



Antimicrobial Resistance in the Environment

By Patricia L. Keen, Mark H. M. Montforts

[Download now](#)

[Read Online](#) 

Antimicrobial Resistance in the Environment By Patricia L. Keen, Mark H. M. Montforts

Examines effects of the environmental distribution of antimicrobial resistance genes on human health and the ecosystem

Resistance genes are everywhere in nature—in pathogens, commensals, and environmental microorganisms. This contributed work shows how the environment plays a pivotal role in the development of antimicrobial resistance traits in bacteria and the distribution of resistant microbial species, resistant genetic material, and antibiotic compounds. Readers will discover the impact of the distribution in the environment of antimicrobial resistance genes and antibiotics on both the ecosystem and human and animal health.

Antimicrobial Resistance in the Environment is divided into four parts:

- Part I, Sources, including ecological and clinical consequences of antibiotic resistance by environmental microbes
- Part II, Fate, including strategies to assess and minimize the biological risk of antibiotic resistance in the environment
- Part III, Antimicrobial Substances and Resistance, including antibiotics in the aquatic environment
- Part IV, Effects and Risks, including the effect of antimicrobials used for non-human purposes on human health

Recognizing the intricate links among overlapping complex systems, this book examines antimicrobial resistance using a comprehensive ecosystem approach. Moreover, the book's multidisciplinary framework applies principles of microbiology, environmental toxicology, and chemistry to assess the human and ecological risks associated with exposure to antibiotics or antibiotic resistance genes that are environmental contaminants.

Each chapter has been written by one or more leading researchers in such fields as microbiology, environmental science, ecology, and toxicology. Comprehensive reference lists at the end of all chapters serve as a gateway to the primary research in the field.

Presenting and analyzing the latest findings in a field of growing importance to

human and environmental health, this text offers readers new insights into the role of the environment in antimicrobial resistance development, the dissemination of antimicrobial resistant genetic elements, and the transport of antibiotic resistance genes and antibiotics.

 [Download Antimicrobial Resistance in the Environment ...pdf](#)

 [Read Online Antimicrobial Resistance in the Environment ...pdf](#)

Antimicrobial Resistance in the Environment

By Patricia L. Keen, Mark H. M. M. Montforts

Antimicrobial Resistance in the Environment By Patricia L. Keen, Mark H. M. M. Montforts

Examines effects of the environmental distribution of antimicrobial resistance genes on human health and the ecosystem

Resistance genes are everywhere in nature—in pathogens, commensals, and environmental microorganisms. This contributed work shows how the environment plays a pivotal role in the development of antimicrobial resistance traits in bacteria and the distribution of resistant microbial species, resistant genetic material, and antibiotic compounds. Readers will discover the impact of the distribution in the environment of antimicrobial resistance genes and antibiotics on both the ecosystem and human and animal health.

Antimicrobial Resistance in the Environment is divided into four parts:

- Part I, Sources, including ecological and clinical consequences of antibiotic resistance by environmental microbes
- Part II, Fate, including strategies to assess and minimize the biological risk of antibiotic resistance in the environment
- Part III, Antimicrobial Substances and Resistance, including antibiotics in the aquatic environment
- Part IV, Effects and Risks, including the effect of antimicrobials used for non-human purposes on human health

Recognizing the intricate links among overlapping complex systems, this book examines antimicrobial resistance using a comprehensive ecosystem approach. Moreover, the book's multidisciplinary framework applies principles of microbiology, environmental toxicology, and chemistry to assess the human and ecological risks associated with exposure to antibiotics or antibiotic resistance genes that are environmental contaminants.

Each chapter has been written by one or more leading researchers in such fields as microbiology, environmental science, ecology, and toxicology. Comprehensive reference lists at the end of all chapters serve as a gateway to the primary research in the field.

Presenting and analyzing the latest findings in a field of growing importance to human and environmental health, this text offers readers new insights into the role of the environment in antimicrobial resistance development, the dissemination of antimicrobial resistant genetic elements, and the transport of antibiotic resistance genes and antibiotics.

Antimicrobial Resistance in the Environment By Patricia L. Keen, Mark H. M. M. Montforts Bibliography

- Sales Rank: #3314801 in Books
- Published on: 2012-01-24
- Original language: English

- Number of items: 1
- Dimensions: 10.25" h x 1.55" w x 7.30" l, 2.65 pounds
- Binding: Hardcover
- 632 pages



[Download Antimicrobial Resistance in the Environment ...pdf](#)



[Read Online Antimicrobial Resistance in the Environment ...pdf](#)

Download and Read Free Online Antimicrobial Resistance in the Environment By Patricia L. Keen, Mark H. M. M. Montforts

Editorial Review

Review

“This is an excellent publication, including primary data and detailed explanations of specific studies and techniques as well as review chapters. As both an introduction to a research area and a call for greater study and thought into how we regulate antimicrobial use in all spheres of society to limit further resistance, I highly recommend *Antimicrobial resistance in the environment*.” (*Phenotype*, 1 February 2013)

“This book will be an ideal read for anyone seeking a comprehensive introduction to the many reservoirs and routes a resistance gene may pass through before or after its appearance in a clinical setting. Even experts in the field stand to gain knowledge regarding the complex web that is the issue of antibiotic resistance in the environment.” (*The Quarterly Review of Biology*, 1 December 2012)

From the Back Cover

Examines effects of the environmental distribution of antimicrobial resistance genes on human health and the ecosystem

Resistance genes are everywhere in nature—in pathogens, commensals, and environmental microorganisms. This contributed work shows how the environment plays a pivotal role in the development of antimicrobial resistance traits in bacteria and the distribution of resistant microbial species, resistant genetic material, and antibiotic compounds. Readers will discover the impact of the distribution in the environment of antimicrobial resistance genes and antibiotics on both the ecosystem and human and animal health.

Antimicrobial Resistance in the Environment is divided into four parts:

- Part I, Sources, including ecological and clinical consequences of antibiotic resistance by environmental microbes
- Part II, Fate, including strategies to assess and minimize the biological risk of antibiotic resistance in the environment
- Part III, Antimicrobial Substances and Resistance, including antibiotics in the aquatic environment
- Part IV, Effects and Risks, including the effect of antimicrobials used for non-human purposes on human health

Recognizing the intricate links among overlapping complex systems, this book examines antimicrobial resistance using a comprehensive ecosystem approach. Moreover, the book's multidisciplinary framework applies principles of microbiology, environmental toxicology, and chemistry to assess the human and ecological risks associated with exposure to antibiotics or antibiotic resistance genes that are environmental contaminants.

Each chapter has been written by one or more leading researchers in such fields as microbiology, environmental science, ecology, and toxicology. Comprehensive reference lists at the end of all chapters serve as a gateway to the primary research in the field.

Presenting and analyzing the latest findings in a field of growing importance to human and environmental health, this text offers readers new insights into the role of the environment in antimicrobial resistance development, the dissemination of antimicrobial resistant genetic elements, and the transport of antibiotic resistance genes and antibiotics.

Users Review

From reader reviews:

May Chapa:

Nowadays reading books become more than want or need but also be a life style. This reading habit give you lot of advantages. The advantages you got of course the knowledge your information inside the book this improve your knowledge and information. The info you get based on what kind of e-book you read, if you want attract knowledge just go with education books but if you want feel happy read one with theme for entertaining such as comic or novel. The Antimicrobial Resistance in the Environment is kind of publication which is giving the reader capricious experience.

Clarice Stephens:

In this age globalization it is important to someone to get information. The information will make professionals understand the condition of the world. The fitness of the world makes the information easier to share. You can find a lot of referrals to get information example: internet, newspapers, book, and soon. You will observe that now, a lot of publisher in which print many kinds of book. Often the book that recommended to you is Antimicrobial Resistance in the Environment this guide consist a lot of the information with the condition of this world now. This book was represented just how can the world has grown up. The vocabulary styles that writer require to explain it is easy to understand. The actual writer made some research when he makes this book. Honestly, that is why this book ideal all of you.

Craig Palmer:

You may get this Antimicrobial Resistance in the Environment by look at the bookstore or Mall. Just viewing or reviewing it may to be your solve trouble if you get difficulties to your knowledge. Kinds of this e-book are various. Not only through written or printed but additionally can you enjoy this book simply by e-book. In the modern era such as now, you just looking by your local mobile phone and searching what their problem. Right now, choose your ways to get more information about your book. It is most important to arrange you to ultimately make your knowledge are still revise. Let's try to choose correct ways for you.

Heather Bly:

Do you like reading a e-book? Confuse to looking for your selected book? Or your book had been rare? Why so many concern for the book? But virtually any people feel that they enjoy for reading. Some people likes reading through, not only science book and also novel and Antimicrobial Resistance in the Environment as well as others sources were given knowledge for you. After you know how the good a book, you feel want to read more and more. Science guide was created for teacher as well as students especially. Those publications

are helping them to put their knowledge. In some other case, beside science guide, any other book likes Antimicrobial Resistance in the Environment to make your spare time more colorful. Many types of book like this.

Download and Read Online Antimicrobial Resistance in the Environment By Patricia L. Keen, Mark H. M. M. Montforts #3U5F1N2IRJ9

Read Antimicrobial Resistance in the Environment By Patricia L. Keen, Mark H. M. M. Montforts for online ebook

Antimicrobial Resistance in the Environment By Patricia L. Keen, Mark H. M. M. Montforts Free PDF d0wnl0ad, audio books, books to read, good books to read, cheap books, good books, online books, books online, book reviews epub, read books online, books to read online, online library, greatbooks to read, PDF best books to read, top books to read Antimicrobial Resistance in the Environment By Patricia L. Keen, Mark H. M. M. Montforts books to read online.

Online Antimicrobial Resistance in the Environment By Patricia L. Keen, Mark H. M. M. Montforts ebook PDF download

Antimicrobial Resistance in the Environment By Patricia L. Keen, Mark H. M. M. Montforts Doc

Antimicrobial Resistance in the Environment By Patricia L. Keen, Mark H. M. M. Montforts Mobipocket

Antimicrobial Resistance in the Environment By Patricia L. Keen, Mark H. M. M. Montforts EPub

3U5F1N2IRJ9: Antimicrobial Resistance in the Environment By Patricia L. Keen, Mark H. M. M. Montforts