CONTENTS

List of figures x List of tables xvi Acknowledgements xvii

01 Introduction: The importance of health and safety 1

Origin and content of this book 4 Conclusion 6

02 Basic principles of health and safety 7

The cultural approach to health and safety 8
Health and safety law 11
Health and safety management: Basic principles 24
Plan, do, check, act 31
Conclusion 31

O3 Physical health issues 33

Musculoskeletal disorders 33 Working hours, night work and shift work 35 Noise 38 Asbestos 40 Infectious diseases 41 Skin conditions 42 Conclusion 43

04 Mental health 44

Andrea Newton 44

Introduction 44

Workplace issues 45

The importance of effective leadership 50

Conclusion: Being a decent employer 58

O5 Drug and alcohol issues 59

The effect of drugs and alcohol on driving 59 Alcoholism and addiction 61 Alcohol and drug misuse 64 Developing a drug and alcohol policy 64 Alcohol and drug testing 68 Conclusion 70

O6 Personal protection equipment 71

The importance of PPE 71 The law relating to PPE 73 Risk assessment for PPE 74 Types of PPE 76 Conclusion 95

O7 Safe storage and warehouse layout 96

Packaging 96
Pallet safety 100
Racking 104
Warehouse layout 113
Storage of hazardous goods 121
Conclusion 124

08 Manual handling 125

Legal requirements 125 Avoiding manual handling 129 Alternatives to manual handling 129 Risk assessments 140 Pushing and pulling a load 159 Conclusion 167

09 Materials handling equipment 169

UK legal requirements 169 US requirements 175 Training requirements 175 Safety features available on forklifts 185 Pre-use inspections 195 Forklift stability 198 Good and bad practice 202 Conclusion 206

10 Fire safety 207

Legal requirements 207 Risk assessments 209 Fire detection and alarms 221 Fire fighting equipment 226 Sprinkler systems 230 Escape 237 Conclusion 242

11 Yard safety 243

Yard layout 243 Yard operations 250 Drop trailer operations 256 Conclusion 258

12 Vehicle loading 259

Warehouses without dock levellers 259 Dock levellers 263 Safety of the load 273 Conclusion 280

13 Road vehicle specifications, maintenance and compliance 281

Vehicle selection 281

Tyres 287

Additional vehicle safety features 296

Walk-round checks 309

Operator's Licence compliance 310

Fleet operator recognition scheme 312

CLOCS 314

Company car tax 314

Conclusion 315

14 Accident prevention during vehicle operations 316

Bad driving habits 316

Driver recruitment and selection 318

Health 320

Vehicle routing 323

Driving standards 326

Accident procedure 332

Conclusion 334

15 Transport of dangerous goods by road 336

Introduction 336

ADR and CDG 337

Information to be displayed on vehicles 346

EU: The Kemler system 350

Equipment to be carried 351

REACH 353

US regulations 353

Conclusion 354

16 Vehicle-mounted loading equipment 355

Cranes 355

Tail lifts 362

Vehicle-mounted forklifts 365

Conclusion 365

17 Seafreight, rolling motorway and airfreight 366

Absolute authority of the captain 366

Types of seafreight 367

Hazardous goods 368

Container and trailer loading 369

Rolling motorway 375

Airfreight 376

Conclusion 379

18 Miscellaneous issues 380

First aiders 380

Vulnerable workers 382

Slips and trips 386
Computer screens 388
Electrical safety 389
Work at height 390
Automation of warehouse tasks 393
Safety knives and cutters 397
Conveyors and automated warehouses 399
Conclusion 401

19 Health and safety monitoring and audits 402

Monitoring methods 402 Health and safety audits 404 Accident investigation 411 Conclusion 413

Afterword 414 Appendix: Useful websites 415 References 420 Index 431