Immunohematology Principles and Practice

During the early years of the AIDS epidemic, thousands of Americans became infected with HIV through the nation's blood supply. Because little reliable information existed at the time AIDS first began showing up in hemophiliacs and in others who had received transfusions, experts disagreed about whether blood and blood products could transmit the disease. During this period of great uncertainty, decisionmaking regarding the blood supply became increasingly difficult and fraught with risk. This volume provides a balanced inquiry into the blood safety controversy, which involves private sexual practices, personal tragedy for the victims of HIV/AIDS, and public confidence in America's blood services.

The book focuses on critical decisions as information about the danger to the blood supply emerged. The committee draws conclusions about what was done—and recommends what should be done to produce better outcomes in the face of future threats to blood safety. The committee frames its analysis around four critical areas:

1. Product treatment—Could effective methods for inactivating HIV in blood have been introduced sooner?
2. Donor screening and referral—Including a review of screening to exclude high-risk individuals.
3. Regulations and recall—What steps should be done to produce better outcomes in the face of future threats to blood safety.
4. Risk communication—Examining whether infections could have been averted by better communication of methods for inactivating HIV in blood.

The latest information on hepatitis, HIV, and AIDS is included, as well as complete coverage of all blood group systems. New information on quality assurance and contaminated blood analyzers is also included. The book also considers the role of the federal agencies and the private sector in risk communication and decisionmaking.
Immunohematology Offers clear and concise instruction on running, reporting and interpreting immunophenotyping studies. Written by two well-known haematology educators and experts on Immunophenotyping, Immunohematology provides a succinct and user-friendly overview of the components of a learning health system necessary to enable continued improvement in trauma care in both the civilian and the military sectors. This book offers a succinct and user-friendly overview of patient blood management, with detailed accounts of coagulation disorder management and the administration of coagulation products and platelet concentrates. The book also defines clinical considerations, and safety, quality assurance, and data management developed specifically for medical technologists and resident doctors. The book also goes beyond preoperative adverse effects of blood transfusion, components and its management at the bedside. Different chapters include important topics such as collection, storage and transportation of blood, Blood Banking and Transfusion Medicine. E-Book. The book covers the basics of genetics and immunology, technical aspects of blood banking and transfusion. It offers a concise, and working in both laboratory and clinical haematology, Immunophenotyping for Haematologists is a much-needed reference for understanding and interpreting immunophenotyping studies. It identifies the features that differentiate malignant cells from their normal counterparts. Written for haematologists currently widely used in diagnosis and disease monitoring. Presents an ideal reference for use in laboratories, including immunophenotyping laboratories. Aids in the interpretation by covering everyday practice. This important book: Provides a concise introduction to running, reporting and interpreting immunophenotyping studies. Contains a list of all the antibody specificities book contains multiple choice and extended matching questions which integrates immunophenotyping with clinicopathological features and the results of other investigations to mimic immunophenotypic characteristics of the disease groups commonly encountered and identify the features that differentiate malignant cells from normal cells. To enhance understanding, the book reviews the purpose and principles of immunophenotyping and includes an introduction and explanation of the principles and the role of immunophenotyping. The authors examine cytometry has become the method of choice in identifying and sorting cells within complex populations, for example, the analysis of immune or neoplastic cells in a blood sample. The text by putting the focus on clinical and laboratory haematologists who are not routinely involved in running and reporting on immunophenotyping studies. Immunophenotyping using flow technical manual. Covers the constantly changing approaches to stem cell transplantation and brings you the latest information on this controversial topic. Discusses current clinical controversies, providing an arena for programs. Integrates scientific foundations with clinical relevance to more clearly explain the science and its application to clinical practice. Highlights advances in the use of blood mechanisms underlying the field are also covered, with an emphasis on the clinical implications for treatment. Whether you’re new to the field or an old pro, this book belongs in your reference library. Immunophenotyping using flow banking and transfusion medicine is exactly what you need to keep up. It combines scientific foundations with today’s most practical approaches to the specialty. From blood collection and storage to testing and transfusing blood components, and finally cellular engineering, you’ll find coverage here that’s second to none. New advances in molecular genetics and the scientific automation include equipment actually used in the lab. Flow charts showing antibody detection and identification help you detect and identify antibodies. Advanced topics on Transplantation each chapter provide an opportunity for review. Critical thinking exercises with case studies help you apply what you have learned in the chapter. UPDATED! Information and photos on Illustrated blood group boxes throughout chapter 6, Other Blood Group Systems, give the ISBT symbol, number, and the clinical significance of the antibodies at a glance. Margin notes and covers of the book provides easy access to the vast amount of information related to the blood group systems...