

# What do we do when antibiotics don't work any more?

Penicillin changed everything. Infections that had previously killed were suddenly quickly curable. Yet as Maryn McKenna shares in this sobering talk, we've squandered the advantages afforded us by that and later antibiotics. Drug-resistant bacteria mean we're entering a post-antibiotic world -- and it won't be pretty. There are, however, things we can do ... if we start right now.

[https://www.ted.com/talks/maryn\\_mckenna\\_what\\_do\\_we\\_do\\_when\\_antibiotics\\_don\\_t\\_work\\_any\\_more/transcript](https://www.ted.com/talks/maryn_mckenna_what_do_we_do_when_antibiotics_don_t_work_any_more/transcript)

## Watch the video and complete the activities:

1. If you look back through history, most people died of:  
**cancer / heart disease / injuries and infection**
2. We stand today on the threshold of the **pre-antibiotic / post-antibiotic era**
3. People are dying of infections because of **antibiotic shortage / antibiotic resistance**
4. Penicillin was distributed in 1943, and resistance appeared in **1944 / 1945**.
5. Vancomycin arrived in 1972, and vancomycin resistance in **1988 / 1990**.
6. Imipenem in 1985, and resistance to it in **1998 / 1989**
7. Daptomycin in 2003, and resistance to it in **2005 / 2004**.
8. In the United States and Europe **50,000 / 100,0000** people a year die of infections which no drugs can help.
9. If we lost antibiotics, here's what else we'd lose:

First, any protection for people with weakened immune systems -- \_\_\_\_\_ patients, AIDS patients, transplant \_\_\_\_\_, premature babies.

Next, any treatment that installs foreign objects in the body: \_\_\_\_\_ for stroke, pumps for \_\_\_\_\_, dialysis, \_\_\_\_\_ replacements.

10. Next, we'd probably lose \_\_\_\_\_.
11. If we can't control this by 2050, the worldwide toll will be **8/10** million deaths a year.
12. Complete the quote by Alexander Fleming:

"The thoughtless person \_\_\_\_\_ with penicillin treatment is morally responsible for the \_\_\_\_\_ of a man who succumbs to \_\_\_\_\_ with a penicillin-resistant organism." He added, "I hope this \_\_\_\_\_ can be averted."