

# Making Health Care Safer

## Stopping *C. difficile* infections



**3X**

Hospital stays from *C. difficile* infections tripled in the last decade, posing a patient safety threat especially harmful to older Americans.

**94%**



Almost all *C. difficile* infections are connected to getting medical care.



**20%**

Hospitals following infection control recommendations lowered *C. difficile* infection rates by 20% in less than 2 years.

People getting medical care can catch serious infections called health care-associated infections (HAIs). While most types of HAIs are declining, one – caused by the germ *C. difficile*\* – remains at historically high levels. *C. difficile* causes diarrhea linked to 14,000 American deaths each year. Those most at risk are people, especially older adults, who take antibiotics and also get medical care. When a person takes antibiotics, good germs that protect against infection are destroyed for several months. During this time, patients can get sick from *C. difficile* picked up from contaminated surfaces or spread from a health care provider's hands. About 25% of *C. difficile* infections first show symptoms in hospital patients; 75% first show in nursing home patients or in people recently cared for in doctors' offices and clinics. *C. difficile* infections cost at least \$1 billion in extra health care costs annually.

\**Clostridium difficile* (klah-STRID-ee-um DIFF-i-seel)

To learn more about how to stop the spread of *C. difficile*

→ See page 4

www <http://www.cdc.gov/vitalsigns>

# Problem

## *C. difficile* infections are at an all-time high.

### ***C. difficile* causes many Americans to become sick or die.**

- ◇ *C. difficile* infections are linked to 14,000 deaths in the US each year.
- ◇ Deaths related to *C. difficile* increased 400% between 2000 and 2007, due in part to a stronger germ strain.
- ◇ Most *C. difficile* infections are connected with receiving medical care.
- ◇ Almost half of infections occur in people younger than 65, but more than 90% of deaths occur in people 65 and older.
- ◇ Infection risk generally increases with age; children are at lower risk.
- ◇ About 25% of *C. difficile* infections first show symptoms in hospital patients; 75% first show in nursing home patients or in people recently cared for in doctors' offices and clinics.

### ***C. difficile* germs move with patients from one health care facility to another, infecting other patients.**

- ◇ Half of all hospital patients with *C. difficile* infections have the infection when admitted and may spread it within the facility.
- ◇ The most dangerous source of spread to others is patients with diarrhea.
- ◇ Unnecessary antibiotic use in patients at one facility may increase the spread of *C. difficile* in another facility when patients transfer.
- ◇ When a patient transfers, health care providers are not always told that the patient has or recently had a *C. difficile* infection, so they may not take the right actions to prevent spread.

### ***C. difficile* infections can be prevented.**

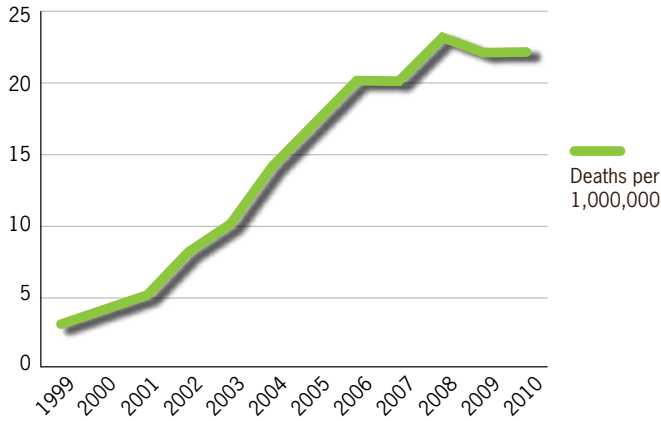
- ◇ Early results from hospital prevention projects show 20% fewer *C. difficile* infections in less than 2 years with infection prevention and control measures.
- ◇ England decreased *C. difficile* infection rates in hospitals by more than half in 3 years by using infection control recommendations and more careful antibiotic use.

### **For Clinicians: 6 Steps to Prevention**

1. Prescribe and use antibiotics carefully. About 50% of all antibiotics given are not needed, unnecessarily raising the risk of *C. difficile* infections.
2. Test for *C. difficile* when patients have diarrhea while on antibiotics or within several months of taking them.
3. Isolate patients with *C. difficile* immediately.
4. Wear gloves and gowns when treating patients with *C. difficile*, even during short visits. Hand sanitizer does not kill *C. difficile*, and hand washing may not be sufficient.
5. Clean room surfaces with bleach or another EPA-approved, spore-killing disinfectant after a patient with *C. difficile* has been treated there.
6. When a patient transfers, notify the new facility if the patient has a *C. difficile* infection.

# Prevention

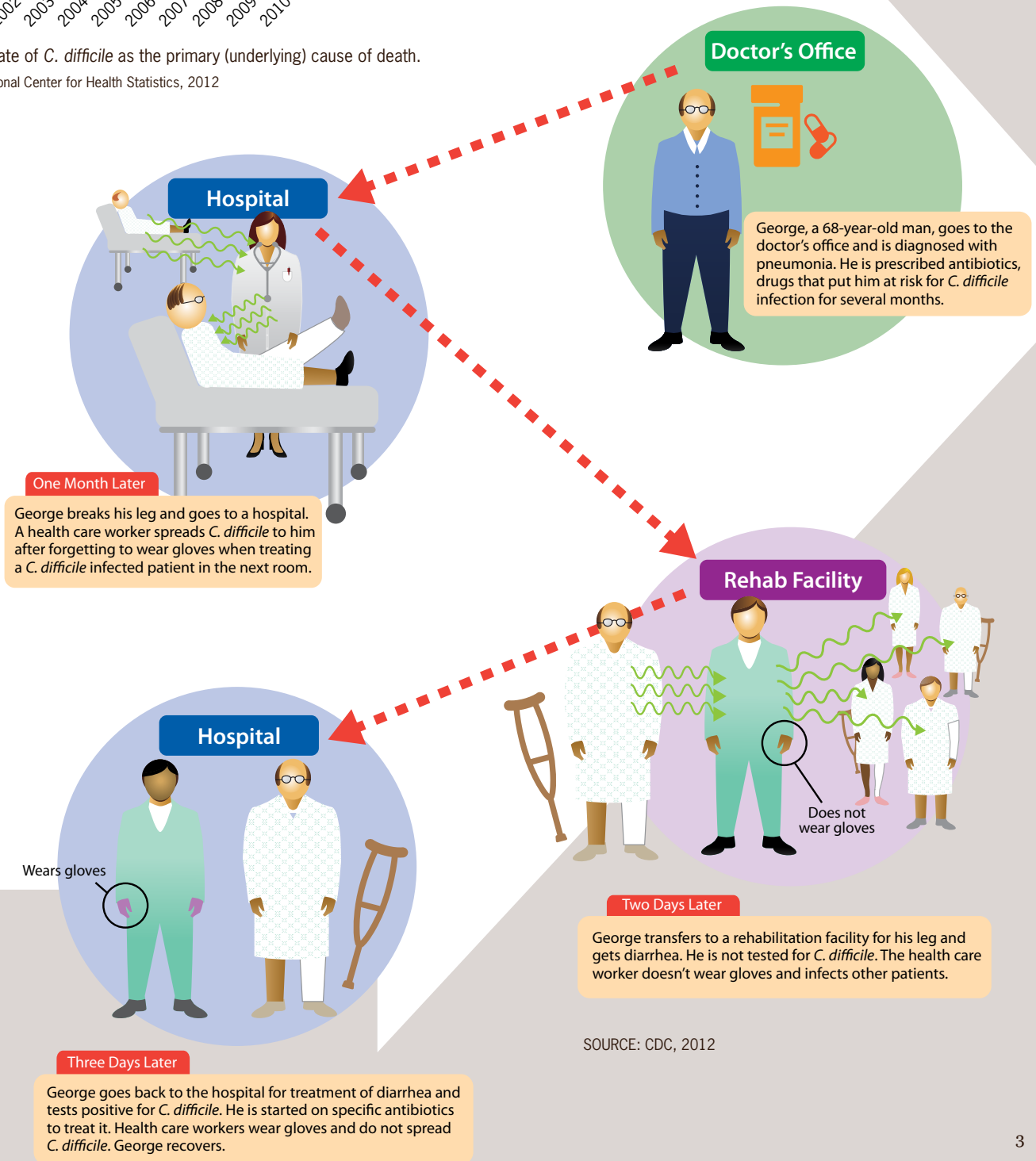
## Deaths caused by *C. difficile* infections \*



\*Age-adjusted rate of *C. difficile* as the primary (underlying) cause of death.

SOURCE: CDC National Center for Health Statistics, 2012

# How *C. difficile* Spreads.



SOURCE: CDC, 2012

# What Can Be Done



## Federal government is

- ◇ Tracking and reporting national progress toward preventing *C. difficile* infections in many types of health care facilities. These programs help track the size of the problem, antibiotics used, and people at risk.
- ◇ Promoting *C. difficile* prevention programs and providing gold-standard patient safety recommendations (see [http://www.cdc.gov/HAI/organisms/cdiff/Cdiff\\_infect.html](http://www.cdc.gov/HAI/organisms/cdiff/Cdiff_infect.html)).
- ◇ Providing prevention expertise, as well as outbreak and laboratory support to health departments and facilities.



## States and communities can

- ◇ Encourage health care facilities to track and share data using CDC's National Healthcare Safety Network.
- ◇ Develop regional *C. difficile* prevention projects with many types of facilities.
- ◇ Help health care facilities in their prevention efforts.
- ◇ Provide a standardized form for facilities to use during patient transfers, especially between hospitals and nursing homes.

## Patients can

- ◇ Take antibiotics only as prescribed by your doctor. Antibiotics can be lifesaving medicines.
- ◇ Tell your doctor if you have been on antibiotics and get diarrhea within a few months.
- ◇ Wash your hands after using the bathroom.
- ◇ Try to use a separate bathroom if you have diarrhea, or be sure the bathroom is cleaned well if someone with diarrhea has used it.



## Health care facility administrators can

- ◇ Support better testing, tracking, and reporting of infections and prevention efforts.
- ◇ Make sure cleaning staff follows CDC recommendations, using an EPA-approved, spore-killing disinfectant in rooms where *C. difficile* patients are treated.
- ◇ Notify other health care facilities about infectious diseases when patients transfer, especially between hospitals and nursing homes.
- ◇ Participate in a regional *C. difficile* prevention effort.



## Doctors and nurses can

- ◇ Prescribe antibiotics carefully (see <http://www.cdc.gov/getsmart/specific-groups/hcp/index.html>). Once culture results are available, check whether the prescribed antibiotics are correct and necessary.
- ◇ Order a *C. difficile* test (preferably a nucleic acid test) if the patient has had 3 or more unformed stools within 24 hours.
- ◇ Be aware of infection rates in your facility or practice, and follow infection control recommendations with every patient. This includes isolating patients who test positive for *C. difficile* infection and wearing gloves and gowns to treat them.

www <http://www.cdc.gov/vitalsigns>

For more information, please contact

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Publication date: 3/6/2012