. Is the time of the year or season appropriate for the suspected or reported illness? (For example: we would expect to see flu in January but not in July)

In general, if patients/residents and/or staff in your facility are becoming ill with similar symptoms within the same time period, especially if they have similar characteristics or have a common exposure, it is highly likely that an outbreak is occurring.

If you suspect an outbreak is occurring in your facility, report this situation to your local health department immediately. You can find the contact information for your local health department online at www.vdh.virginia.gov/lhd.

Your facility and your local health department will work together to discuss the situation, assess infection prevention steps that have already been taken to address the source of the problem, and recommend additional measures that can be taken to control the spread of disease.

If you have any questions about identifying outbreaks, outbreak reporting, or suspect an outbreak in your facility, contact your local health department.