

# Contents

## Part I Zoonoses in Food-Chain Animals with Public Health Relevance

<b>1 Important Public Health Zoonoses Through Cattle .....</b>	<b>3</b>
Mo D. Salman and Katie Steneroden	
<b>2 Zoonotic Diseases of Swine: Food-borne and Occupational Aspects of Infection .....</b>	<b>23</b>
Dipendra Thapaliya, Blake M. Hanson, Ashley Kates, Cassandra A. Klostermann, Rajeshwari Nair, Shylo E. Wardyn and Tara C. Smith	
<b>3 Small Ruminants and Zoonotic Infections: Live or Dead—Direct or Indirect.....</b>	<b>69</b>
Snorre Stuen	
<b>4 Zoonoses with Public Health Relevance in Poultry .....</b>	<b>103</b>
Hafez M. Hafez and Rüdiger Hauck	
<b>5 Bacterial Pathogens Associated with Aquaculture Products .....</b>	<b>125</b>
Iddya Karunasagar	
<b>6 <i>Campylobacter</i>: Animal Reservoirs, Human Infections, and Options for Control .....</b>	<b>159</b>
Jaap A. Wagenaar, Diane G. Newell, Ruwani S. Kalupahana and Lapo Mughini-Gras	
<b>7 The zoonotic agent <i>Salmonella</i>.....</b>	<b>179</b>
Wolfgang Rabsch, Angelika Fruth, Sandra Simon, Istvan Szabo and Burkhard Malorny	
<b>8 Enteropathogenic <i>Yersinia</i> spp.....</b>	<b>213</b>
Maria Fredriksson-Ahomaa	

<b>9 Enterohemorrhagic <i>E. coli</i> (EHEC): Environmental-Vehicle-Human Interface .....</b>	<b>235</b>
Helge Karch, Shana R. Leopold, Annelene Kossow, Alexander Mellmann, Robin Köck and Andreas Bauwens	
<b>10 Listeriosis: The Dark Side of Refrigeration and Ensiling .....</b>	<b>249</b>
Franz Allerberger, Zoltán Bagó, Steliana Huhulescu and Ariane Pietzka	
<b>11 Brucellosis: It is not only Malta! .....</b>	<b>287</b>
Mile Bosilkovski	
<b>12 Q Fever (<i>Coxiella burnetii</i>): A Blueprint for Outbreaks .....</b>	<b>317</b>
Hendrik-Jan Roest and Dimitrios Frangoulidis	
<b>13 Cysticercosis: A Preventable, but Embarrassing Neglected Disease Still Prevalent in Non-Developed Countries .....</b>	<b>335</b>
Agnès Fleury, Edda Sciutto, Aline S Aluja and Arturo Carpio	
<b>14 Toxoplasmosis: A Widespread Zoonosis Diversely Affecting Humans and Animals .....</b>	<b>355</b>
Florence Robert-Gangneux, Dominique Aubert and Isabelle Villena	
<b>Part II Zoonoses in food-chain and domestic animals: Focus on antibiotic resistance</b>	
<b>15 Extended-Spectrum <math>\beta</math>-Lactamase and AmpC <math>\beta</math>-Lactamase-Producing Bacteria in Livestock Animals .....</b>	<b>379</b>
Christa Ewers	
<b>16 Zoonotic Transmission of Antimicrobial Resistant Enterococci: A Threat to Public Health or an Overemphasised Risk? .....</b>	<b>407</b>
Valeria Bortolaia and Luca Guardabassi	
<b>17 Infections With Multidrug-Resistant Bacteria—Has the Post-Antibiotic Era Arrived in Companion Animals? .....</b>	<b>433</b>
Lothar H. Wieler, Birgit Walther, Szilvia Vincze, Sebastian Guenther and Antina Lübke-Becker	
<b>Part III Important zoonoses in non-food animals</b>	
<b>18 Influenza from a One Health Perspective: Infection by a Highly Versatile Virus .....</b>	<b>455</b>
Leslie A. Reperant and Albert D.M.E. Osterhaus	

<b>19 Important Zoonoses in Animals: Parapoxviruses: Extraordinary “Ball of Wool” Particle Shape—Masters of Local Infection and Immune Escape.....</b>	<b>487</b>
Mathias Büttner	
<b>20 Orthopoxviruses—Plagues of Mankind, Strategists in Immune Evasion, Teachers in Vaccination .....</b>	<b>497</b>
Claus-Peter Czerny	
<b>21 Elimination of Rabies—A Missed Opportunity .....</b>	<b>527</b>
Thomas Müller, Conrad Freuling, Charles C. Rupprecht, Leonard Both, Anthony R. Fooks, Tiziana Lembo, Lea Knopf, Deborah J. Briggs and Louise Taylor	

#### **Part IV Zoonoses in Domestic Animals**

<b>22 Dogs and Transmission of Infection to Man, “Respected Member of the Family?” .....</b>	<b>575</b>
Frans van Knapen and Paul Overgaauw	
<b>23 Cat-Related Zoonoses: Killing You Softly with Feces and Fleas .....</b>	<b>587</b>
Andreas Sing	
<b>24 Public Health and Rodents: A Game of Cat and Mouse .....</b>	<b>629</b>
Bastiaan G. Meerburg	
<b>25 Equine Zoonoses: Consequences of Horse-Human Interactions.....</b>	<b>643</b>
Roberta M. Dwyer	
<b>26 Animal Bites and Zoonoses: From A to Z: Alligators to Zebras.....</b>	<b>659</b>
Ellie J. C. Goldstein and Fredrick M. Abrahamian	

#### **Part V Zoonoses of Wildlife Species**

<b>27 Vector-Borne Zoonoses .....</b>	<b>683</b>
Filipe Dantas-Torres and Domenico Otranto	
<b>28 Bat-Related Zoonoses .....</b>	<b>697</b>
Bruno B. Chomel, Matthew J. Stuckey, Henri-Jean Boulouis and Alvaro Aguilar- Setién	
<b>29 Cystic and Alveolar Echinococcosis: Fraternal Twins both in Search of Optimal Treatment .....</b>	<b>715</b>
Dominique A. Vuitton and Enrico Brunetti	

<b>30 Hantaviruses—Infections, Epidemiology and Hosts .....</b>	<b>749</b>
Sandra S. Essbauer and Ellen Krautkrämer	
<b>31 Human African Trypanosomiasis: The Smoldering Scourge of Africa.....</b>	<b>785</b>
August Stich	
<b>Part VI Waterborne Zoonoses</b>	
<b>32 Waterborne Zoonoses: <i>Cryptosporidium</i> and Cryptosporidiosis: A Small Parasite that Makes a Big Splash .....</b>	<b>803</b>
Lucy J. Robertson	
<b>33 Giardiasis: A Zoonotic Infection or Not?.....</b>	<b>821</b>
Simone M. Cacciò	
<b>34 Leptospirosis and Leptospire—The Silent Assassins .....</b>	<b>849</b>
Scott B. Craig, Sarah J. Wynwood, Trudi A. Collet, Steven L. Weier and David B. McKay	
<b>35 Glanders &amp; Melioidosis: A Zoonosis and a Sapronosis— “Same Same, but Different”.....</b>	<b>859</b>
Caoimhe Nic Fhogartaigh and David A. B. Dance	
<b>Part VII Emerging and Re-emerging Zoonoses</b>	
<b>36 Zoonotic Aspects of Tuberculosis: Disease of the Past or Re-emerging Zoonosis? .....</b>	<b>891</b>
Anita Luise Michel	
<b>37 Hepatitis E: The Commonest Viral Zoonosis Worldwide? .....</b>	<b>915</b>
Harry R Dalton, Jacques Izopet, Malcolm Banks, Richard Bendall and Nassim Kamar	
<b>38 West Nile Virus: From Africa to Europe, America, and Beyond.....</b>	<b>937</b>
Lyle R. Petersen	
<b>39 Crimean-Congo Haemorrhagic Fever Virus, an Emerging and Re-Emerging Pathogen .....</b>	<b>977</b>
Felicity Jane Burt and Dominique Goedhals	
<b>40 A Review of Hendra Virus and Nipah Virus Infections in Man and Other Animals .....</b>	<b>997</b>
Kim Halpin and Paul Rota	

## **Part VIII Nature is the Greatest Bioterrorist: Zoonotic Pathogens as Bioterroristic Agents**

- 41 Dangerous Viral Pathogens of Animal Origin: Risk and Biosecurity** ..... 1015  
Jean-Paul Gonzalez and Gavin Macgregor-Skinner
- 42 Bacterial Zoonotic Pathogens as Bioterroristic Agents** ..... 1063  
Stefan Hörmansdorfer

## **Part IX Controversial or Non-resolved Issues**

- 43 Bovine Paratuberculosis and Human Crohn's Disease—Is There a Zoonotic Linkage?** ..... 1079  
Erdmute Neuendorf and Nikolaus Ackermann
- 44 Clostridia: *Clostridium botulinum* and *Clostridium difficile*: Ubiquitous Spore-Forming Bacteria as New Zoonotic Pathogens?** .... 1097  
Ute Messelhäuser

## **Part X Economic and Ecological Aspects of Zoonoses**

- 45 Economic Aspects of Zoonoses: Impact of Zoonoses on the Food Industry** ..... 1107  
Sara Babo Martins, Barbara Häsler and Jonathan Rushton
- 46 Zoonoses of Poverty: Measuring and Managing the Multiple Burdens of Zoonoses and Poverty** ..... 1127  
Delia Grace
- Index** ..... 1139

Zoonoses - Infections Affecting Humans and Animals

Focus on Public Health Aspects

Sing, A. (Ed.)

2015, XIX, 1143 p. 40 illus., 20 illus. in color., Hardcover

ISBN: 978-94-017-9456-5