

Objective 1: Improve awareness and understanding of antimicrobial resistance through effective communication, education and training

Global

Action on Antibiotic Resistance (ReAct)	<p>ReAct - Action on Antibiotic Resistance is an independent global network for concerted action on antibiotic resistance. ReAct works across disciplines, bringing stakeholders together in developing ways forward, promoting best practices and innovative solutions, advocating and mobilizing for behavioral change. ReAct has three programmatic areas of work to guide its projects and activities:</p> <ul style="list-style-type: none">• Empowerment, Engagement and network Extension (EEE)• Strategic Policy (SP)• Generation and Translation of Evidence (GATE) <p>http://www.reactgroup.org/</p>
Alliance for the Prudent Use of Antibiotics (APUA)	<p>The Alliance for the Prudent Use of Antibiotics (APUA) is a leading global non-governmental organization fighting to preserve the effectiveness of antimicrobial drugs since 1981. With affiliated chapters in over 66 developed and developing countries, it conducts research, education and advocacy programs to control antimicrobial resistance and ensure access to effective antibiotics for current and future generations.</p> <p>http://www.tufts.edu/med/apua/</p>
Antibiotic Action	<p>Antibiotic Action is an independent UK-led global initiative wholly funded by the British Society for Antimicrobial Chemotherapy (BSAC), which is a UK registered charity. Antibiotic Action seeks to inform and educate all about the need for discovery, research and development of new treatments for bacterial infections. It contributes to national and international activities and acts as a conduit through which all stakeholders are educated on the importance of new ways to treat bacterial infections.</p> <p>http://antibiotic-action.com/</p>
Antibiotic Awareness Week Antibiotic Awareness Day	<p>These annual public health initiatives have emerged to raise awareness of antibiotic resistance and promote the responsible use of antibiotics.</p> <ul style="list-style-type: none">• Antibiotic Awareness Week is marked annually in November in the USA, Canada and Australia (see separate entries).• Antibiotic Awareness Day on 18 November is observed by Europe, Thailand, Hong Kong and Mexico among others. As part of European Antibiotic Aware Day (EAAD), fully referenced template materials and supports countries with press and media toolkit including ECDC latest data and information on antimicrobial resistance and healthcare-associated infections, TV spots, infographics etc. are prepared. <p>http://ecdc.europa.eu/en/EAAD/Pages/Home.aspx/</p>
Antibiotic Resistance Coalition (ARC)	<p>An international coalition established in 2014 consisting of numerous civil society organisations and stakeholders from six continents working in the health, agriculture, consumer and development sectors. It advocates for policy change and action as outlined in the ARC Declaration. Original Signatories to the Declaration are: Alliance to Save our Antibiotics, Centre for Science and Environment, Center for</p>

Science in the Public Interest, Consumers International, Duke University's Program on Global Health and Technology Access, Food Animal Concerns Trust, IFARMA Foundation, Initiative for Health & Equity in Society, Institute for Agriculture and Trade Policy, Health Action International, Health Care Without Harm, Healthy Food Action, Keep Antibiotics working, People's Health Movement, Public Citizen, ReAct—Action on Antibiotic Resistance, South Centre, Sustainable Food Trust, Third World Network, Universities Allied for Essential Medicines, What Next Forum.

<http://www.reactgroup.org/arc-press-release.html>

<http://www.reactgroup.org/uploads/ARC-declaration/ARC-declaration-May-22-2014.pdf>.

Center for Global Development, Drug Resistance Working Group	The Drug Resistance Working Group was convened in late 2007 to identify practical and feasible ways for donors, multilateral organizations, nongovernmental organizations, and private companies to prevent or contain resistance to drugs for infectious diseases affecting developing countries. The main product of the Working Group was the policy report: <i>The Race Against Drug Resistance</i> . http://www.cgdev.org/publication/race-against-drug-resistance
'Fight AMR! Save medicines for our children' campaign of the Ecumenical Pharmaceutical Network (EPN)	'Fight AMR! Save medicines for our children' is a campaign of the Ecumenical Pharmaceutical Network (EPN) and its partners aimed at raising awareness about the challenge of antimicrobial resistance among all relevant stakeholders. The campaign is intended to stimulate renewed attention to fighting AMR both locally and globally. The key campaign tool is a call to action document developed by representatives from the EPN membership in Moshi, Tanzania in November 2008. Apart from using the call to reach out to the relevant stakeholders, EPN members have undertaken a number of other activities including: <ul style="list-style-type: none"> • Sensitization seminars for health professionals in Malawi, Togo, Kenya, Cameroon and Nigeria. • Education for children and high school students on rational use of antibiotics in Moldova and India. • Research to investigate knowledge and perceptions on Antibiotic use and Antimicrobial resistance in Sierra Leone and Tanzania. The campaign draws particular attention to the following areas of intervention: infection control, promoting effective diagnosis, improving prescribing practices and encouraging optimal use of antimicrobial agents. Booklets of comic strips and illustrations are aimed at reinforcing the various messages on containment. http://www.epnetwork.org/Programmes/AMR-Campaign
Lancet Infectious Diseases Commission	The Lancet Infectious Diseases Commission's <i>Antibiotic resistance—the need for global solutions</i> is a freely available document that describes the global situation of antibiotic resistance, its major causes and consequences, and identifies key areas in which action is urgently needed. Published online November 2013. http://www.thelancet.com/journals/laninf/article/PIIS1473-3099(13)70318-9/fulltext
South Centre	The South Centre is an intergovernmental organization of developing countries that helps developing countries to combine their efforts and expertise to promote their common interests in the international arena. The Centre seeks to raise awareness about the problem of AMR in developing countries through its publications and organizes capacity building meetings involving civil society groups, the scientific community and ministries of health from developing countries. The Centre co-organised a workshop for about 50 NGO representatives and experts in May 2014, and it intends to organise more workshops to raise awareness and plan actions for policy makers and civil society organizations especially in developing countries. The Centre has published a special issue of its regular news bulletin, the <i>South Bulletin</i> , on the issue of AMR.

<http://www.southcentre.int/>
http://www.southcentre.int/wp-content/uploads/2014/10/SB82_EN.pdf

Third World Network	<p>Third World Network (TWN) is an independent non-profit international network of organisations and individuals involved in issues relating to development, developing countries and North-South affairs. Its Information Service on Health Issues and <i>Third World Resurgence</i>, a monthly publication of the Network, disseminate information on antimicrobial resistance.</p> <p>http://www.twn.my/title2/health.info/health.new.htm http://www.twn.my/title2/resurgence/2014/286.htm</p>
World Alliance Against Antibiotic Resistance (WAAAR)	<p>World Alliance Against Antibiotic Resistance (WAAAR) is a group of more than 700 individuals from 44 different countries representing all the key stakeholders (MDs, veterinarians, pharmacists, evolutionary biologists, ecologists, environmentalists) including patients' advocacy groups. It is supported by 50 scientific societies and professional groups. The primary objective of WAAAR is to raise awareness among all stakeholders of the urgency and magnitude of the threat of antibiotic resistance. The Alliance is dedicated to actively lobbying for antibiotics preservation to raise awareness among antibiotic prescribers, policy-makers, patient safety groups, the pharmaceutical industry, international health organizations, politicians and the entire population.</p> <p>http://www.ac2bmr.fr/index.php/en/the-organization/members http://www.infectiologie.com/site/waaar.php</p>
World Innovation Summit for Health (WISH)	<p><i>Antimicrobial resistance: in search of a collaborative solution</i>, Report of the Antimicrobial Resistance Working Group, was launched at the 2013 World Innovation Summit for Health in Doha, Qatar.</p> <p>http://www.wish-qatar.org/app/media/385 http://www.wish.org.qa/</p>
World Organisation for Animal Health (OIE)	<p>In March 2013, the OIE organised a <i>Global Conference on the Responsible and Prudent Use of Antimicrobial Agents for Animals, International Solidarity to fight against Antimicrobial Resistance</i>, in Paris, France. More than 300 participants from over 100 countries (WHO, FAO, OIE Delegates, OIE National Focal Points for Veterinary Products, experts, professionals, policymakers, industry representatives, non-governmental organisations and potential donors) attended the conference.</p> <p>http://www.oie.int/doc/en_document.php?numrec=4385903 The recommendations are guiding future actions. http://www.oie.int/eng/A_AMR2013/Recommendations.htm Copies of the wide-ranging presentations are available online. http://www.oie.int/eng/A_AMR2013/presentations.htm</p>
World Veterinary Association (WVA) and partners	<p>The WVA and the World Medical Association (WMA) with collaboration of the Spanish Medical and Veterinary associations will hold a Global Conference on 'Drivers towards One Health - Strengthening collaboration between medical and animals' doctors' in May 2015. The conference will mainly focus on zoonotic diseases, antimicrobial resistance, natural disaster management and environmental hazards exposure to humans and animals. It aims to bring together Veterinarians, Physicians, Students, Public Health Officials, NGOs and others from the different world regions. http://www.worldvet.org/news.php?item=151</p>

World Veterinary Day 2012
- Spotlight on antimicrobial
resistance

AMR chosen as the theme for World Veterinary Day 2012 to raise concerns about antimicrobial resistance and to highlight the importance of the responsible use of antimicrobials by the veterinary profession.

<http://www.bva.co.uk/News-campaigns-and-policies/Newsroom/News-releases/Spotlight-on-antimicrobial-resistance-for-World-Veterinary-Day/>

Regional

Asia

Initiatives to Control
Antimicrobial Resistance (I
CARE)

I CARE was launched in 2011 as an international campaign programme in Asia run by the Asia Pacific Foundation for Infectious Diseases (APFID). I CARE programme included appropriate use of antimicrobial agents, promotion of available vaccination, promotion of more active infection control as well as increasing the public awareness of resistance. The campaign consisted of interventions for the public and for healthcare professionals. Interventions for the public include distribution of printed materials, mass media campaign, and providing information by using internet and the social network service. Interventions for healthcare professionals include education of physicians by academic meetings or conferences, treatment guidelines, information sharing through website and social network service.

<http://www.liveto.com/isaar/pdf/PL-5.pdf>

(Additional source: Antibiotic Resistance - a Threat to Global Health Security and the Case for Action, Written submissions (Asia) (2013). Link to document available through: http://www.who.int/drugresistance/activities/wha66_side_event/en/)

Europe

Eurobarometer

The European Commission seeks to monitor levels of public use of and knowledge about antibiotics. The Directorate-General for Health and Consumers commissioned an EU wide survey in late 2009 and again in 2013. The 2013 tracker survey used the same questions as in 2009 and the report addressed the same key objectives:

- To identify the use of antibiotics among the EU public: the frequency with which they take antibiotics, how they obtained them, and for what reason they took them
- To measure the levels of public knowledge about the nature and effectiveness of antibiotics and the risks associated with their unnecessary use
- To determine the impact of antibiotic awareness campaigns on the knowledge and actions of Europeans.

Special Eurobarometer 407: Antimicrobial Resistance. European Commission November 2013.

http://ec.europa.eu/health/antimicrobial_resistance/eurobarometers/index_en.htm

Changing behaviour of
Health care professionals
And the general public

The CHAMP project summarised the available evidence and assessed expert opinions and views of professionals and patients on activities that target rational and cost-effective use of antibiotic drugs for the management of respiratory infections in primary care. Analyses of the cost-effectiveness of the different interventions that aim to improve antibiotic use were performed. On the basis of the information that

towards a More Prudent use of anti-microbial agents (CHAMP)	<p>was gathered and analysed, a best-practice intervention was developed. The project studied the implementation and feasibility of this best-practice intervention. The project completed in 2010.</p> <p>http://www.champ-antibiotics.org/default.aspx http://ec.europa.eu/research/health/infectious-diseases/antimicrobial-drug-resistance/projects/025_en.html <i>Characteristics and outcomes of public campaigns aimed at improving the use of antibiotics in outpatients in high-income countries.</i> http://www.ncbi.nlm.nih.gov/pubmed/20129146</p>
e-Bug	<p>The e-Bug project aims to reduce the incidence of antibiotic resistance across Europe by educating the future prescribers and users on prudent antibiotic use. It is led by Public Health England's (PHE) Primary Care Unit in England and involves a consortium of 28 international partner countries. The resources are designed to educate children and young people across the globe, at junior and senior school level, about microbiology, hygiene and the spread, treatment and prevention of disease. e-Bug also aims to reinforce an awareness of the benefits of prudent antibiotic use and how inappropriate use can have an adverse effect on antibiotic resistance in the community. The e-Bug resources comprise of a teacher and student educational pack reinforcing an awareness of essential hygiene and antibiotic issues through detailed interactive lesson plans and an interactive website hosting complementary games, interactive quizzes, disease fact sheets and more.</p> <p>http://www.e-bug.eu/partners/index.html http://www.e-bug.eu</p>
Federation of European Companion Animal Veterinary Associations (FECAVA)	<ul style="list-style-type: none"> • Poster advice on Use of Antimicrobials in Veterinary Practice http://www.fecava.org/sites/default/files/files/AMR(1).pdf • Poster advice to Companion Animal Owners on Responsible Use of Antibiotics and Infection Control http://www.fecava.org/sites/default/files/files/FECAVA%20advice%20AMR.pdf
Federation of Veterinarians of Europe (FVE)	<ul style="list-style-type: none"> • How to use antibiotics responsibly: advice for companion animal owners http://www.fve.org/uploads/publications/docs/fve_antimicrobials_pets_final_small.pdf • How to use antimicrobials responsibly: advice for veterinarians http://www.fve.org/uploads/publications/docs/fve_antimicrobials_a3_hr03.pdf • How we can safeguard antimicrobials now and for the future http://www.fve.org/uploads/publications/docs/fve_antimicrobials_a4_hr02.pdf
Sustainable Food Trust	<p>The Sustainable Food Trust campaigns on the misuse of antibiotics in agriculture and for further restrictions on the way in which antibiotics are currently used on intensive farms in the UK and within Europe.</p> <p>http://sustainablefoodtrust.org/projects/antibiotics/</p>
TAP Guide to tailoring AMR programmes (TAP)	<p>WHO/Europe and the Netherlands National Institute for Public Health and the Environment (RIVM) are collaborating on the preparation of a Guide to tailoring AMR programmes (TAP). It will provide Member States with tools to identify the audiences that contribute significantly to the issues around AMR and to design targeted strategies to bring about behaviour change (such as prudent antibiotic use). The Secretariat is planning to pilot the guide in Sweden and the United Kingdom.</p>

http://www.euro.who.int/_data/assets/pdf_file/0008/253889/64wd19e_ProgressReports_NoParma_140422.pdf?ua=1 (Page 52).

It covers:

- Support for WHO Member States with setting up targeted AMR programmes to improve the prudent use of antibiotics
- Targeted programmes address a specific target audience rather than ‘spray campaigns’ (disseminated to multiple audiences) and are country specific
- TAP includes several activities that aim to achieve maintainable behaviour change (i.e. prudent antibiotic use) in target groups.

[http://www.nivel.nl/sites/default/files/WHO%20-%20vdSande\(2\).pdf](http://www.nivel.nl/sites/default/files/WHO%20-%20vdSande(2).pdf)

National

Australia

NPS MedicineWise is an independent, not-for-profit and evidence-based organisation that works across Australia and throughout the Asia-Pacific region. NPS MedicineWise’s ‘*Resistance fighter*’ campaign provides information about antibiotics and urges all Australians to join the fight against antibiotic resistance. It has developed independent health and treatment information about antibiotics written by Australian experts. This includes freely available resources for consumers and health professionals. The antibiotic campaigns are freely available at: <http://www.nps.org.au/medicines/infections-and-infestations/antibiotics>.

Antibiotic Awareness Week has taken place in November every year since 2009 to raise awareness of antibiotic resistance and promote the responsible use of antibiotics. All health services and hospitals are encouraged to participate in Antibiotic Awareness Week. A wide range of resources and fact sheets are freely available online. <http://www.safetyandquality.gov.au/our-work/healthcare-associated-infection/antimicrobial-stewardship/antibiotic-awareness-week/>

Belgium

The Belgian Antibiotic Policy Coordination Committee (BAPCOC) launched a national campaign, including in schools, on the appropriate use of antibiotics and how antibiotics do not help with the flu, bronchitis or a cold. <http://www.health.belgium.be/Antibiotiques/index.htm>

Canada

Canada’s national Antibiotic Awareness Week, has been held in November every year since 2010, coordinated by the National Collaborating Centre for Infectious Diseases. AntibioticAwareness.ca is coordinated by numerous health-related organizations across the country. These groups partner to promote Antibiotic Awareness in Canada. Information is targeted at both health care providers and parents. <http://antibioticawareness.ca/>

Do Bugs Need Drugs? is a community education program about handwashing and responsible use of antibiotics. Materials are available for healthcare professionals and the public that explain why antibiotic resistance is an issue and steps to prevent antibiotic resistance from

developing. The Do Bugs Need Drugs? programme started as a small six-month pilot in Grande Prairie, Alberta, Canada in 1998-99. Currently it is a provincial program in Alberta and British Columbia. Components of the program are used elsewhere in Canada, the United States and abroad.

<http://www.dobugsneeddrugs.org/about/>

France

National Health Insurance campaign

A French National Health Insurance campaign was launched in 2002 promoting better-targeted antibiotic use with the catchphrase – *Les antibiotiques, c'est pas automatique*. In particular, the campaign targeted the treatment of viral respiratory infections in children, for whom 40% of the prescriptions were being written. Since 2002 the campaign has been repeated every winter for the duration of the viral respiratory infections epidemic season.

<http://www.who.int/bulletin/volumes/89/1/11-030111/en/>

India

Avoid Antibiotic Abuse

Indian Academy of Pediatrics (IAP) is starting a mission called 'Avoid Antibiotic Abuse' to create and foster awareness on antibiotic resistance and rational antibiotic use among doctors and public. The Indian Medical Association (IMA) has also joined the IAP in this mission

<http://www.reactgroup.org/news/442/31.html>

http://www.iapindia.org/avoid_antibiotic_abuse-aaa.php

Ireland

Bug Run School Days

The Discipline of General Practice at the National University of Ireland, Galway, has launched Bug Run, a free iPad app that combines a game and an educational video to educate children and adults on the issue of antibiotic resistance, funded by the Health Research Board. The game teaches children (4 – 10 years) about the importance of staying healthy and that taking antibiotics comes at a price; the short video developed for adults highlights the issue of antibiotic resistance and provides suggestions on how to discuss this with their General Practitioner.

<http://www.nuigalway.ie/about-us/news-and-events/news-archive/2014/may2014/nui-galway-launches-bug-run-school-days-an-antibiotic-awareness-ipad-app.html>

Health Service Executive

Public Engagement activities include:

- *Taking antibiotics for colds and flu? There's no point*, with the message that 'Taking antibiotics when you don't need them is a waste. It can also mean that they won't work when you really need them for a serious infection and put you at risk of side effects.'

www.hse.ie/antibiotics

- The *Under the Weather* campaign to help build the health knowledge of everyone living in Ireland and to reduce the amount of unnecessary antibiotics that are used.

<http://undertheweather.ie/welcome-to-under-the-weather>

New Zealand

The Pharmaceutical Management Agency (PHARMAC)

Kick That Bug: The Wise Use of Antibiotics campaign is an annual campaign, which aims to raise awareness about the use and demand for antibiotics over the winter months. It focuses on when a patient can expect to be prescribed an antibiotic, what to do when prescribed an antibiotic and how to manage their cold or flu bug. The campaign is managed and implemented by The Pharmaceutical Management Agency (PHARMAC) of the New Zealand Government.

<http://www.kickthatbug.co.nz/>

Sweden

Strategic Programme Against Antibiotic Resistance (STRAMA)

STRAMA is an advisory body with the remit to assist the Swedish Institute for Infectious Disease Control in:

- Matters regarding antibiotic use and containment of antibiotic resistance
- Facilitating an interdisciplinary and locally approved working model, ensuring involvement by all relevant stakeholders including national and local authorities and non-profit organizations.

<http://en.strama.se/dyn//,85,3,77.html>

There are local Strama groups in every county council, most often under the leadership of the county medical officer for communicable disease control. The Public Health Agency of Sweden and local Strama groups have a continuous cooperation on communication efforts and strategies. Brochures and apps for smartphones with summarised treatment recommendations, patient information, posters at health clinics, brochures for elderly and parents of younger children, education at children's health centres, school material, shorter films for the web and TV as well as a website 'antibiotics or not' are examples of produced information material. The Strama groups also share their experiences at recurrent Strama Days and through the web portal Strama.se.

<http://www.folkhalsomyndigheten.se/pagefiles/17351/Swedish-work-on-containment-of-antibiotic-resistance.pdf>

The former Yugoslav Republic of Macedonia

Centre for Regional Policy Research and Cooperation (STUDIORUM)

The Centre for Regional Policy Research and Cooperation (Studiorum), jointly with the Ministry of Health, Institute of Public Health, faculties of medical science, and related professional associations, has been organising the European Antibiotic Awareness Day (EAAD) in Macedonia since 2008.

In 2014, Studiorum, the Ministry of Health, the Health Insurance Fund of Macedonia and the Institute for Public Health of the Republic of Macedonia initiated a series of seminars for health professionals, patients and general public under the motto 'Antibiotics are not your food'.

<http://studiorum.org.mk/>

<http://studiorum.org.mk/?p=1907>

United Kingdom

British Society for Antimicrobial Chemotherapy (BSAC)

UK Antimicrobial Resistance Roundtable Series

The events will look at how the health communities, pharmaceutical industry and diagnostics within Europe and internationally can:

- Improve the knowledge and understanding of antimicrobial resistance

- Conserve and steward the effectiveness of existing treatments
- Stimulate the development of new antibiotics, diagnostics and novel therapies

They aim to assist and influence delivery of the strategy across the UK, and share lessons learnt to colleagues across Europe and the rest of the world. The outputs of this series will be presented at a joint meeting of the All Party Parliamentary Group on Antibiotics and All Party Parliamentary Group on Health in Spring 2015.

<http://bsac.org.uk/events/forthcoming-events/the-uk-antimicrobial-resistance-roundtable-series/>

Antibiotic Awareness Day	European Antibiotic Awareness Days (EAAD) and other awareness raising initiatives have been carried out in the UK since 1999. UK EAAD activities include provision of on-line educational resources, social media work, editorials, articles and conferences for professionals. https://www.gov.uk/government/collections/european-antibiotic-awareness-day-resources <i>European Antibiotic Awareness Day evaluation 2013</i> https://www.gov.uk/government/publications/european-antibiotic-awareness-day-evaluation-2013
Antibiotic Guardian pledge	The Antibiotic Guardian pledge campaign was launched in 2014. It calls on everyone in the UK, the public and healthcare community to become antibiotics guardians by choosing one simple pledge about how they will make better use of these medicines. http://antibioticguardian.com/

United States

Alternatives to Antibiotics: Resource Center	Alternatives to Antibiotics: Challenges and Solutions in Animal Production is a U.S. Department of Agriculture (USDA) resource center with a focus on new strategies for preventing and treating diseases that do not result in the creation of selection pressure favouring the development of antimicrobial resistance. http://www.ars.usda.gov/alternativestoantibiotics/
Detect and Protect Against Antibiotic Resistance Initiative	CDC's Detect and Protect Against Antibiotic Resistance Initiative (known as the AR Initiative) is a part of the broader CDC strategy to target investment aimed at antibiotic resistance. Its website provides accessible factsheets and infographics about the AR Initiative. http://www.cdc.gov/drugresistance/detect-and-protect/index.html
FixFood	FixFood is a nonprofit organization dedicated to changing the food system. It uses videos and social media to raise awareness and partner with leading organizations to help Americans take direct action. It runs a 'Fix Antibiotics' campaign against the overuse of antibiotics in food animals. http://www.fixfood.org/fix-antibiotics/
Get Smart About Antibiotics Week	<i>Get Smart About Antibiotics Week</i> has run every year since 2008 to raise awareness of the threat of antibiotic resistance and the importance of appropriate antibiotic prescribing and use. It includes a range of freely available promotional materials and educational resources. http://www.cdc.gov/getsmart/week/index.html
Get Smart: Know when antibiotics work	<i>Get Smart: Know when antibiotics work</i> promotes public awareness of appropriate antibiotic use. The campaign aims to reduce the rate of rise of antibiotic resistance by:

- Promoting adherence to appropriate prescribing guidelines among providers
- Decreasing demand for antibiotics among both healthy adults and parents of young children
- Increasing adherence to prescribed antibiotics.

<http://www.cdc.gov/getsmart/community/index.html>

<http://www.cdc.gov/getsmart/campaign-materials/about-campaign.html>

Get Smart for Healthcare	<p><i>Get Smart for Healthcare</i> is a campaign focused on improving prescribing practices in inpatient healthcare facilities.</p> <p>http://www.cdc.gov/getsmart/healthcare/</p>
Get Smart: Know When Antibiotics Work on the Farm	<p><i>Get Smart: Know When Antibiotics Work on the Farm</i> provides educational activities to promote appropriate use of antibiotics in animals. It was introduced in 2004 to promote appropriate antibiotic use in veterinary medicine and animal agriculture. The Get Smart on the Farm goals are:</p> <ul style="list-style-type: none"> • Promote appropriate use of antibiotics in animals through collaboration, communication, and education • Serve as a liaison among the public health community, veterinarians, and food animal producers • Build relationships between CDC and the animal agriculture industry within the United States. <p>http://www.cdc.gov/narms/get-smart.html</p> <p>The Antimicrobial Resistance Learning Site, under the ‘Get Smart on the Farm’ programme, provides open-source teaching modules designed for integration into existing veterinary school courses. Contributors include Michigan State University, the University of Minnesota and the Centers for Disease Control and Prevention.</p> <p>http://amrls.cvm.msu.edu/</p>
Keep Antibiotics Working	<p><i>Keep Antibiotics Working</i> is a coalition of health, consumer, agricultural, environmental, humane and other advocacy groups with more than 11 million members dedicated to eliminating a major cause of antibiotic resistance: the inappropriate use of antibiotics in food animals. The Campaign focuses on three areas:</p> <ul style="list-style-type: none"> • Phasing out use in non-sick animals of antibiotics that are or may become important to human medicine • Restricting use in sick animals of antibiotics essential for treating sick humans, notably fluoroquinolones • Ensuring policymakers and the public will have adequate data at their disposal to track antibiotic use and the development of antibiotic resistance. <p>http://www.keepantibioticsworking.com/</p>
Meat Without Drugs	<p>A campaign, supported by a number of organizations including Consumers Union, that asks grocery stores to choose to only sell meat raised without antibiotics.</p> <p>http://www.meatwithoutdrugs.org/#watch</p>
National Veterinary Accreditation Program	<p>U.S. Department of Agriculture (USDA) National Veterinary Accreditation Program Module 23: Use of Antibiotics in Animals.</p> <p>This module reviews the terms and concepts necessary for veterinarians to make informed decisions for the proper selection and judicious use of antibiotics in animals. The various benefits and limitations of antibiotic susceptibility testing options and how to correctly interpret a drug label are presented. A review of the many agencies involved in antibiotic regulation and antibiotic resistance and residue monitoring is</p>

provided as well as a review of the key components of the Animal Medicinal Drug Use Clarification Act (AMDUCA) and extra-label use of drugs. Numerous resources to assist in making informed decisions on antibiotic use in animals are also included.

http://www.aphis.usda.gov/animal_health/vet_accreditation/downloads/nvap_supplemental_training_form.pdf

Pew Charitable Trusts
Campaign on Human Health
and Industrial Farming

Pew Charitable Trusts Campaign on Human Health and Industrial Farming works to preserve the effectiveness of antibiotics by phasing out the overuse and misuse of the drugs in food animal production. The campaign works with public health and food industry leaders, veterinarians, agricultural interests, academics, and citizen groups who share its objective of protecting human and animal health. The campaign includes *Supermoms Against Superbugs* and *Super Chefs Against Superbugs*.

<http://www.pewtrusts.org/en/projects/campaign-on-human-health-and-industrial-farming>

Systems for Improved
Access to Pharmaceuticals
and Services (SIAPS)
Program

SIAPS supports country and regional coalition-building efforts around AMR as described in the publication, *Building Local Coalitions for Containing Drug Resistance* (http://projects.msh.org/projects/sps/SPS-Documents/upload/AMR-guide-English_FINAL.pdf). The approach involves rapid information gathering to identify AMR-related issues and important stakeholders. Stakeholders are then helped to establish a local champion group that will mobilize and catalyze partners and develop locally feasible action plans to contain AMR.

<http://siapsprogram.org/approach/pharmaceutical-services/antimicrobial-resistance/>