

# Table of Contents

Visit [www.healthreferenceseries.com](http://www.healthreferenceseries.com) to view *A Contents Guide to the Health Reference Series*, a listing of more than 15,000 topics and the volumes in which they are covered.

Preface .....	xi
---------------	----

## ***Part I: Understanding Blood and the Circulatory System***

Chapter 1—Blood Function and Composition .....	3
Chapter 2—Blood Types .....	15
Section 2.1—Introduction to Blood Types .....	16
Section 2.2—Blood Types in the United States .....	19
Chapter 3—Donating and Preserving Blood .....	21
Section 3.1—Frequently Asked Questions about Blood Donation .....	22
Section 3.2—Tips for a Good Donation Experience .....	24
Section 3.3—Apheresis .....	26
Section 3.4—Cord Blood Banking .....	28
Chapter 4—Maintaining a Healthy Circulatory System .....	31
Chapter 5—How Aging Affects the Heart and Blood Vessels .....	37

**Part II: Diagnosing and Treating Blood and Circulatory Disorders**

Chapter 6—Blood Tests .....	45
Section 6.1—Blood Typing.....	46
Section 6.2—Complete Blood Count .....	50
Section 6.3—Fibrinogen Test .....	54
Section 6.4—Reticulocyte Count .....	57
Chapter 7—Bone Marrow Tests .....	61
Chapter 8—Bleeding and Clotting Tests .....	65
Section 8.1—Bleeding Time.....	66
Section 8.2—Partial Thromboplastin Time .....	68
Chapter 9—Tests Used in the Assessment of Vascular Disease.....	71
Chapter 10—Commonly Used Medications for Cardiovascular Health .....	77
Section 10.1—Facts about Using Aspirin .....	78
Section 10.2—Anticoagulants and Antiplatelet Agents .....	81
Section 10.3—Using Coumadin Safely .....	84
Chapter 11—Commonly Used Medications for Anemia .....	91
Section 11.1—Iron Supplements.....	92
Section 11.2—Erythropoiesis-Stimulating Agents .....	95
Chapter 12—Blood Transfusion.....	99
Chapter 13—Bone Marrow and Stem Cell Transplants .....	107
Chapter 14—Chelation Therapy: A Controversial Treatment Approach.....	117

**Part III: Blood Disorders**

Chapter 15—Anemia .....	127
Section 15.1—Anemia: An Overview.....	128
Section 15.2—Anemia of Chronic Disease.....	135
Section 15.3—Aplastic Anemia .....	138

Section 15.4—Fanconi Anemia.....	145
Section 15.5—Glucose-6-Phosphate Dehydrogenase (G6PD) Deficiency.....	154
Section 15.6—Hemoglobin C Disease .....	157
Section 15.7—Hemoglobin E Disease .....	159
Section 15.8—Iron-Deficiency Anemia.....	162
Section 15.9—Pernicious (Megaloblastic) Anemia.....	165
Section 15.10—Sickle Cell Disease .....	167
Section 15.11—Spherocytosis.....	173
Section 15.12—Thalassemia .....	176
Chapter 16—Hemochromatosis .....	181
Chapter 17—Leukemia.....	187
Section 17.1—Acute Lymphocytic Leukemia .....	188
Section 17.2—Chronic Lymphocytic Leukemia .....	196
Section 17.3—Acute Myelogenous Leukemia .....	203
Section 17.4—Chronic Myelogenous Leukemia .....	212
Section 17.5—Hairy Cell Leukemia.....	218
Chapter 18—Lymphoma.....	225
Section 18.1—Hodgkin Lymphoma.....	226
Section 18.2—Non-Hodgkin Lymphoma.....	233
Section 18.3—Waldenström Macroglobulinemia.....	244
Chapter 19—Myeloproliferative Disorders.....	249
Section 19.1—Idiopathic Myelofibrosis.....	250
Section 19.2—Myelodysplastic Syndrome .....	256
Section 19.3—Polycythemia Vera.....	260
Section 19.4—Thrombocythemia and Thrombocytosis.....	267

Chapter 20—Plasma Cell Disorders .....	277
Section 20.1—Amyloidosis.....	278
Section 20.2—Cryoglobulinemia .....	282
Section 20.3—Monoclonal Gammopathy of Undetermined Significance .....	286
Section 20.4—Multiple Myeloma .....	287
Chapter 21—Rh Disease.....	291
Chapter 22—White Blood Cell Disorders .....	295
Section 22.1—Hypereosinophilic Syndrome....	296
Section 22.2—Histiocytosis .....	300
Section 22.3—Lymphocytopenia .....	305
Section 22.4—Neutropenia.....	309

#### ***Part IV: Bleeding and Clotting Disorders***

Chapter 23—What Are Hereditary Bleeding and Clotting Disorders?.....	317
Chapter 24—Hemophilia.....	323
Chapter 25—Von Willebrand Disease.....	335
Chapter 26—Factor V Leiden.....	341
Chapter 27—Factor Deficiencies.....	345
Chapter 28—Hereditary Hemorrhagic Telangiectasia .....	353
Chapter 29—Bruises: When to See a Doctor .....	355
Chapter 30—Antiphospholipid Antibody Syndrome.....	359
Chapter 31—Disseminated Intravascular Coagulation .....	365
Chapter 32—Hypercoagulation.....	371
Section 32.1—Excessive Blood Clotting.....	372
Section 32.2—Deep Vein Thrombosis.....	375
Section 32.3—Pulmonary Embolism.....	380
Section 32.4—Preventing and Treating Blood Clots.....	385

Chapter 33—Thrombocytopenia .....	389
Chapter 34—Idiopathic Thrombocytopenic Purpura .....	397
Chapter 35—Thrombotic Thrombocytopenic Purpura.....	403
Chapter 36—Thrombophilia.....	407

***Part V: Circulatory Disorders***

Chapter 37—Aneurysm .....	413
Chapter 38—Aortic Dissection .....	421
Chapter 39—Arteritis .....	427
Section 39.1—Takayasu Arteritis .....	428
Section 39.2—Temporal Arteritis.....	430
Chapter 40—Atherosclerosis .....	433
Chapter 41—Blood Pressure Disorders .....	441
Section 41.1—Hypertension (High Blood Pressure).....	442
Section 41.2—Portal Hypertension .....	446
Section 41.3—Preeclampsia .....	449
Section 41.4—Renovascular Hypertension .....	452
Section 41.5—Hypotension (Low Blood Pressure) .....	454
Section 41.6—Shock.....	465
Section 41.7—Syncope (Fainting).....	468
Chapter 42—Carotid Artery Disease .....	471
Chapter 43—Coronary Artery and Heart Disease .....	475
Section 43.1—Coronary Artery Disease.....	476
Section 43.2—Angina.....	485
Section 43.3—Heart Attack .....	488
Chapter 44—Fibromuscular Dysplasia .....	493
Chapter 45—Klippel-Trénaunay Syndrome.....	499

Chapter 46—Peripheral Vascular Disease .....	503
Section 46.1—Buerger Disease (Thromboangiitis Obliterans).....	504
Section 46.2—Claudication .....	506
Section 46.3—Critical Limb Ischemia .....	509
Section 46.4—Erythromelalgia .....	512
Section 46.5—Peripheral Artery Disease.....	516
Section 46.6—Raynaud Phenomenon .....	521
Chapter 47—Renovascular Artery Stenosis and Thrombosis.....	525
Chapter 48—Sepsis.....	531
Chapter 49—Stroke .....	535
Chapter 50—Vascular Birthmarks: Hemangiomas and Vascular Malformations .....	541
Chapter 51—Vasculitis .....	543
Chapter 52—Venous Disorders .....	555
Section 52.1—Arteriovenous Fistula .....	556
Section 52.2—Chronic Venous Insufficiency...	558
Section 52.3—Thrombophlebitis .....	560
Section 52.4—Varicose Veins and Spider Veins.....	563
 <b><i>Part VI: Additional Help and Information</i></b>	
Chapter 53—Glossary of Terms Related to Blood and Circulatory Disorders.....	573
Chapter 54—Directory of Resources Related to Blood and Circulatory Disorders.....	579
<b>Index.....</b>	<b>589</b>