About 3 percent to 5 percent of the healthy population carry the bacterium Clostridium difficile, (C. diff.), as part of the normal flora in their bowel. Among hospitalized people, the number can be as high as 30 percent. Among both populations, other, naturally occurring bacteria typically keep C. diff. from causing illness.

Sometimes; however, long-term antibiotic use for other health problems can sterilize the bowel and allow C. diff. to proliferate. When this happens, patients may experience watery diarrhea, fever, loss of appetite, nausea and abdominal pain. In rare cases, severe illness or death may result.

A new, more serious, strain of C. diff. has been noted in hospitals in Ohio and 16 other states. With this strain, illness progresses rapidly and results in more severe symptoms and, sometimes, death.

Together, long-term antibiotic use and associated antibiotic resistance are considered one of the world’s biggest public health problems. Because of this and because the Ohio Department of Heath is deeply concerned about this new strain, we must address antibiotic use and resistance.

Resistance to antibiotics occurs when bacteria change in ways that limit or eliminate the medications’ effectiveness. If they are not identified before treatment is prescribed, resistant bacteria can survive the treatment, multiply and cause more severe illness. Thus, it is important to use the right antibiotic for the right bacterium. To help reduce the incidence of resistance, individuals should remember the following:

- Antibiotics are not effective against most colds, coughs and runny noses; use them only when your doctor determines they may be effective.
- If an antibiotic is prescribed, take the entire course, even if you begin to feel better.
- Do not take antibiotics prescribed for someone else.
- Do not demand antibiotics for your child when a health care provider determines they are not likely to be effective.