

**RECOMMENDATION
NATIONAL SEMINAR**

“The Global Threat of Antimicrobial Resistance: How Should We Act?”

Universitas Siswa Bangsa Internasional (USBI), Jakarta, Saturday, 22 March 2014

The finalization of this document had been done by drafting team with the final inputs and comments from speakers and other key source - person who also attending the seminar, then disseminated to all stakeholders. The comprehensive seminar results and its recommendations are below:

1. Antimicrobial resistance is a threat to public health, animal, and environment.
2. Antimicrobial resistance can occur naturally and acquired that were caused or influenced by risk factors.
3. The factors that contribute and cause for increasing antimicrobial resistance are:
 - Implementations of guidelines for antimicrobial usage not yet optimal.
 - The lack of control in sale and distribution of antimicrobial both in number and distribution arrangements, and also in antimicrobial usage.
 - The absence of national surveillance program for antimicrobial resistance.
 - The lack of antimicrobial resistance test and its data analysis.
 - The lack of laboratory quality assurance for antimicrobial resistance testing
4. In the livestock sector, antimicrobial resistance is driven by the increasing of animal products demand due to government program in increasing community protein consumption through livestock industrialization program, which give an impact on the extensive usage of veterinary drugs for treatment and uncontrolled usage of growth promoters as feed additive to increase livestock productivities
5. In human, the other important factors that urge to the antimicrobial resistance are inappropriate use of antibiotics (out of the rules or guidelines), free access for obtaining antibiotics, inappropriate of self medication, and irrational use of antibiotics.
6. On the environment, increasing environmental pollution by the remnants of antibiotic usage that caused by bad practices on the sanitary and other biosecurity aspects, or as a result of contamination from antibiotic residues, will cause the bacteria to become resistant in the environment. The resistant bacteria can carry and transmit its resistant genetic material to other bacteria, both of commensal and pathogen.
7. Antimicrobial resistance can give impacts especially in the failure of implementation of standards therapy/ treatment, increasing treatment or caring cost, and risk of death.
8. Antimicrobial resistance is the problem for human, animal, and environment health, therefore it is need to implement multi-sector strategies and approach for its prevention and control program.

9. Particularly in animal health sector, the recommendations of World Organization for Animal Health (OIE) for antimicrobial usage are below:

- Enforcement of rules and guidelines or standards, and also government regulation that related to the prudent use of antimicrobials and for better control system in production, registration, distribution, and use of antimicrobials.
- Good knowledge and monitoring on antimicrobial quantity usage in livestock production.
- Harmonization of national surveillance programs and incidence monitoring of antimicrobial resistance in animals, human and environment, and the implementation of international coordination and solidarity programs for developing countries.
- Implementation of permanent risk assessment measure.
- Prevention on hazardous practices.
- Imposition of legal punishment on the part of marketing activities and usage of false antimicrobial products.

10. The strategy and action plan which must be done together to prevent and reduce the occurrence of antimicrobial resistance are:

- Development and or refinement guidelines and regulations for the use of antimicrobials.
- Strengthening and increasing capacity building of laboratory testing.
- Development and strengthening of the antibiotic surveillance network in each area and between animal and human health aspects; including between laboratories and other related technical units, in the public and private sectors, and also in educational institutions or universities.
- Determination of better plan and its sustainability for monitoring and evaluation programs on the permitting process, distribution and antimicrobial usage.
- Joint research between animal health and human health, optimalization on implementation of monitoring research program, and increasing the collaboration on result dissemination program from various studies to encourage update information and knowledge exchange, through workshop, conferences, establishment of communication forum and cross-sectoral working groups.
- Dissemination of information and increasing better understanding and awareness of various stakeholders on the importance of the rational use of antimicrobials to encourage better thinking and behavior change.
- The development of national roadmap on antimicrobials resistance control program which is involving multi sector.

11. The implementation of the national strategy to control antimicrobial resistance must involve the participation and commitment of all stakeholders (government, farmers, drug companies, drug importers, livestock associations, employers of drug association, and other stakeholders), for the success of law enforcement.

Team Member:

1. **Dr. Anak Agung Gde Putra, DVM, SH, MSc, PhD** | Professional Consultant
2. **Pebi Purwo Suseno, DVM** | CIVAS Member and Staff of Directorate of Animal Health, Directorate General of Livestock and Animal Health Services
3. **Imron Suandy, DVM, MVPH** | CIVAS Member and Staff of Directorate of Veterinary Public Health, Directorate General of Livestock and Animal Health Services