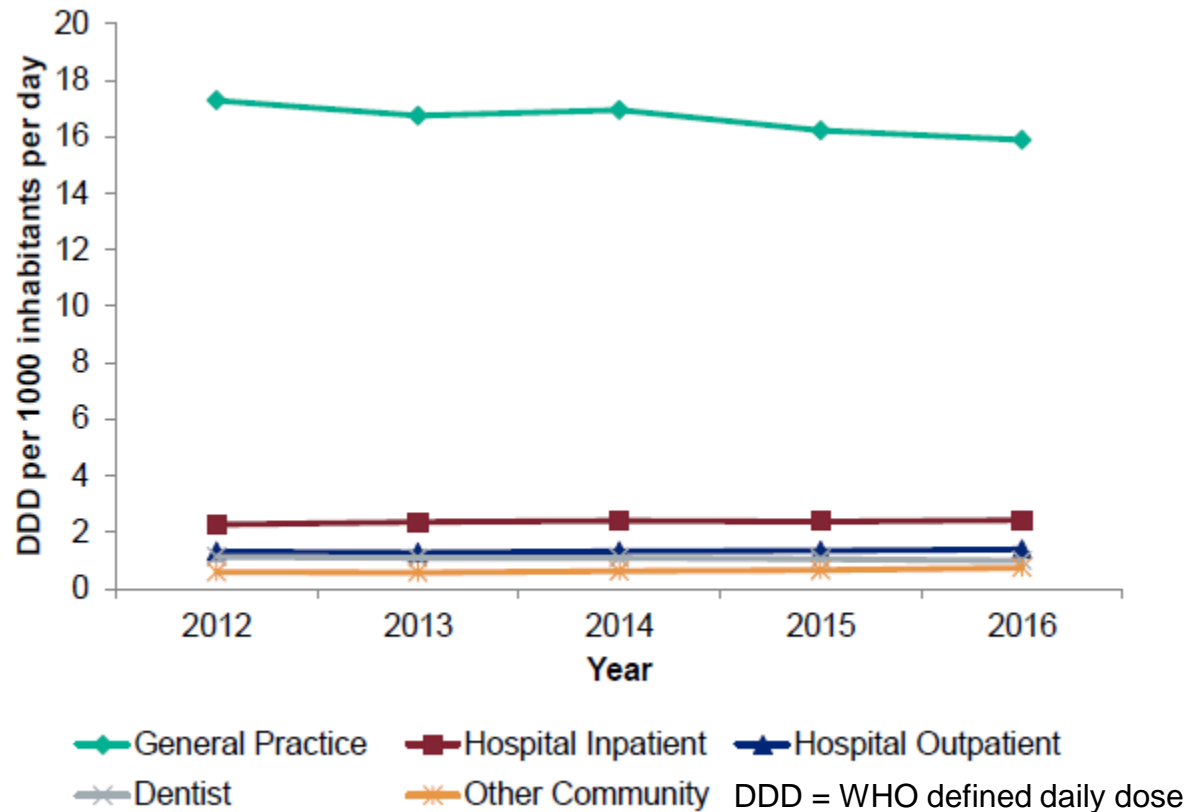


# Medication Without Harm – Antimicrobials

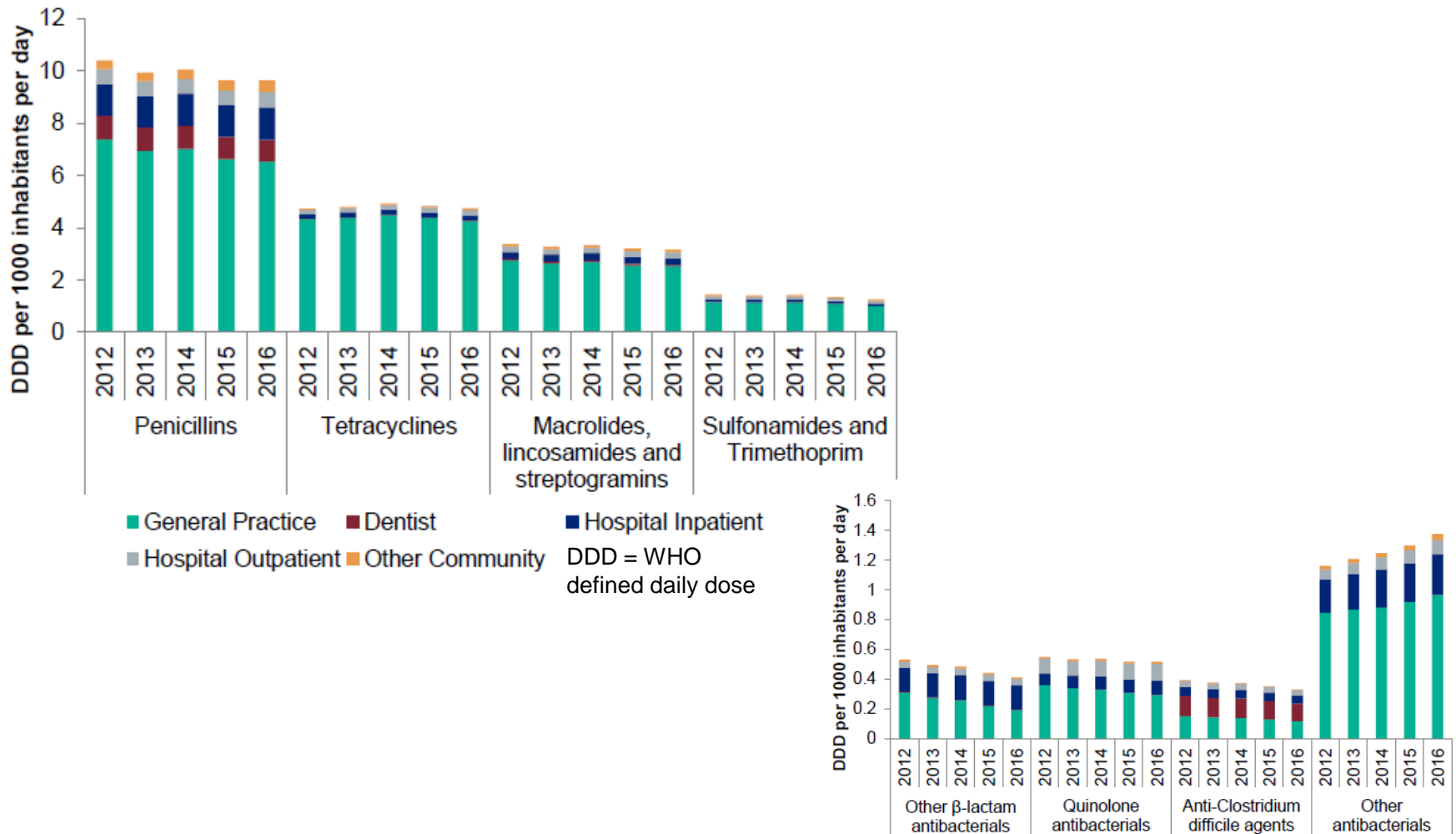
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# Antibiotic consumption 2016



# Antibiotic consumption 2016



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## Philippa Gillespie died after hospital penicillin error

26 May 2016 | South West Wales

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Philippa Gillespie

A Pembrokeshire cancer patient died from an allergic reaction to penicillin administered in error by hospital staff, an inquest has heard.

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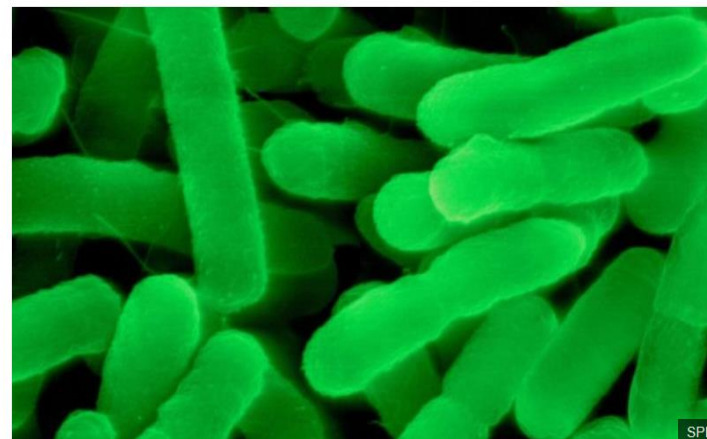
## Health

## Bug resistant to all antibiotics kills woman

By James Gallagher  
Health and science reporter, BBC News website

13 January 2017 | Health

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SPL

A superbug that could not be treated with 26 different antibiotics has killed a woman in the US, officials report.

CORRECTED PROOF

## The Impact of a Reported Penicillin Allergy on Surgical Site Infection Risk

Kimberly G Blumenthal , Erin E Ryan, Yu Li, Hang Lee, James L Kuhlen, Erica S Shenoy

*Clinical Infectious Diseases*, cix794, <https://doi.org/10.1093/cid/cix794>

**Published:** 09 October 2017    **Article history** ▼

frequently had an SSI (3.5% vs 2.6%;  $P = .10$ ). In the multivariable logistic regression model adjusting for age, sex, race, surgery type, ASA class, procedure duration, and wound class, a reported penicillin allergy was associated with increased odds of SSI (adjusted OR [aOR], 1.51; 95% CI, 1.02–2.22) (Table 3).

8385 patients; 9004 procedures  
922 (11%) reported an allergy  
241 (2.7%) had a surgical site infection risk



## Phase 1

- Establish the scale of the problem

## Phase 2

- Factors that influence behaviours

## Phase 3

- Identify effective strategies for improvement

## Phase 4

- Test strategies - National Medication Safety Officer Network

# Establish the scale of the problem - 1

## Research Questions:

1. How many patient safety incidents are reported in England & Wales where there is some degree of patient harm because of an **allergic reaction to a penicillin or other antibiotic**?
2. How many patients safety incidents are reported in England & Wales where there is some degree of patient harm because a **patient with a known penicillin allergy was prescribed a medicine they were allergic to**?

## Method:

- National Reporting and Learning System data extract and analysis

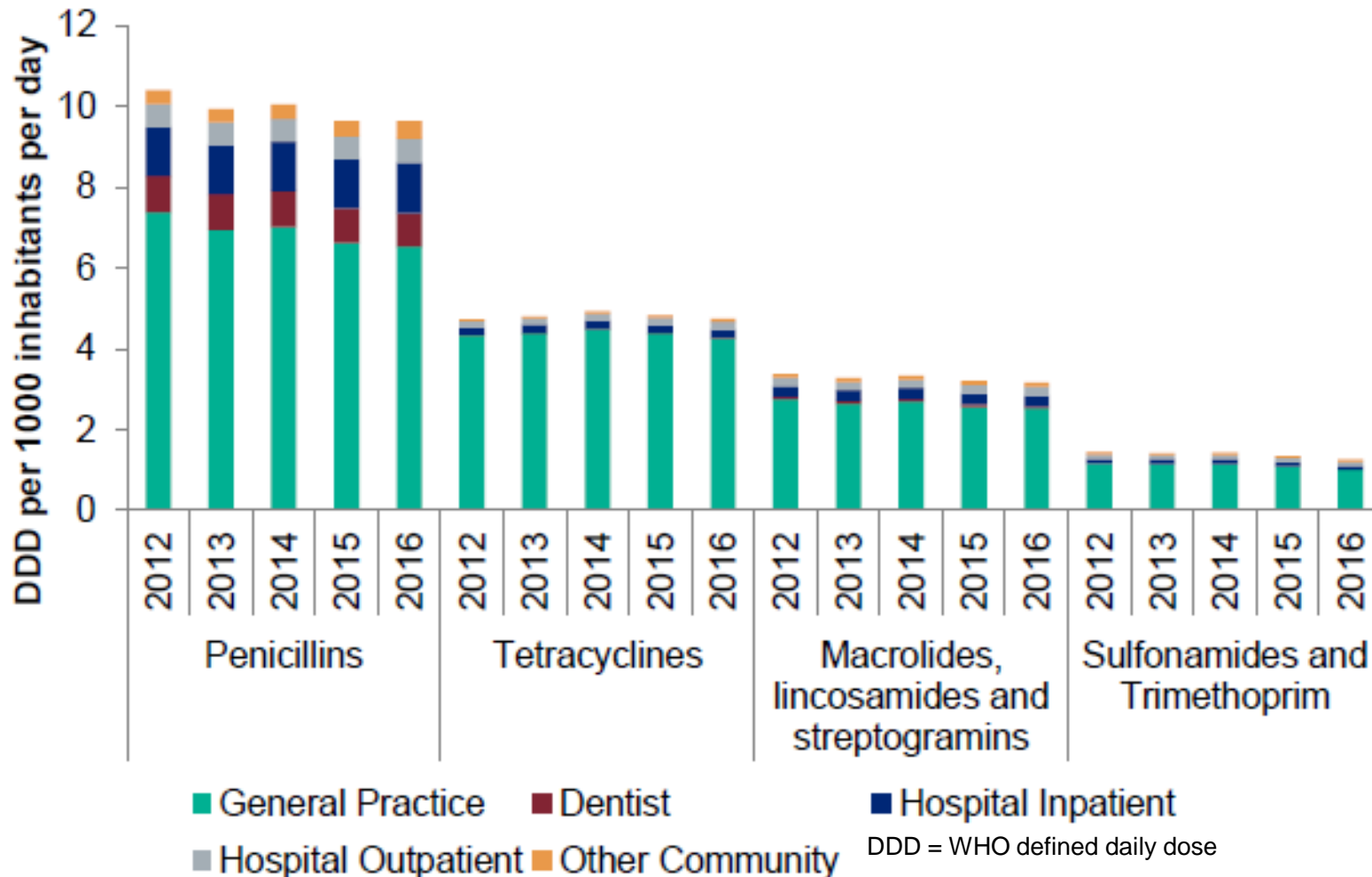


# Establish the scale of the problem - 1

Next steps:

1. To report on the **data quality** of patient safety incident reports involving patients with allergies to antimicrobials.
2. To determine the **proportion** of patient safety incidents involving reports of near misses or harm in patients with **known allergies** antimicrobials.
3. To determine the **stage of medicines use** at which the near miss or harm was detected.
4. To determine the **severity of actual or potential harm** reported in patients with known allergies to antimicrobials
5. To identify **themes of causative and contributory factors** from the reported incidents.

# Antibiotic consumption 2016



## Medication Without Harm



WHO Global Patient Safety Challenge

High risk situations  
Polypharmacy  
Transitions of care



The NRLS data reviewed highlighted two groups of patients associated with medication errors. One is patients with known allergies to certain medicines, particularly antibiotics, being given those or similar medicines. Although these errors constituted only 3.2 per cent of the total reported medication incidents occurring in hospitals, a third (30.9 per cent) of these reports resulted in harm (including death).

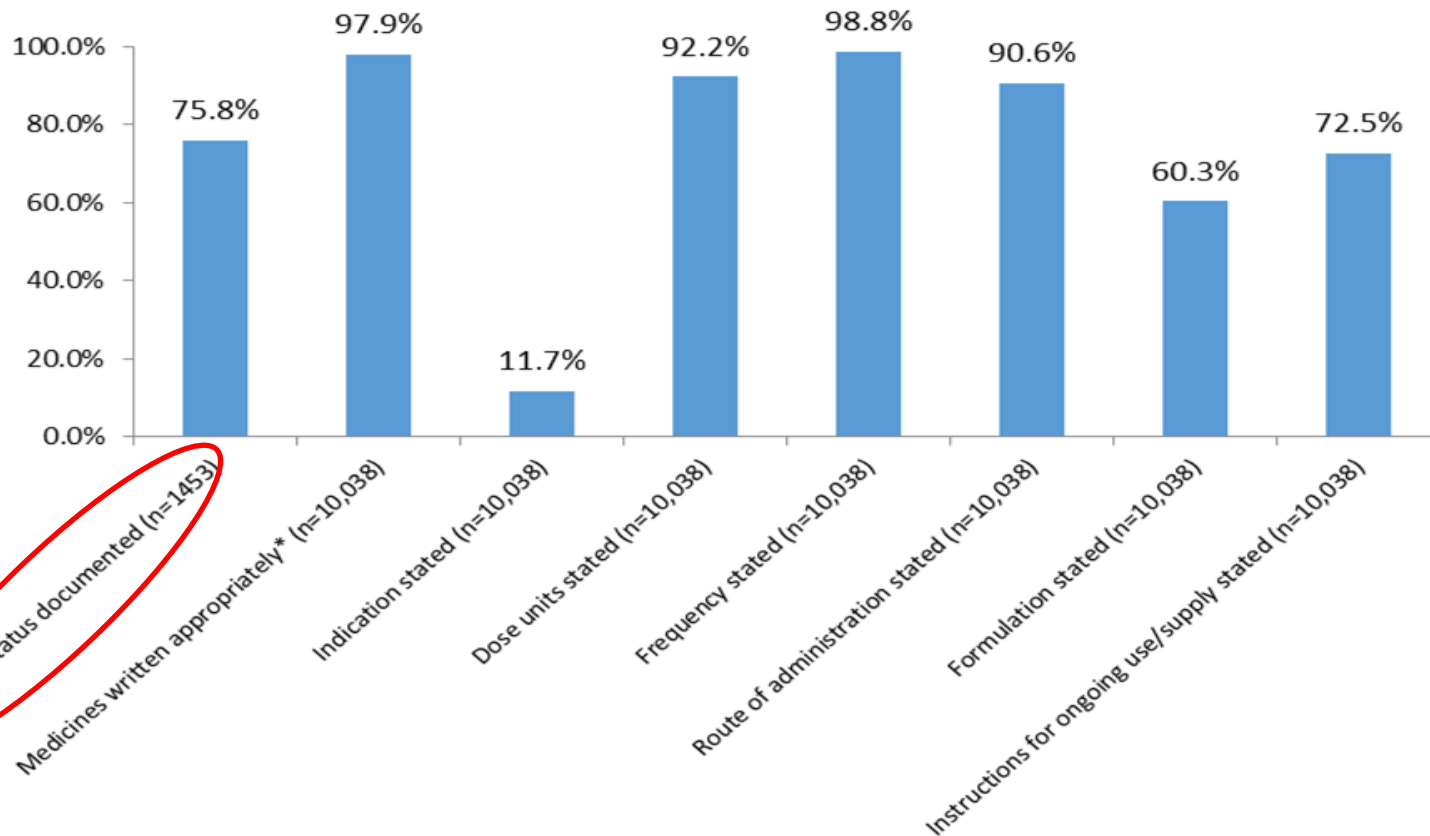


### **Document patients' medicine allergy status**

Improve recording of patient allergies, and raise awareness amongst staff of high-risk products and the importance of knowing the patient's allergy status.



## Discharge prescribing standards



<https://www.sps.nhs.uk/articles/report-of-the-collaborative-audit-on-the-quality-of-medication-related-information-provided-when-transferring-patients-from-secondary-care-to-primary-care-and-the-subsequent-medicines-reconciliation/>

## Phase 1

- Establish the scale of the problem

## Phase 2

- Factors that influence behaviours

## Phase 3

- Identify effective strategies for improvement

## Phase 4

- Test strategies - National Medication Safety Officer Network