Antimicrobial stewardship: changing risk-related behaviours in the general population

NICE NG63; 2017

This guideline aims to change people’s behaviour to reduce antimicrobial resistance and the spread of resistant microbes. It includes making people aware of:

- measures to prevent and control infection that can stop people needing antimicrobials or spreading infection to others,
- how to correctly use antimicrobial medicines,
- dangers associated with overuse and misuse of antimicrobial medicines.

It should be read in conjunction with NICE NG15; Antimicrobial stewardship: systems and processes for effective antimicrobial medicine use.

It provides recommendations for use in different settings such as CCGs, public health teams, primary care, schools etc.

Prescribers, primary care and community pharmacy teams

- When people ask about managing self-limiting infections:
  - share advice on self-care for each of the symptoms,
  - use and share resources that provide written advice to encourage people to change their behaviour.
  - Verbally emphasise key messages given in written resources.
  - Display resources that provide or signpost to advice and information about self-care. See Box 1
- Signpost them to further information to read at home, such as online advice.
- Discuss whether taking or using an antimicrobial is the most appropriate option.
- Raise awareness of community pharmacists as an easily accessible first point of contact for advice about managing a self-limiting infection.
- Consider using computer prompts or decision support aids to prompt healthcare professionals to share information with people on the appropriate use of antimicrobials, self-care and safety netting.

When antimicrobials are prescribed/supplied

- Share verbal advice and written information for people to take away about how to use antimicrobials correctly. See Box 2.
- If giving the person a back-up (delayed) prescription, tell them:
  - how to self-care to manage their symptoms,
  - what the antimicrobials would be used for, if needed,
  - how to recognise when they might need to use the antimicrobials, and if so
  - how to get them,
  - when and how to start taking or using them.

General advice

- Share safety-netting advice with everyone who has an infection (regardless of whether or not they are prescribed/supplied with antimicrobials). This should include:
  - how long symptoms are likely to last with and without antimicrobials,
  - what to do if symptoms get worse,
  - what to do if they experience adverse effects from the treatment,
  - when they should ask again for medical advice.

<table>
<thead>
<tr>
<th>Box 1</th>
<th>Self-care – where can I get advice?</th>
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<tbody>
<tr>
<td></td>
<td>speak to a community pharmacist</td>
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<td></td>
<td>online at NHS Choices</td>
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<td></td>
<td>access local triaging services e.g. practice nurse, local advice line or helpline</td>
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<td>call 111</td>
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<table>
<thead>
<tr>
<th>Box 2</th>
<th>Antimicrobial medicines</th>
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<tr>
<td></td>
<td>Advise people to take the correct dose for the time specified and via the correct route as instructed by a healthcare professional and:</td>
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<td>NOT to</td>
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<td>use or take prescription-only antimicrobials without a prescription and advice from a suitably qualified healthcare professional,</td>
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<td>keep leftover antimicrobials for use another time,</td>
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<td>share or give, prescription-only antimicrobials to anyone other than the person they were prescribed/supplied for,</td>
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<td>use or take antimicrobials prescribed for animals,</td>
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|       | use or take prescription-only antimicrobials or give them to others if they have been obtained from anywhere other than a healthcare professional or pharmacist, e.g.
|       | prescription-only antimicrobials bought online without a prescription, |
|       | ask for antimicrobials as a preventive measure against becoming ill or as a ‘stand-by’ measure; e.g. when going on holiday* |

*unless the person has a specific condition that makes this necessary or there is a specific risk e.g. if travelling to areas where malaria is endemic [see NHS Choices] or there is a high risk of travellers' diarrhoea.

Local system-wide approaches

CCGs (Clinical commissioning groups)

- Ensure resources are available for healthcare professionals to use with the public to provide information about self-limiting infections and encourage people to manage their infection themselves at home if safe to do so.
- Include information on:
  - how someone can recognise whether they, or someone they are caring for, have a self-limiting infection e.g. at NHS Choices,
  - how to seek further advice if they not sure whether their infection is self-limiting,
  - where to seek advice on managing self-limiting infections. See Box 1,
  - the natural course of self-limiting infections, including the length of time symptoms are likely to last,
  - how people can self-care e.g. by resting, drinking plenty of fluids and taking over-the-counter preparations to relieve symptoms, if needed,
explicit advice on when to seek medical help, which symptoms should be considered red flags and safety-netting advice.

- Ensure resources and advice are also available for people prescribed/supplied with antimicrobials. See Box 2.

Public Health Teams

- Consider linking to public awareness-raising initiatives e.g. European Antibiotic Awareness Day and Public Health England's Antibiotic Guardian.
- Use potential opportunities through local authority activities to distribute information about antimicrobial resistance e.g. waste disposal and recycling information could include advice not to flush leftover antimicrobials down sinks or toilets but to return them to a community pharmacy for safe disposal.
- Resources promoting infection prevention such as posters, leaflets and digital resources should be made available through multiple routes to provide a coordinated system of information.
- Ensure information is available in a variety of formats to meet people's literacy and language needs and the needs of people with sensory disabilities.
- Consider distributing information and advice through facilities and services operated by local authorities, such as leisure centres and libraries.
- When deciding where to distribute information, prioritise settings in which people are more vulnerable to infection or where there is a high risk of transmitting infection to others e.g. childcare settings, residential and day care settings for older people.
- Give people information and advice on:
  - handwashing. See Box 3.
  - food hygiene and safety. See NHS Choices.

Overarching principles for directors of public health

- Work with health and wellbeing boards, commissioners and local authorities to ensure the following are a priority locally:
  - public health aspects of local antimicrobial stewardship programmes,
  - local system-wide infection prevention programmes.
- Ensure that local authorities and CCGs work collaboratively to provide consistent information and advice to the public and healthcare professionals, including GPs, other prescribers and community pharmacists.
- Ensure that health and social care practitioners and organisations that commission, provide or support the provision of care are aware of NICE's guideline on antimicrobial stewardship and supported to implement it.

Pre-school settings

- Display information or direct parents/carers to resources about managing symptoms of infection in children, when to seek medical advice and the appropriate use of antimicrobials.

Schools

- Promote a 'whole-school' approach to preventing infections. The school environment and staff should support children to act in a way that prevents or minimises infection.
- Teach all children, in an appropriate way for their age and ability about the need to reduce inappropriate antimicrobial demand and use. Use existing teaching resources.
- Consider giving children information to take home about when and how to wash their hands. See Box 3.
- Share information with parents/carers to support their children's learning.
- Give parents/carers advice on other ways to help prevent infections including advice on being up to date with vaccinations (see NICE pathway; immunisation in children and young people) and preventing spread of airborne infections.

Box 3

Handwashing

Why important? to reduce risk of getting an infection or passing infection on to other people

When e.g. after using the toilet, before eating meals/snacks, after being in close contact with people with colds/other infections.

How: use liquid soap and tepid running water, or a handrub (if soap and water unavailable) See NHS Choices.

All school settings

- Ensure good standards of food hygiene (see NHS Choices)
- Provide facilities for thoroughly washing and drying hands for children, staff and visitors including liquid soap and tepid running water, and handrubs when these are not available.
- Ensure staff talk to children about the importance of thoroughly washing and drying hands and show them how to wash hands with liquid soap and tepid running water. See Box 3.

- Refer to Public Health England's guidance; infection control in schools and other childcare settings for details of how long children should be kept away from childcare when they have an infection.

Educational and residential settings for young people

- Display information or direct young people to resources that aim to reduce inappropriate antimicrobial demand and use. The information should:
  - take into account that many young people will be managing infections on their own for the first time,
  - explain how to recognise signs and symptoms associated with a self-limiting infection, when they can safely self-care, how to do so and when they need to seek medical help.
- Promote community pharmacies and minor ailment services, where available, as a source of advice and care (see NHS Choices; Common ailments your pharmacist can help with).

- Introduce a programme which is regularly repeated to improve young people's infection prevention knowledge and behaviour. Include:
  - posters promoting handwashing displayed in various locations,
  - signposts to online awareness-raising resources, with links to information on infection control,
  - one-off events providing free handrubs,
  - food safety campaigns such as face-to-face lectures, education materials delivered via the web, including digital and social media and promotional materials,
  - other ways to help prevent infections, such as advice on being up to date with vaccinations and preventing the spread of airborne infections.

Other resources:

- Germ defence: an online resource to help people prevent cold, flu and stomach upset. https://pips.ecs.soton.ac.uk/player/play/germdefence
- e-BUG: an educational pack for children and young people at www.e-bug.eu/
- NHS Choices at http://www.nhs.uk

This bulletin summarises key prescribing points from NICE guidance. Please refer to the full guidance at www.nice.org.uk for further detail. This is an NHS document not to be used for commercial purposes.