

## 2004 ANA HOUSE OF DELEGATES

**SUBJECT:** **Inappropriate Use of Antimicrobials in Agriculture  
(Action Report)**

**RELEVANT CORE ISSUE:** **Patient Safety & Advocacy**

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**REFERRED TO:** **Reference Hearing**

**EXECUTIVE SUMMARY:** Antibiotic resistance is a serious and growing problem in human medicine. While medical overuse of antibiotics is a key part of the problem, mounting evidence indicates that the extensive use of antibiotics in agriculture also plays a significant role, by creating a massive reservoir of resistant bacteria that contaminate both the food chain and the environment. By some estimates, the *majority* of antibiotics now used in the United States are given as feed additives to livestock and poultry for "non-therapeutic" purposes – not to treat sick animals, but rather to promote slightly faster growth and to compensate for poor animal-husbandry practices. Most of these antibiotics belong to classes of drugs used in human medicine, and their widespread use as feed additives promotes development and spread of resistant bacteria. This Action Report requests ANA's support for phasing out non-therapeutic use of medically important antibiotics as feed additives in order to protect their efficacy in human medicine. In addition, the Action Report requests ANA's support for the Food and Drug Administration's proposal to ban therapeutic use of fluoroquinolones in poultry, in order to protect efficacy of fluoroquinolones in treating serious food-borne illness in humans

1 **RECOMMENDATION(S):**  
2

3 **WHEREAS**, overuse of antibiotics in agricultural is contributing to the emerging crisis  
4 of antibiotic resistance (Alliance for the Prudent Use of Antibiotics, 2002), which  
5 threatens the ability of nurses to treat patients for bacterial infections successfully and  
6 which may pose risks to the health of nurses and their families (Gewanter, 2002); and  
7

8 **WHEREAS**, nurses can play a critical role in educating the public and policymakers on  
9 the importance of maintaining the efficacy of antibiotics by reducing overuse of  
10 antibiotics in agriculture; and  
11

1           **WHEREAS,**

- 2           ▪ The U.S. Centers for Disease Control has identified antibiotic resistance as a “top  
3 concern,” and has stated that “Widespread use of antibiotics promotes the spread of  
4 antibiotic resistance” (U.S. Centers for Disease Control);  
5           ▪ Antibiotics are extensively used in agriculture, primarily as feed additives for non-  
6 therapeutic purposes including growth promotion and routine prophylaxis, and  
7 many of these antibiotics are within classes also used in human medicine (Mellon,  
8 2001);  
9           ▪ The U.S. Food and Drug Administration proposed in October 2000 to withdraw the  
10 approval for therapeutic use in poultry of fluoroquinolones, a class of drugs that  
11 includes Ciprofloxacin, because of evidence that such use is contributing to the  
12 spread of fluoroquinolone-resistant *Campylobacter* in humans, thus increasing the  
13 difficulty of treating severe food-borne illness (Food and Drug Administration,  
14 2000);  
15           ▪ Bipartisan federal legislation that has been endorsed by numerous health-  
16 professional organizations would phase out use of medically important antibiotics  
17 as non-therapeutic feed additives unless FDA concludes that continued use does  
18 not contribute to antibiotic resistance affecting humans (Preservation of Antibiotics  
19 for Medical Treatment Act); and  
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21           **WHEREAS,** few new antibiotics are now under development, and any new antibiotics  
22 that reach the market are likely to be more expensive, exacerbating problems of the  
23 affordability of health care (Infectious Diseases Society of America, 2003);  
24

25           **THEREFORE BE IT RESOLVED** that the American Nurses Association and  
26 individual registered nurses will urge Congress, meat and poultry producers, and  
27 bulk purchasers of meat to move to promptly adopt policies phasing out the non-  
28 therapeutic use of medically important antibiotics and the use in poultry of  
29 fluoroquinolones.  
30

31           **REPORT:**

32  
33           A federal Interagency Task Force recently noted that “drug-resistant pathogens are a growing  
34 menace to all people, regardless of age, gender, or socioeconomic background. If we do not act  
35 to address the problem . . . drug choices for the treatment of common infections will become  
36 increasingly limited and expensive—and, in some cases, nonexistent” (Interagency Task Force  
37 on Antimicrobial Resistance). The loss of effective antibiotics would gravely hamper many  
38 medical procedures, including aggressive chemotherapy, transplantation, and surgery, all of  
39 which may weaken patients’ immune functions and/or increase their susceptibility to infection.  
40 Young children, seniors, and persons with HIV/AIDS are also particularly susceptible to  
41 bacterial infection (Environmental Defense, 2001).  
42

43           Although overuse of antibiotics in human medicine is clearly a significant cause of the antibiotic-  
44 resistance problem, mounting evidence indicates that agricultural overuse also plays an important  
45 role. Authoritative data on antibiotic use are not available, but by some estimates 70% of all

1 antibiotics and other antimicrobials used in the United States are used as agricultural feed  
2 additives for non-therapeutic purposes, i.e., to promote slightly faster growth and for routine  
3 prophylaxis in healthy animals. Approximately half of these drugs belong to classes of drugs  
4 used in human medicines such as penicillins, tetracyclines, macrolides, aminoglycosides,  
5 lincosamides, streptogramins, and sulfonamides (Mellon, 2001). These non-therapeutic uses in  
6 animals do not require a prescription or any other supervision by a veterinary professional.  
7

8 Numerous experts have called for an end to non-therapeutic use of medically important  
9 antibiotics as feed additives. For example:

- 11     ▪ In June 2000, the World Health Organization called for ending the non-therapeutic use  
12     of medically important antibiotics unless they are shown to be safe (World Health  
13     Organization, n.d.);
- 14     ▪ In October 2001, the *New England Journal of Medicine* published a guest editorial  
15     titled “Antimicrobial Use in Animal Feed: Time to Stop” (Gorbach, 2001).
- 16     ▪ In June 2002, a multidisciplinary group of scientists concluded based on a two-year  
17     review of more than 500 studies that “elimination of non-therapeutic use of  
18     antimicrobials in food animals and agriculture will lower the burden of antimicrobial  
19     resistance ... with consequent benefits to human and animal health”(Alliance for the  
20     Prudent Use of Antibiotics, 2002).
- 21     • In March 2003, the Institute of Medicine’s report on microbial threats to health  
22     concluded that "Clearly, a decrease in antimicrobial use in human medicine alone will  
23     have little effect on the current situation. Substantial efforts must be made to decrease  
24     inappropriate overuse in animals and agriculture as well” (Institute of Medicine, Board  
25     on Global Health, 2003).
- 26     • In December 2003, an expert consultation of the World Health Organization concluded  
27     that “There is clear evidence of the human health consequences due to resistant  
28     organisms resulting from non-human usage of antimicrobials. These consequences  
29     include infections that would not have otherwise occurred, increased frequency of  
30     treatment failures (in some cases death) and increased severity of infections” (World  
31     Health Organization and Food and Agriculture Organization).

32  
33 Moreover, it is clear that reducing use of antibiotic feed additives is feasible. In August 2003,  
34 the World Health Organization published a detailed analysis of experience in Denmark, the  
35 world’s largest exporter of pork, which banned such use in the late 1990s. WHO concluded that  
36 Denmark’s ban had resulted in a 54% decrease in overall antibiotic use in agriculture, with no  
37 impact on food safety and meat prices, and virtually no impact on animal welfare or productivity  
38 (World Health Organization, 2003).

39  
40 In addition, in June 2003, the McDonald’s Corporation adopted a policy requiring certain meat  
41 suppliers to reduce use of medically important antibiotics as growth promoters, and providing for  
42 a purchase preference for other suppliers that comply with the policy (McDonald’s Corporation,  
43 2003). In November 2003, Bon Appetit, a major food-service company, adopted a policy that is  
44 similar to but more extensive than the McDonald’s policy (Bon Appétit, 2003). More generally,  
45 a growing number of suppliers are able to supply meat, fish, and dairy products produced

1 without routine use of antibiotics (numerous such suppliers, for example, are listed at  
2 [www.EatWellGuide.org](http://www.EatWellGuide.org)).

3 Despite these steps, however, substantial quantities of medically important antibiotics continue  
4 to be used as feed additives in the U.S. While the Food and Drug Administration (FDA) has  
5 authority to withdraw such drugs from the market, prior withdrawal proceedings for other  
6 agricultural drugs have taken six to twenty years to complete per drug or drug class (Sundlof,  
7 2001), suggesting that it would take FDA several decades to complete action on the eight classes  
8 of medically important antibiotics now approved for non-therapeutic use.  
9

10 In addition to concerns about non-therapeutic use of medically important antibiotics as feed  
11 additives, some therapeutic uses of agricultural drugs also raise concerns. In particular, the U.S.  
12 Food and Drug Administration proposed in October 2000 to withdraw the approval for  
13 therapeutic use in poultry of fluoroquinolones, a class of drugs that includes Ciprofloxacin. FDA  
14 concluded that poultry fluoroquinolones should be removed from the market because their use is  
15 contributing to the spread of fluoroquinolone-resistant *Campylobacter* in humans, thus  
16 increasing the difficulty of treating severe food-borne illness (Food and Drug Administration,  
17 2000). It is not known when the current regulatory proceeding will be concluded.  
18

19 The American Nurses Association therefore supports legislation to phase out the non-therapeutic  
20 use of medically important antibiotics as feed additives, as well as voluntary efforts to reduce  
21 both non-therapeutic use of medically important antibiotics and use of fluoroquinolones in  
22 poultry.  
23

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15 **Past House Action(s): None identified**

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17 **Relates to ANA Strategic Goals:**

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19 \_\_\_\_\_ **I. Professional Practice Excellence**

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21 ANA successfully champions professional nursing excellence through standards,  
22 code of ethics, credentialing and professional development.

23 \_\_\_\_\_ **II. Healthcare & Public Policy**

24  
25 ANA is an acknowledged leader in the formulation of effective healthcare and  
26 public policy as they affect workplace issues related to nursing and the adequate  
27 supply of nurses.  
28

29  X  **III. Knowledge & Research**

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31 The nursing healthcare community looks to ANA as the recognized source for  
32 accurate, comprehensive health policy information.  
33

34 \_\_\_\_\_ **IV. Unification**

35  
36 ANA has a structure that facilitates unification and advancement of the profession.  
37

38 \_\_\_\_\_ **V. Workforce & Workplace Advocacy**

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40 Nurses are recognized as essential providers and valued decision makers in all  
41 practice settings.  
42

43 \_\_\_\_\_ **VI. Does not relate to ANA Goals**  
44  
45

1 **Relates to ANA Core Issues:**

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3  **Appropriate Nurse Staffing**

4  **Nursing Shortage**

5  **Workplace Rights**

6  **Workplace Health & Safety**

7  **Patient Safety & Advocacy**

## 2004 ANA HOUSE OF DELEGATES

<b>SUBJECT OF PROPOSAL:</b>	Inappropriate Use of Antimicrobials in Agriculture		
	(Action Report)		
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### **Suggested Implementation Activities:**

1. Endorsement of the Preservation of Antibiotics for Medical Treatment Act of 2004., S.1460/H.R. 2932.