



England

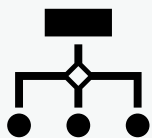
Implementing the AMR National Action Plan in NEL: Where We Are and What's Next?

NEL AMR Educational Event:
Reducing Antimicrobial
Exposure in Childhood

24th Mar 2026

Laura Whitney

Regional AMS Lead, London

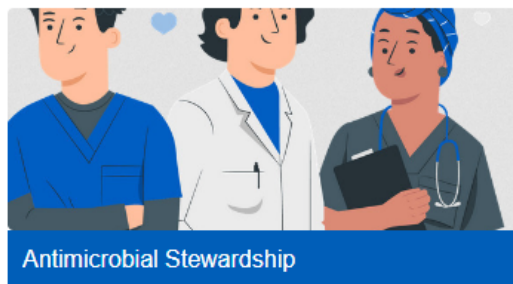
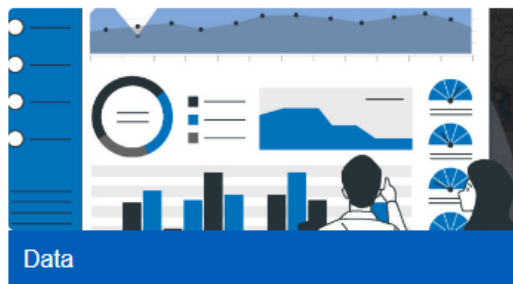


NHSE AMR programme overview

National AMR Programme

The AMR Programme sits within the Prevention and Long-Term Conditions Team (PLTC) in the Medical Directorate at NHS England (NHSE). NHSE has responsibility for delivering actions in support of the human health commitments set out in the [5- year UK AMR National Action Plan 2024-29 \(NAP 2024-29\)](#), which builds on the achievements and lessons of the first NAP 2019-24. Professor Claire Fuller, National Medical Director for Primary Care, NHS England is the NHS Senior Responsible Officer (SRO) for the programme.

The AMR programme has established a series of national workstreams to support improvements in respect of managing the ambitions set out in the UK Government's [AMR National Action Plan](#). For more information on AMR and how we work across different workstreams within NHSE to tackle AMR please click on the heading tile above to access our Team Structure and Core Information Pack.



AMR remains a priority (and a concern)



May 2024
HM Government's
second 5-year AMR
National Action Plan
2024-2029



September 2024
“...there is still more the
UK needs to do to
decrease inappropriate
antibiotic usage...”
Lord Darzi



January 2025
Chronic risk: “Antimicrobial
resistance (AMR) has the
potential to exacerbate the risk
of infectious diseases...”



February 2025
“There are huge
foreseeable consequences
for the world, including UK
citizens, if humanity fails to
address increasing
resistance.”
National Audit Office

AMR remains a priority (and a concern)



June 2025

“NHS England must ensure that AMR is mainstreamed into everyday NHS policy and practice”

Public Accounts Committee



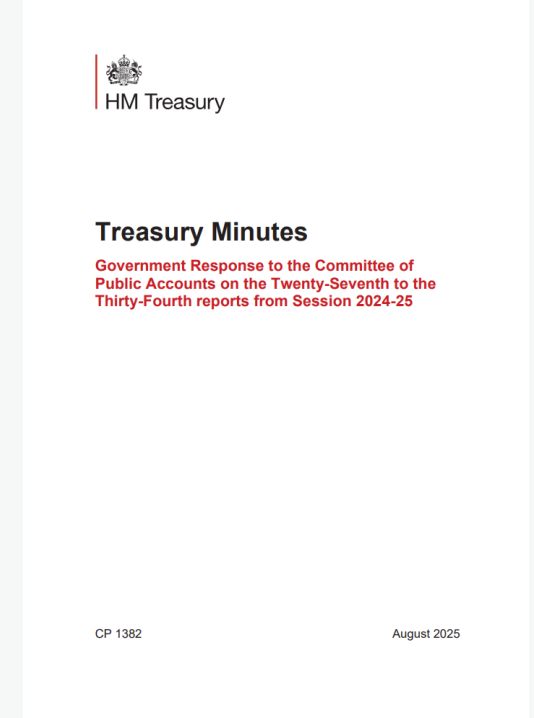
July 2025

“We will act. We will continue to deliver the National Action Plan on AMR.”



July 2025

“...previous reductions in hospital-acquired *C. difficile* infections have begun to rise again.”
Dr Penny Dash



August 2025

“Pilot schemes to gather evidence on clinical impact of point-of-care tests are being scoped for several primary care patient pathways, including community pharmacy.”

AMR remains a priority (and a concern)

Chief Medical Officer's
Annual Report 2025
Infections



Simulated HCD exercise

“AMR continues to be a major risk...

...Addressing AMR requires a range of co-ordinated actions to enable more accurate and judicious use of antimicrobials in the presence of infection or possible infection. Prevention of infection in the first instance, through for example vaccines and good hygiene practice, will reduce both the burden of resistant infections from spread and the opportunity for new resistance to develop – this applies to agriculture as it does to human medicine. Infection control measures in hospital and antimicrobial stewardship (reducing overuse of antimicrobials in human and animal health) are both essential. A realistic pipeline of new antimicrobials which can be used in the presence of resistance will mitigate ongoing risk.”

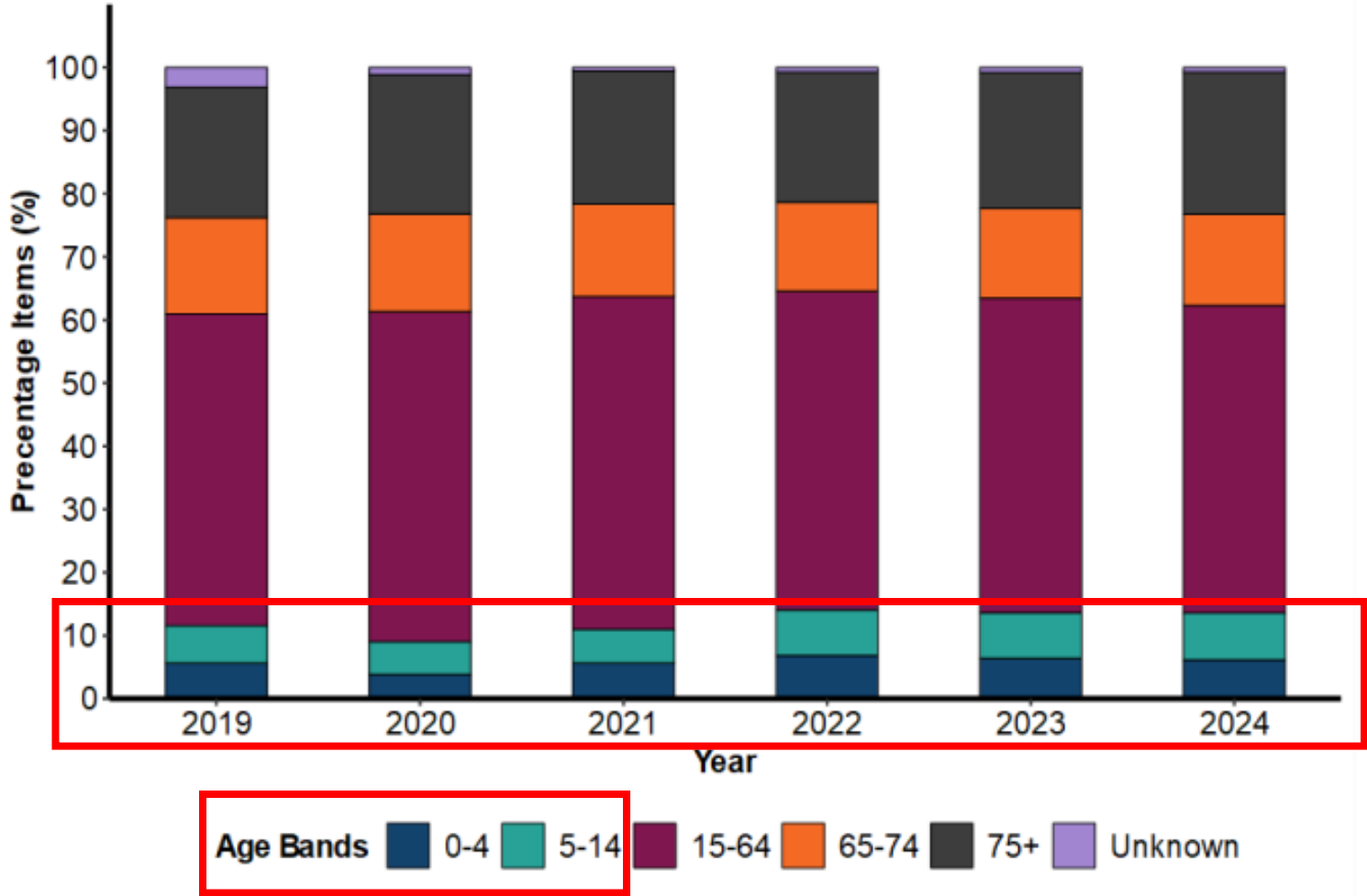
“We need to be much more systematic about infections in older age, where the risk is highest.

In managing common infections in elderly patients healthcare professionals should take account both of the higher probability of older patients acquiring many infections, and of infections being more likely to cause severe or recurrent disease in this age group. The difficult balance between over- and underuse of antibiotics is often more tilted towards treatment in older than younger adults in primary care.”

Dec 2025

Prof. Chris Whitty

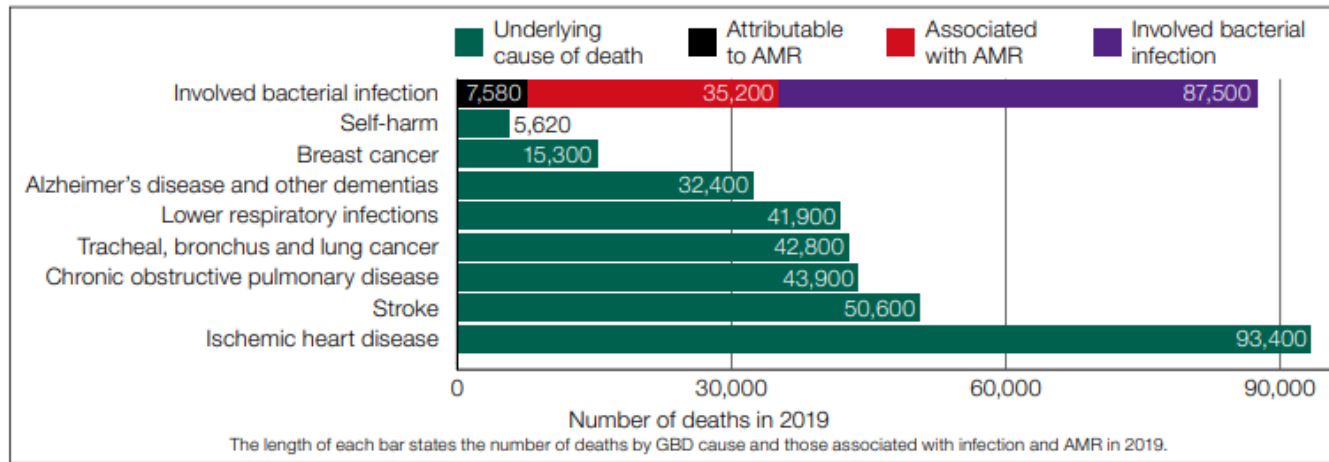
Primary care prescribing 2019-2024 (ePACT2 dashboard)



Why do we need action?

- Infection and AMR cause significant mortality and morbidity and healthcare resource utilisation
- AMR is increasing and will threaten healthcare delivery

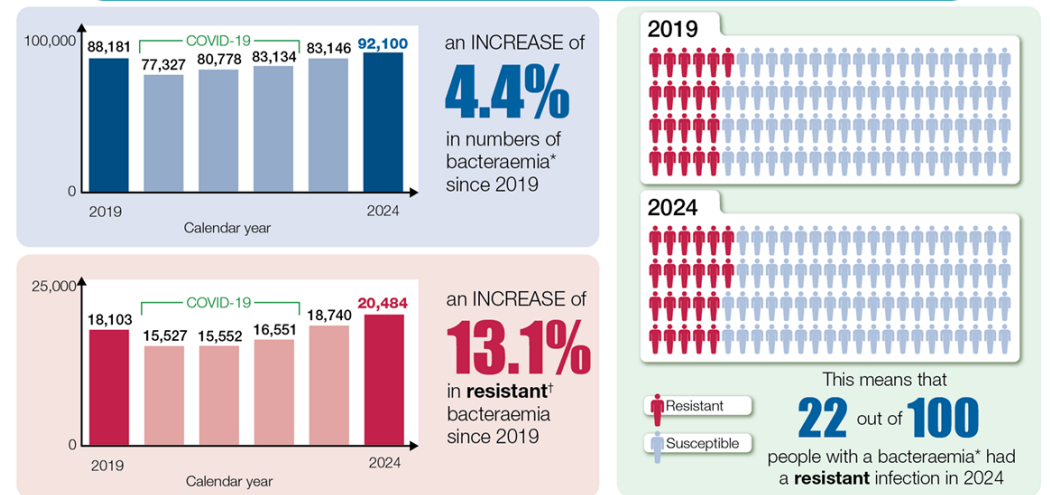
Figure 2: impact of infection and AMR in the UK



Source: IHME Global Burden of Disease (GBD) Study 2019.

[English surveillance programme for antimicrobial utilisation and resistance \(ESPAUR\) report - GOV.UK](#)

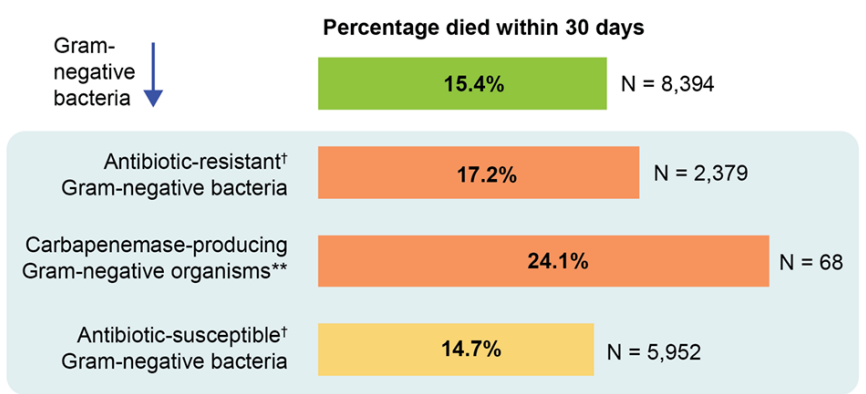
The burden of bacteraemia and resistant bacteraemia



* Pathogens include: *E. coli*, *K. pneumoniae*, *K. oxytoca*, *Acinetobacter* spp., *Pseudomonas* spp., *Enterococcus* spp., *S. aureus* and *S. pneumoniae*.
 † *E. coli*, *K. pneumoniae* and *K. oxytoca*: resistant to any of: carbapenems, third-generation cephalosporins, aminoglycosides or fluoroquinolones; *Acinetobacter* spp.: resistant to aminoglycosides and fluoroquinolones, or carbapenems; *Pseudomonas* spp.: resistant to three or more antimicrobial groups, or carbapenems; *Enterococcus* spp.: resistant to glycopeptides; *S. aureus* resistant to methicillin; *S. pneumoniae* resistant to penicillin and macrolides, or penicillin.

UKHSA ESPAUR Report 2024-25

30-day all-cause mortality of patients with Gram-negative bacteraemia* in 2024

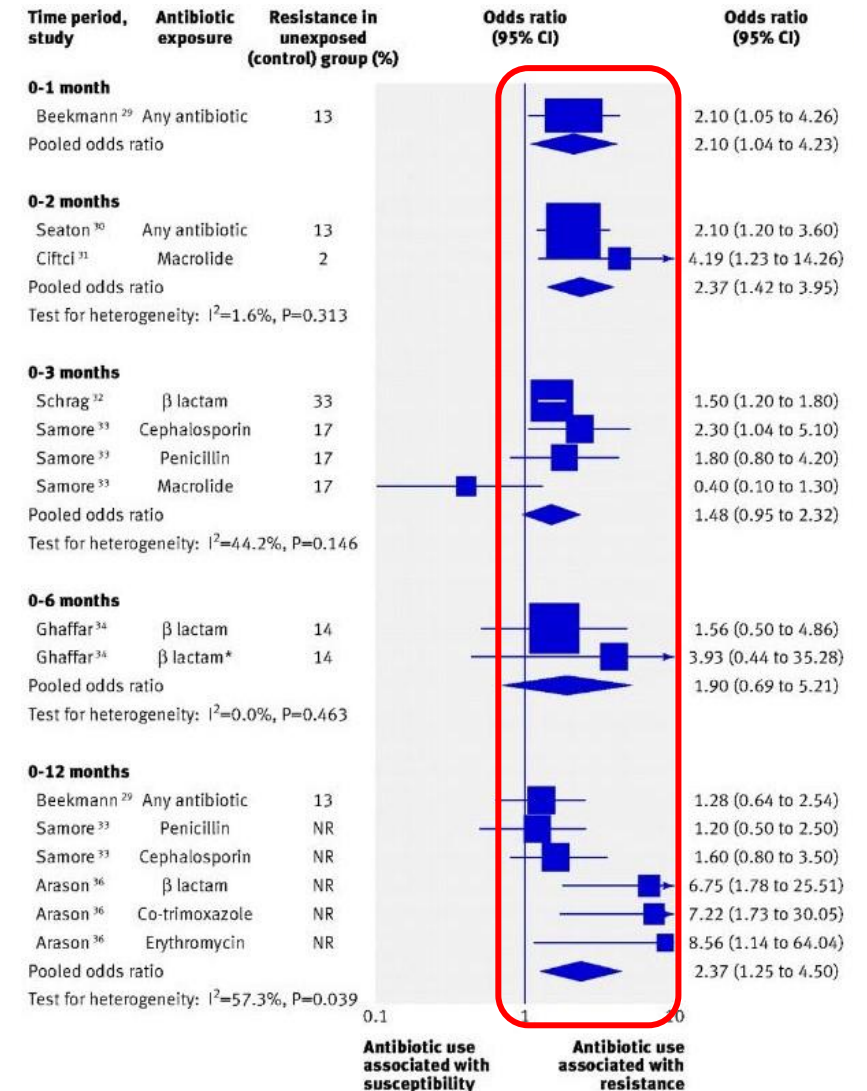


*Pathogens include: *E. coli*, *K. pneumoniae*, *K. oxytoca*, *Acinetobacter* spp., and *Pseudomonas* spp.
 †The resistance combinations included are: *E. coli*, *K. pneumoniae* and *K. oxytoca*, resistant to any of: carbapenems, third-generation cephalosporins, aminoglycosides, or fluoroquinolones; *Acinetobacter* spp., resistant to aminoglycosides and fluoroquinolones, or carbapenems; *Pseudomonas* spp., resistant to 3 or more antimicrobial groups, or carbapenems
 ** Sterile site infections

UKHSA ESPAUR Report 2024-25

Prescribing leads to individual patient level resistance

- Two weeks after prescribing amoxicillin to a child in general practice:
 - Less susceptible organism (MIC tripled)
 - Doubled risk of isolating a resistant strain (RR 1.9, 95%CI 1.2-2.9)¹
- Meta-analysis of 7 studies looking at resistance in respiratory isolates showed that resistance can persist after prescribing for up to 12 months²
 - (OR 2.4, 95% CI: 1.3-4.5)

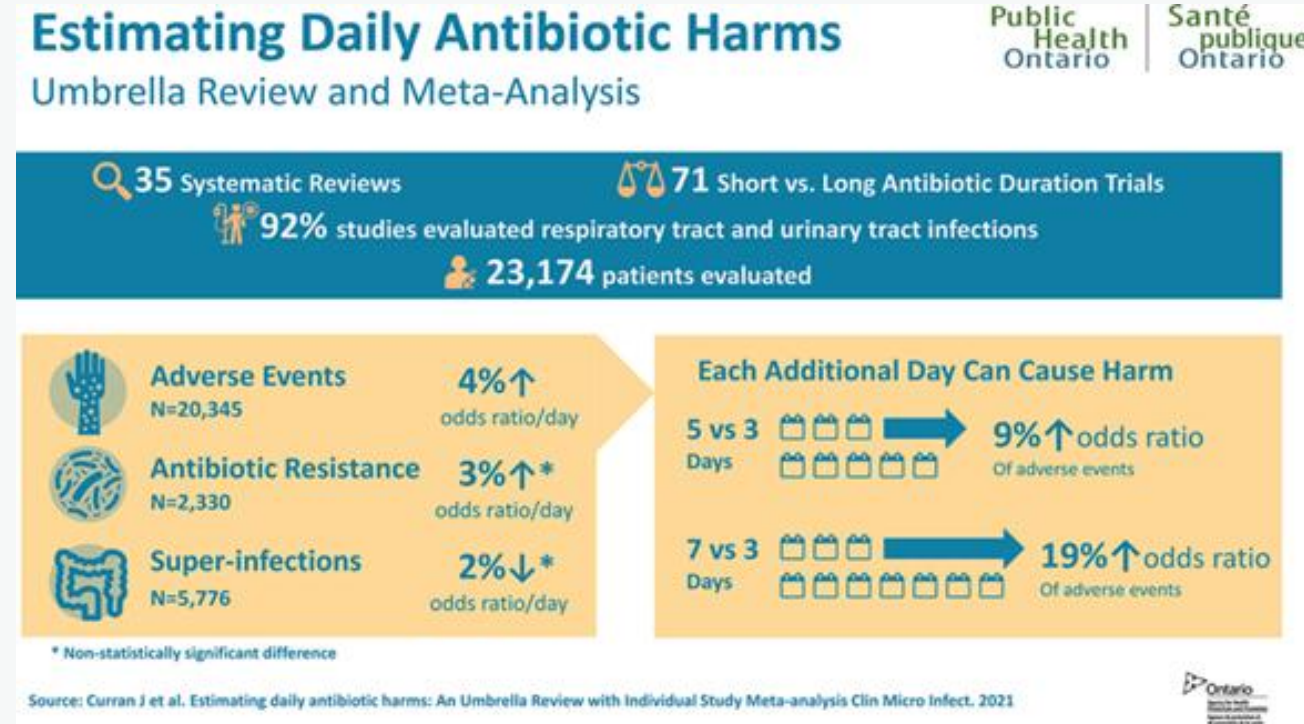


* β lactam plus another antibiotic. NR=not reported

¹Chung et al, *BMJ* 2007; **35**:429; ²Costelloe et al, *BMJ* 2010; **340**:c2096

Antibiotics can be harmful - Every extra day of treatment matters

- Umbrella review and meta-analysis of systematic reviews of 71 RCTs comparing short and longer courses of antibiotics
- Adults and children, multiple settings but majority community
- **19.9% of patients experienced an adverse drug event**
- Each day of antibiotic therapy associated with a **4% increased odds** of experiencing an ADR
- AMR developed in 10.6% of patients, risk increased by **3%** for every additional day of treatment



Impact of exposure to antibiotics in early life

		Hazard ratio/incidence rate ratio (95% CI)				
Country	Sample size	Exposure period	Asthma	Food allergies	Intellectual disability	Obesity
Minnesota, USA	14,572	0-2 years	1.90 (1.63-2.23)	1.33 (0.99-1.77)	1.21 (1.03-1.43)	1.20 (1.10-1.32)
United Kingdom	1 million	0-2 years	1.24 (1.22-1.6)	1.33 (1.26-1.40)	Dose dependent increased HR	<i>Not studied</i>
Iceland	22,393	During delivery to 1 st week of life*	1.91 (1.40-2.59)	NS	<i>Not studied</i>	<i>Group II significantly heavier at 1.5 and 4 years</i>

*3 groups: I: during C-section, II: during vaginal delivery, III: for at least 48h within 1st week of life

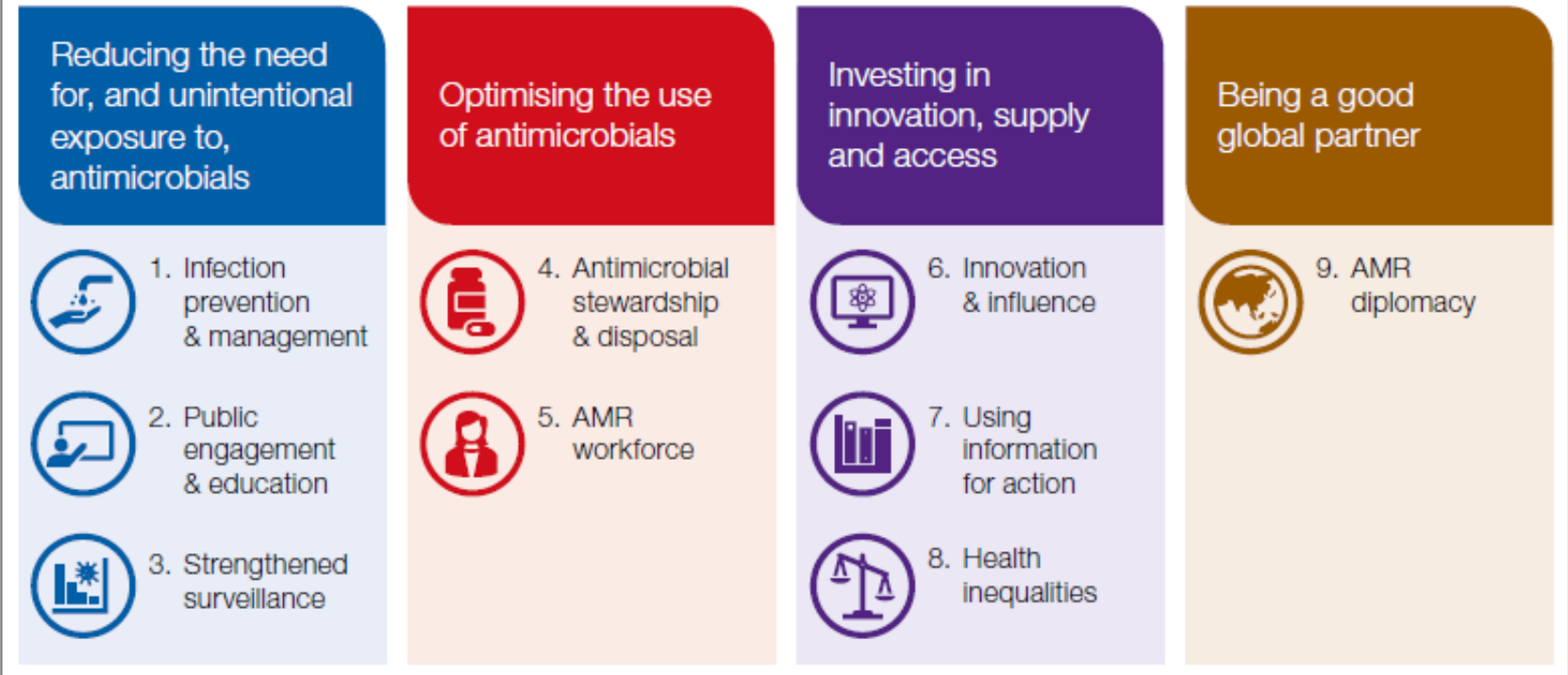
“..early life microbiome composition is a critical health determinant.... perturbations during key developmental periods can have long term consequences”¹

National Action Plan on AMR



9 strategic outcomes underpinned by 30 commitments that set out the activity that government organisations will undertake to confront AMR

Figure 1. The nine strategic outcomes for the 2024 to 2029 national action plan





NAP 2024-2029 Human Health Targets



Target 1a: by 2029, we aim to prevent any increase in a specified set of drug-resistant infections in humans from the 2019 to 2020 financial year (FY) baseline.

Target 1b: by 2029, we aim to prevent any increase in Gram-negative bloodstream infections in humans from the 2019 to 2020 financial year baseline.

Target 2a: by 2029, we aim to increase UK public and healthcare professionals' knowledge on AMR by 10%, using 2018 and 2019 baselines, respectively.

Target 4a: by 2029, we aim to reduce total antibiotic use in human populations by 5% from the 2019 baseline.

Target 4b: by 2029, we aim to achieve 70% of total use of antibiotics from the Access category (new UK category) across the human healthcare system.



Actions to support meeting NAP AMU Targets



Medium Term Planning Framework –

delivering change together
2026/27 to 2028/29

2.3 Shifting from sickness to prevention

The 10 Year Health Plan is clear that we need to shift from an NHS that focuses on treating patients to one that improves the lives of the population by preventing ill health or slowing the exacerbation of ill health. This approach will improve the outcomes and experiences of patients and improve the management of demand for general practice and acute care services.

ICBs must ensure their 5-year plans support the following preventative goals:

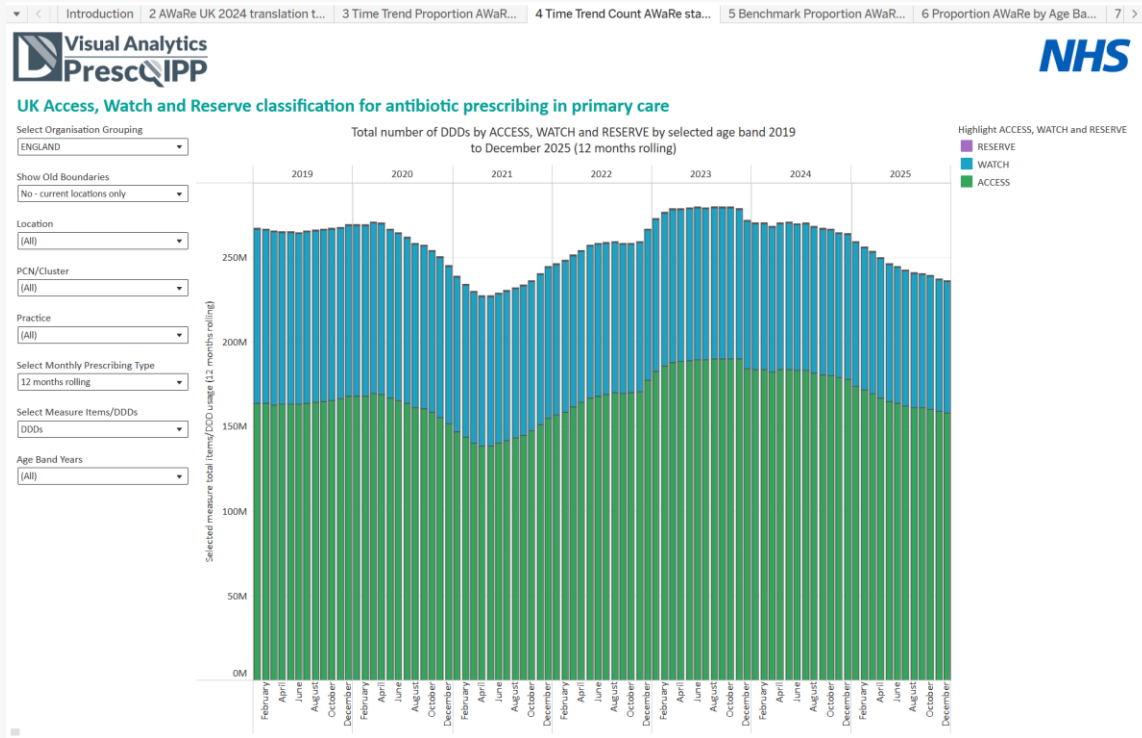
- a significant focus on tackling obesity. Specifically:
 - in 2026/27, to be making demonstrable progress in delivery of new obesity service models to improve advice and support, access to treatment, and effective management of obesity, including providing access to weight loss medications and strengthening specialist provision, including complications of excess weight clinics for children and young people

- by the end of June 2028, to have provided access to National Institute for Health and Care Excellence (NICE) approved weight loss treatments for an initial eligible cohort of around 220,000 adults
- by the end of March 2029, to be making 250,000 referrals to the NHS Digital Weight Management Programme a year
- supporting the target of a 25% reduction in CVD-related premature mortality over the next 10 years, including working in partnership with local authorities to test the new NHS Health Check online service and to scale it across the country
- implementing opt-out models of tobacco dependence in routine care
- reducing exposure to antibiotics to meet thresholds set in recent guidance and addressing problematic polypharmacy to reduce avoidable harm
- demonstrating how they will reduce health inequalities in the exercise of their functions

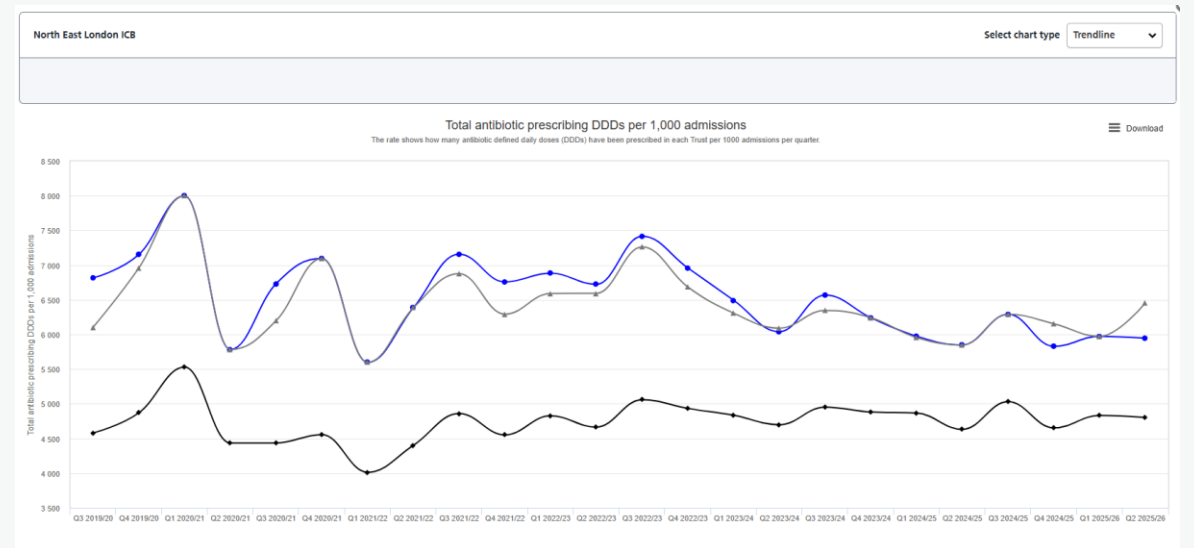
Further detail on emerging national standards and legislation related to prevention will follow.

NAP progress

UK Access, Watch and Reserve classification for antibiotic prescribing in primary care

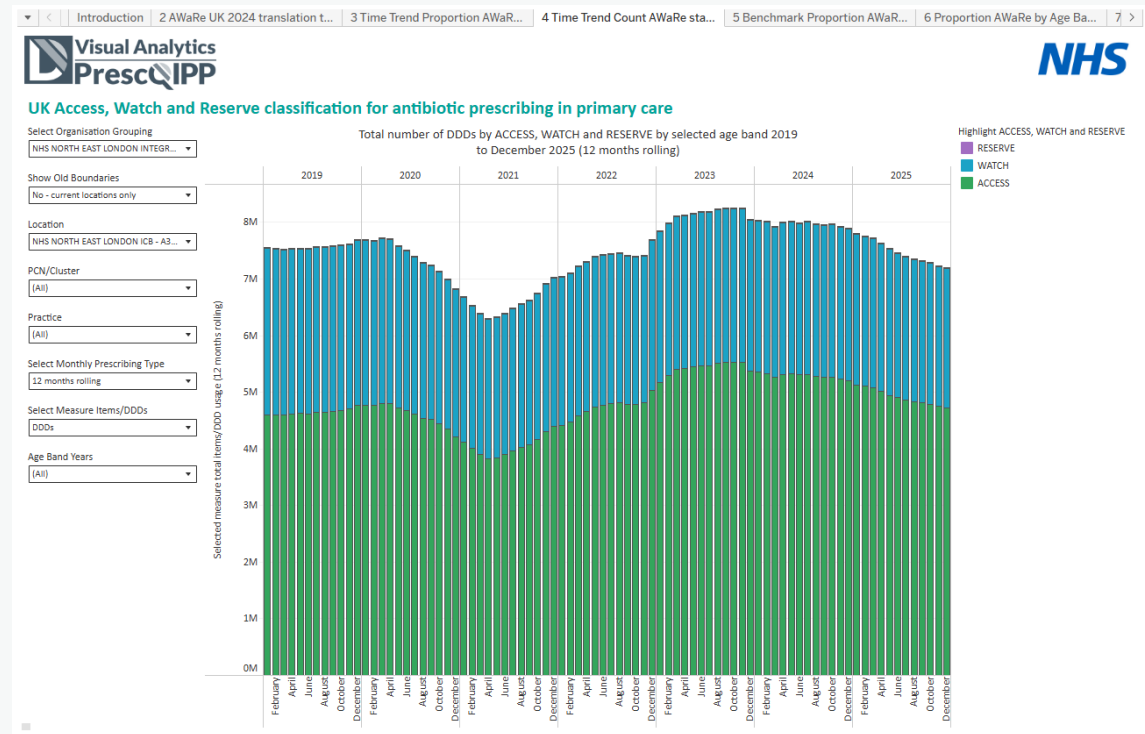


View metric - Total antibiotic prescribing DDDs per 1,000 admissions - Model Health System

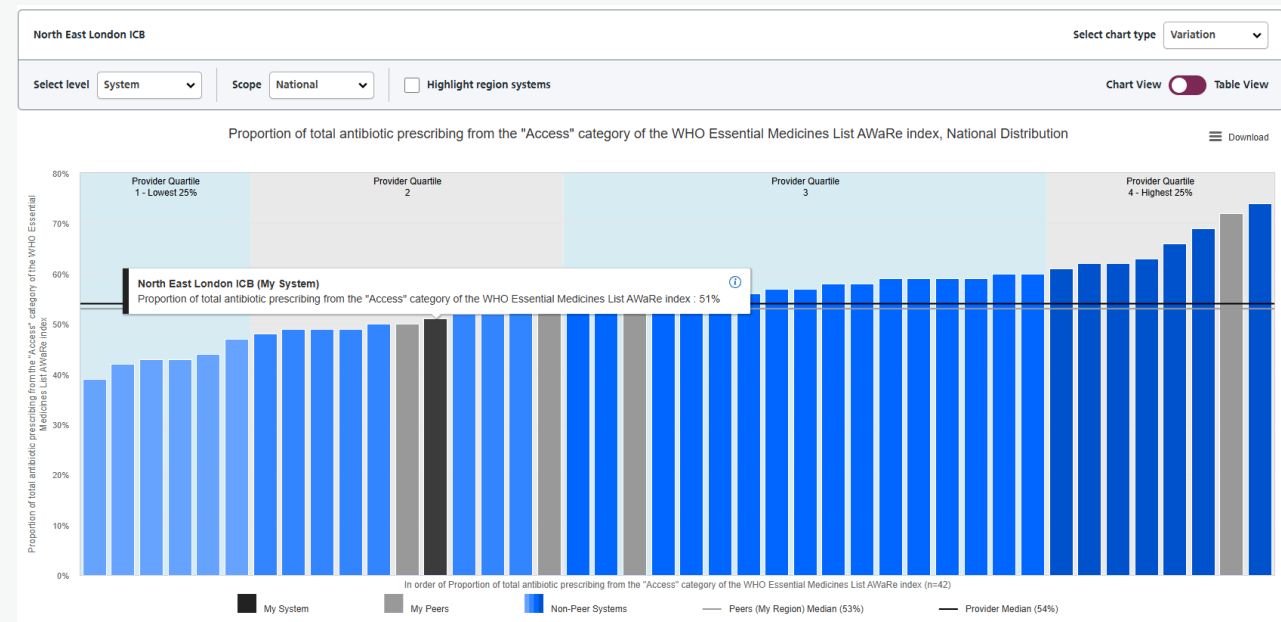


NWL NAP progress

UK Access, Watch and Reserve classification for antibiotic prescribing in primary care



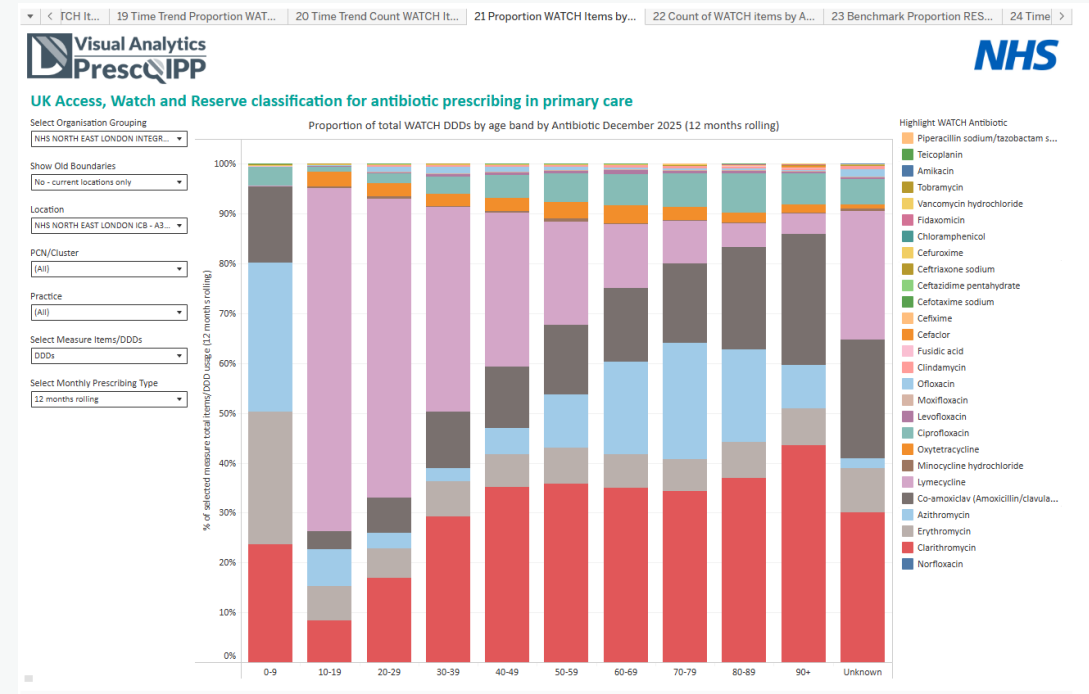
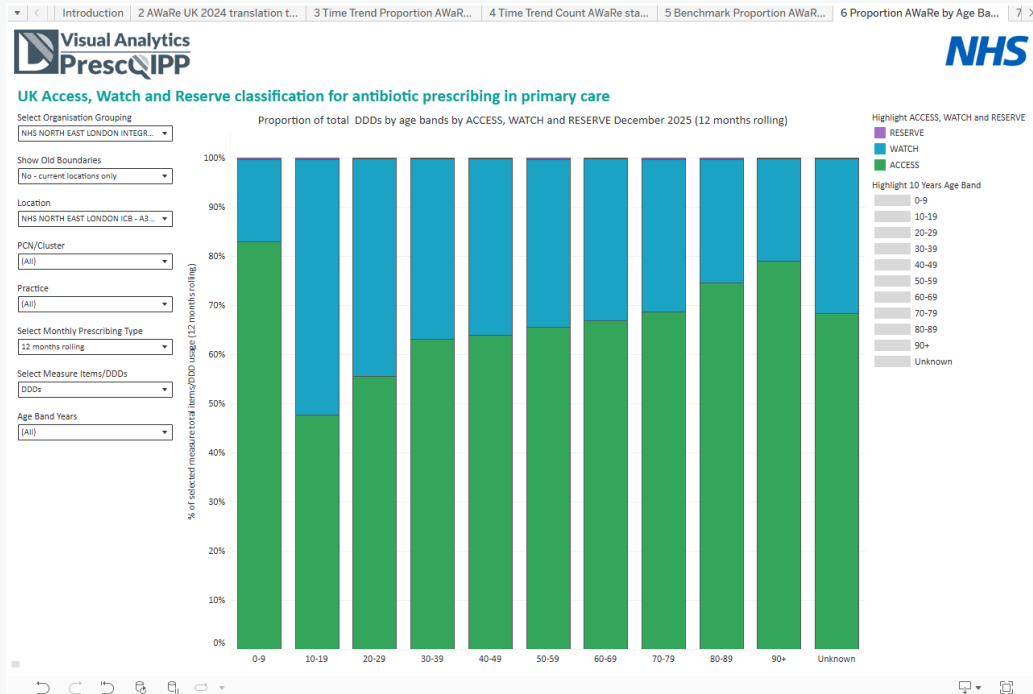
View metric - Proportion of total antibiotic prescribing from the "Access" category of the WHO Essential Medicines List AWaRe index - Model Health System



Actions to support delivery of AMU targets in NAP

Primary Care

- [NHS Oversight Framework 2025-26](#) – reducing unnecessary antibiotic use in Children age 0-9
- [Optimising antimicrobial duration in primary care:](#)
- Interventions to reduce use of “Watch” antibiotics (largest opportunity Lymecycline and macrolides – data available in [PrescQIPP AWaRe dashboard](#))



NHSE Antimicrobial Prescribing & Medicines Optimisation (APMO) workstream

Aim: To optimise clinical outcomes for patients with infection while safely mitigating the risk of AMR

Strategic Goals

- Avoid infection
- Reduce demand
- Reduce exposure
- Optimise use
- Weigh impact
- + Safeguard patients
- + Ensure health equity

Behaviour Change Enablers

- Public empowerment
- Workforce
- Knowledge mobilisation
- Decision-support
- Data
- Digital
- Diagnostics
- Research
- Policy
- Commissioning
- Governance

Priority Action Areas

1. Overprescribing
2. Paediatric AMS
3. Shorter courses
4. Recurrent infection
5. Antibiotic-sparing strategies
6. Back-up prescribing
7. Narrow-spectrum
8. IV-to-oral switch
9. Penicillin allergy de-labelling

- AMR Antimicrobial Prescribing & Medicines Optimisation (APMO)
- Antibiotic Prescribing Improvement Scheme Concepts to Enhance antimicrobial
- Antimicrobials Medicines Safety
- APMO Collaborative Projects
- Digital AMS
- Evidence Observatory
- Health Inequalities
- PADL resources
- Paediatric AMS
- Patient Group Directions (PGDs)
- Resistance Data
- Resources to support timely appropriate IV to oral switch (IVOS)
- Shorter Courses
- Strategies to reduce Watch and Reserve

Antimicrobial Resistance Programme > AMR Antimicrobial Prescribing & Medicines ...

AMR Antimicrobial Prescribing & Medicines

Priority Clinical Topics

- ✓ Delayed or back-up prescriptions
- 🔗 IV to Oral Switch
- 🏷️ Paediatric AMS

Futures Home My Dashboard My Workspaces

Antimicrobial Resistance Programme > ... > SE projects and resources > Paediatric AMS (South East & Midlands)

Paediatric AMS (South East & Midlands)

Paediatric AMS
This page includes resources to support the South East and Midlands region and system collaborative Paediatric AMS project.

📄 **Key messages for Primary Care prescribers**

These two-page guides for prescribers in Primary Care outlines the key messages and data for the South East and Midlands.

📄 **Gut microbiome information**

Leaflets and videos for patients and healthcare professionals on the effect of antibiotics on the gut biome.

📊 **Data & monitoring**

Links to PrescQIPP's dashboard

📄 **Point-of-prescribing alert templates**

Template text & guidance for local point-of-prescribing alerts

📄 **Back-up prescribing resources**

These resources help with implementing a back-up prescription strategy.

🎓 **Respiratory tract infections training pack**


A training package for respiratory tract infections which can be customised to different audiences & settings.

- AMR Antimicrobial Prescribing & Medicines Optimisation (APMO)
- AMR Data Workstream
- AMR Diagnostics
- AMR Infection, Prevention & Control Workstream
- AMR Leadership Programme in ICBS
- AMR Products Subscription Model
- AMR Urinary Tract Infections
- Collaborate and Network
- Events and Webinars
- Index of Resources
- Learning Resources - Antimicrobial Resistance
- National Policy - Improvement & Assurance Schemes
- Regional Folders
 - East of England Region
 - London Region
 - Midlands Region

Caring for children with COUGHS

University of BRISTOL

This leaflet contains information about how to look after a child who has a cough (not due to asthma). For more detail see www.bristol.ac.uk/child-cough



COUGH
Coughs can last for 3-4 weeks and make your child feel quite unwell but will still get better by themselves.

"Noisy chests" or "chesty coughs" are quite common when young children catch a cold and are not necessarily a sign of a 'chest infection'.

Healthy children typically get a cough 7-10 times a year and this is not a sign that there is anything wrong with their immune system.


© University of Bristol


DISTURBED SLEEP
Coughs will often wake your child in the night. When the child lies down, more of the mucus from the nose and throat runs downwards and your child coughs more to clear it.

Coughing is part of the body's defence system which helps keep the lungs clear and fight the illness. Unfortunately this can wake the child in the night but does not mean the illness is more severe.

For children over 1 year, a spoon of honey (perhaps in a warm drink) half an hour before bed may help them to wake less often.

For children over 2 years, vapour rubs (containing camphor, menthol and/ or eucalyptus) may help children sleep better.






DRINKING/EATING LESS
Children often eat and drink less when they have normal childhood illnesses. Most children can go a few days without eating much and this will not affect their longer term growth and development.

All children need to drink regularly to avoid becoming dehydrated, especially if they are vomiting.

To help prevent dehydration, encourage your child to have sips of water.



FEVER/HIGH TEMPERATURE
In children, a temperature of over 37.5°C is considered a fever.

Fever is a normal response to illness and does not harm children. It may even help to fight illness.

Children with a high temperature may be more likely to have a more severe illness, although most do not. Occasionally a child may have a fit. This shouldn't cause harm and treating the fever doesn't prevent it.

It is safe to use child paracetamol and ibuprofen to manage children's fever (and pain) for as long as needed. Follow the dosage on the bottle.

Thank You



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