

# 4 What is biosecurity?

---

The Avian Influenza virus is best transmitted via direct contact with sick and/or dead birds. Most human cases of AI have been related to such close contacts.

Biosecurity includes the management of all biological and environmental health risks associated with food. In the context of this Manual, biosecurity consists of a set of management practices which, when followed, collectively reduces the potential for the transmission / spread of disease-causing organisms - such as the Avian Influenza virus - onto and between sites, animals and humans.

Biosecurity comprises two main elements<sup>11</sup> - bio-containment and bio-exclusion. Bio containment refers to prevention of spread of the virus from infected premises and bio-exclusion refers to measures to

exclude infectious agents from uninfected ones.

**Biosecurity has three major components<sup>12</sup>:**

- **Isolation:** refers to the confinement of live animals within a controlled environment.
- **Traffic Control:** includes both the human traffic as well as the vehicular traffic within the controlled environment.
- **Sanitation:** addresses the cleanliness and disinfection of materials, people and equipment entering the controlled environment.

In simple words, biosecurity is the normal way to avoid unnecessary contact between animals and microbes, infected animals and healthy ones<sup>13</sup>. Biosecurity also applies to public health measures that will reduce the contact between animals and humans.

---

<sup>11</sup> FAO Recommendations on the Prevention, Control and Eradication of Highly Pathogenic Avian Influenza (HPAI) in Asia September 2004.  
<http://www.fao.org/ag/againfo/subjects/en/health/diseases-cards/27septrecomm.pdf>

<sup>12</sup> Poultry fact sheet no. 26, Cooperative Extension, University of California, March 1997.  
<http://animalscience.ucdavis.edu/avian/pfs26.htm>

<sup>13</sup> Prevention and control of avian flu in small scale poultry, A guide for veterinary paraprofessionals in Cambodia, FAO, 2005.  
<http://www.fao.org/ag/againfo/subjects/documents/ai/AI-paravets-guide.pdf>

Example: Biosecurity levels for rural/ urban husbandry practices<sup>11</sup>.

