

## JOINT PRESS STATEMENT

### MINISTRY OF HEALTH MALAYSIA AND MINISTRY OF AGRICULTURE AND AGRO-BASED INDUSTRY

#### **National Antibiotic Awareness Week Campaign, 2019**

The National Antibiotic Awareness Week Campaign 2019 is being held on November 14, 2019 at the National Institutes of Health, Setia Alam, Selangor. The campaign through the “One health” approach aims to raise awareness among the public and professionals on the effects of overuse and misuse of antibiotics in human and in the food chain towards the global health.

The rise of the antibiotic resistance is very serious and is one of the four health issues discussed at the United Nations General Assembly (UN). The World Health Organization (WHO), the World Animal Health Organization (OIE) and the Food and Agriculture Organization (FAO) have also declared antibiotic resistance as one of the threats to global health. This illustrates the great threat of antibiotic resistance to human and animal health worldwide.

National data shows *Streptococcus pneumoniae*, a bacterium that often causes infections in the community, has been 36% resistant to Erythromycin. On the other hand, *Acinetobacter Baumannii*, bacteria commonly found in hospital patients has been found to be 41% resistant to Meropenem, an antibiotic specific to treat difficult infections.

Antimicrobial resistance causes the effectiveness of antibiotics to treat illnesses or infections decreases. This is because infections caused by resistant bacteria often fail to respond to standard treatments that make the disease difficult to cure. It can increase the risk of death and the spread of disease to others. In addition, antibiotic resistance can also cause health problems to animals, where sick animals cannot be properly treated, and even worse if they are food-producing livestock. If the disease is out of control, the source of livelihoods will be less and less safe to eat. This can jeopardize food security.

Resistant bacteria can spread in several ways, for example from infected individuals to other individuals or through food chains such as the consumption of food based on livestock or plants contaminated with resistant bacteria. Infections can also occur when we are exposed to contaminated environments, such as water and soil containing resistant bacteria. In addition, the risk of antibiotic resistance can also occur if an individual is consuming foods containing antibiotic residues or is not taking antibiotics properly as advised by the medical doctor.

The Ministry of Health in collaboration with several other ministries and supported by the WHO has conducted a study on bacteria called *E.coli* in humans, the food chain and the environment. *E.coli* is a common bacteria found in the human and animal intestines. When *E.coli* becomes resistant to antibiotics, it can cause serious infections to humans.

Although resistant *E. coli* is often found in hospital patients, the results of this study also show that resistant *E.coli* is also found among healthy individuals in the community. The study also found the same organism in healthy chicken intestines from slaughterhouses and from wastewater in a residential and animal husbandry area. This can be attributed to pollution caused by sewage in the area. Studies have also shown that resistant *E. coli* found in hospital patients, in community, in poultry and in the environment are genetically linked.

The results of this study indicate that antibiotic resistance has occurred in all three domains of one health continuum and is interrelated. An immediate action from various parties is needed to reduce the unnecessary use of antibiotics to control the situation from becoming more serious. In addition to the authorities involved in the formulation of policies and guidelines, health and veterinary professionals as well as the public and the agricultural sector also play an important role in tackling this issue. Use antibiotics only for bacterial infections, antibiotics are not required for combating viral infections that cause common colds, sore throat or dengue fever. Patients need to adhere to their doctor's prescription if given antibiotics. The use of antibiotics for growth promotion purposes, or in healthy livestock should be avoided. Malaysia has banned the use of colistin antibiotics in livestock and will expand the list of antibiotics to be banned for growth promoters in the coming years.

The rational use of antibiotics is everyone's responsibility. Awareness about the proper use of antibiotics is important to keep us healthy as well as for future generations.