

August 31, 2010

Please see Address List for U.S. Senators and House Representatives

RE: California Healthcare Associated Infection Advisory Board Support for HR 1549 and SB 619

I am submitting this letter in support of HR 1549 and SB 619. This legislation is a critical step we must take as we confront the specter of infectious conditions acquired in the healthcare setting.

Antibiotics are used in animal husbandry and the agricultural industry to promote growth and productivity. It has been established that the non-therapeutic utilization of antibiotics in the agriculture industry contributes to the development of antibiotic resistance in organisms in the natural environment.<sup>1,2,3</sup> The tendency for any reproducing organism to survive exposure to an antibiotic intended to eliminate it is driven by the environmental pressure exerted against the entire population of organisms by the antibiotic in question, particularly when the antibiotic doses are subtherapeutic. As an example, people living their entire lives in a desert community without access or exposure to a body of water rarely learn to swim because there is simply no pressure to do so. Similarly, the selection of a subpopulation of bacteria with the capacity to resist treatment with an antibiotic is minimized if the bacterial population is not exposed to a related antibiotic until it is necessary to treat an infection.

Research in Denmark has documented that the elimination of non-therapeutic antibiotic use in animal husbandry practice did not diminish productivity or growth rate in animals or end products in the poultry or swine industry.<sup>4</sup> Nor was there an increase the levels of bacterial colonization in swine and poultry after the discontinuation of growth promoting antibiotics.<sup>5</sup> Therefore, concerns from the industry regarding diminished productivity and increased risk of bacterial contamination appear unfounded. The impact upon the amount of feed needed per unit production (“feed-conversion ratio”) may be minimally increased, but the answer to this question remains obscure.<sup>6</sup>

Support for HR 1549 and SB 619 is far-reaching through the health care industry, in particular from infectious disease specialists and health organizations. Veterinarians themselves remain divided about the use of Antibiotic Growth Promoters. The Institute of Medicine’s (IOM) Board on Global Health recommended in 2003 that “substantial efforts must be made to

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<sup>1</sup> Alliance for the Prudent Use of Antibiotics (APUA). 2001. Antibiotic resistance: synthesis of recommendations by expert policy groups. WHO/CDS/CSR/DRS/2001.10. Geneva: WHO.

<sup>2</sup> CDC. 2001. Public Health Action Plan to Combat Antimicrobial Resistance. National Center for Infectious Diseases, Centers for Disease Control and Prevention. Atlanta, GA [Online]. Available: <http://www.cdc.gov/drugresistance/actionplan/html/index.htm>

<sup>3</sup> FDA (Food and Drug Administration). 2000. FDA Task Force on Antimicrobial Resistance: Key Recommendations and Report. Washington, DC. [Online]. Available: <http://www.fda.gov/oc/antimicrobial/taskforce2000.html>

<sup>4</sup> Emborg H, Ersbøll A, Heuer O, Wegener H. The effect of discontinuing the use of antimicrobial growth promoters on the productivity in the Danish broiler production. *Prev Vet Med* 2001;50:53–70.

<sup>5</sup> Evans, M and Wegener, H. Antimicrobial growth promoters and *Salmonella* spp., *Campylobacter* spp. in poultry and swine, Denmark, *Emerging Infectious Diseases* April 2003, Vol. 9, No. 4

<sup>6</sup> Emborg et al, 2001

decrease inappropriate overuse of antimicrobials in animals and agriculture...” As noted in the IOM report, to accomplish this goal will require a partnership between the CDC, FDA, professional health organizations, academia, health care delivery systems, the healthcare industry and the entire population of consumers of agricultural products.

The emerging threat of antimicrobial resistance and the potential impacts on human health is well-recognized in the health care field.<sup>7</sup> Aside from the cost of suffering the consequences of infection, the economical cost of inpatient treatment with the most recently developed antibiotics and the expense of research to develop new antibacterial weapons is enormous. The scientific evidence strongly supports the measures proposed in HR 1549 and SB 619. For these reasons I am in support of this legislation.

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<sup>7</sup> Bancroft, E *Antimicrobial Resistance*, Journal of the American Medical Association, Vol. 298, No. 15, October 17, 2007