1. Record Nr. UNINA9910461493803321

Titolo	Veterinary toxicology [[electronic resource]] : basic and clinical principles / / edited by Ramesh C. Gupta
Pubbl/distr/stampa	Amsterdam ; ; Boston, : Elsevier, : Academic Press, 2012
ISBN	1-283-73508-3 0-12-385927-1
Edizione	[2nd ed.]
Descrizione fisica	1 online resource (1455 p.)
Altri autori (Persone)	GuptaRamesh C <1949-> (Ramesh Chandra)
Disciplina	636.08959
Soggetti	Veterinary toxicology Veterinary medicine Electronic books.
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Previous ed.: 2007.
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Front Cover; Veterinary Toxicology: Basic and Clinical Principles; Copyright Page; Contents; Preface; List of Contributors; I. General; 1 Veterinary toxicology: a historical perspective; The Emergence of Veterinary Toxicology; Professional Organization and Academic Recognition of Veterinary Toxicology; Published Veterinary Toxicology Literature; ...And Where Will Veterinary Toxicology Go From Here?; References; 2 Concepts in veterinary toxicology; Introduction; Historical Perspective; Historical events; Textbooks; Organizations; Evolution of Veterinary Toxicology Roots in veterinary medicine and toxicologyEmergence of science-based toxicology; Toxicology joined to the risk paradigm; A Framework for Acquiring Information; Linkages from sources to health impacts; Toxicokinetics; Toxicodynamics; Veterinary toxicology is multi-faceted; Sources of Information; Case observations in the species of interest; Epidemiological/epizootiological studies; Experimentation; Schematic experimental designs; Acquiring toxicokinetic data; Acquiring exposure (dose)-response data; Toxicologic Descriptors; Toxicology rooted in observations; Quantifying exposure Describing absorption, distribution, metabolism and excretionToxicant-induced responses; Describing exposure-response relationships for non-cancer endpoints; Cancer as an endpoint; New

potential endpoints; Conclusions and Summary; Dedication; Acknowledgments; References; 3 Toxicokinetics; Introduction; Underlying Physiology; Absorption; Distribution; Biotransformation; Excretion; Traditional (Compartmental) Toxicokinetic Models; Introduction; Measures of absorption; Volume of distribution; Clearance; Half-life; Flip-flop kinetics; Residues; Physiologically Based Toxicokinetics; Introduction
Model constructionParameter estimation and identifiability; Model validation; Applications; Conclusions; References; 4 Factors affecting chemical toxicity; Introduction; Individual Factors; Species; Anatomical and physiological features; Enzyme expression and biotransformation pathways; Breed; Age; Pathophysiological conditions; Stress; Disease; Pregnancy; Lactation; Non-Individual Factors; Physico-chemical characteristics of the poison; Environmental conditions; Diet; Routes of exposure; Previous or coincident exposure to other chemicals (drug-drug interactions); Conclusion; References
5 Toxicological testing: in vivo and in vitro modelsIntroduction; In Vivo Models in Toxicity Testing; Introduction; Animal welfare in toxicity testing; Routes of test compound administration; Reproductive toxicity tests; Developmental toxicity testing; Cutaneous toxicity testing; Genotoxicity testing; Carcinogenicity tests; Neurotoxicity; Immunotoxicity; Transgenic animals in toxicity testing; Limitations and implications of animal use in toxicological testing; In Vitro Models of Toxicity Testing; Introduction; Types of cell culture system used in toxicity testing
Endpoint determination for in vitro testing systems

Sommario/riassunto

Veterinary Toxicology is a unique single reference that teaches the basic principles of veterinary toxicology to any student at the DVM, MS or PhD level and will continue to serve as a clinical reference for practicing veterinary toxicologists, poison control centers, marine biologists, environmentalists, and animal scientists. While most comparable texts are primarily directed toward the field of human toxicology, this is the one text needed to thoroughly prepare future veterinarians on the newest approaches for diagnosing poisoning cases in all animals from chemicals and plants of a d