Index

Note: Italicized page numbers refer to figures and tables

acrylonitrile, 88t
aerosols, 25, 81, 91t, 162–4
alcohol based hand rubs, 71–6
alkaline peroxide, 175, 216t
amalgam separators, 193–4
amalgam waste, 190t, 193–4
anatomical waste, 191
anti-discrimination legislation, 51
antimicrobial
  resistance, 8
  stewardship, 8–9
approved control of practice (ACOP), 8, 179–80
aspirators, 161
autoclaving, 189f
automatic control test, 134–5, 208t
avian flu, 26–7
back siphonage, 177
biocides, 175–6, 212t
biofilms, 147, 167–8
blood-borne viruses (BBV), 22–5
  exposure-prone procedures, 47–50
  hepatitis B virus, 22–3
  hepatitis C virus, 23–4
  human immunodeficiency virus, 24–6
  post-exposure prophylaxis, 62–6
preventing infection in occupational setting, 22
  risk factors for exposure, 63t
  transmission of, 52–5
blood spills, cleaning, 164–6
body fluid spillages, cleaning, 164–6
B-type sterilizers, 130–2
cardiopulmonary resuscitation,
  protection during, 97
care quality commission (CQC), 8
chemical process indicators, 136–7
chlorhexidine gluconate, 175t
chlorine releasing agents, 164, 212t
citric acid, 175t
cleaning, 154–6
  cleaning plan, 154–5
  national colour code155–6
clean room/zone, 112
clinical governance, 13, 66
clinical waste, 182–7, 189–93, 197
cold sterilization, 144–5
communicable diseases, 16–28
  emerging/re-emerging pathogens, 28–9
  sources of infection, 16–17
  transmission routes, 18–22
  airborne, 25
  blood stream, 22–5
direct and indirect contact, 20
community-acquired MRSA (CA-MRSA), 20–2
compressors, 12
Control of Substances Hazardous to Health Regulations 2002, 10–11
Creutzfeldt-Jakob disease and vCJD, 29–32, 106–7, 143–4
single use instruments, 144
cross infection, 1–2, 17–19
decontamination, 105–10
  cycle, 105–6
  facility, 110–16
    basic requirements, 116t
    design of, 110–15
    sterile instrument storage, 139–40
    temporal separation, 115–16
  legal requirements, 107–8
  location, 110
  for specific instruments, 211–14t
  technical standards, 109–10
deionised water, 132–3
delayed hypersensitivity, 89
dental chair, 149–50
dental equipment
  decontamination methods, 211–14t
  heat-sensitive, 144–6
  purchasing of, 117–8
  for service or repair, 201, 206–7
  type A airgap, 174t
dental handpieces, cleaning of, 22, 145–6
dental impressions, disinfection of, 123–4
dental instruments, 22, 105–6
  automated versus manual cleaning, 118
  decontamination requirements, 211–14t
  inspection, 130
  manual cleaning of, 119–21
  out of hours use, 141–2
  passive layer, 119
  presterilization cleaning of, 118
  preventing corrosion of, 118
  risk assessment, 109t
  single-use, 119–20
  sterilization of, 130
  stock control, 141
  traceability of, 141
  unwrapped, storage of, 139–40
dental practice, risk assessment in, 4–6
dental surgery design, 148–53
  clinical waste, 152
  dental chair, 150
  flooring, 150
  lighting, 150–1
  protective clothing, 153
  room size, 149
  sharp containers, 152
  storage of equipment and chemicals, 152–3
  ventilation, 153
  washbasins, 151
  work surfaces and zoning, 149
dental unit waterlines, 22, 25, 167–73
  biocides, 173–6
  biofilms, 167–8, 215–16t
  control of legionella in, 179–80
  decontamination of, 173–81
  health risks from, 168–73
  endotoxin, 173
  legionellae, 170–1
  mycobacterium, 172
  prevention of backsiphonage, 177
  pseudomonads, 171–2
  sterile irrigation 178
Department of Environment, Food and Rural Affairs, 184
dermatitis, 82–4
disinfectants, 214–16t
disinfection
  dental handpieces, 121
  dental impression, 146
  hard surfaces, 144
  heat sensitive equipment, 144
  distilled water, 132–3
ebola virus, 18, 28–9, 51, 93
emerging pathogens, 28–9
emollient hand cream, 83–4
Environment Agency, 184, 199
Epstein-Barr virus (HBV), 21
European waste catalogue codes, 184t, 187t, 189–93
exposure-prone procedures (EPPs), 47–50
face shields, 95–7
failures
  active, 36
  latent, 36–7
  flooring, 156
gasification, 188f

general cleaning, 154–5

General Dental Council (GDC) standards, 51
gloves, 86–91
  allergy to, 88–90
  aseptic removal, 98f
  choosing, 88
  heavy duty, 82, 115f, 197
  properties of, 88t
  role of, 86–7
  safe use in dental surgery, 87
goggles, 85, 95–7

hand creams, 83–4
hand hygiene, 68–84
  products, 81–2, 214t
  and team working, 70–5
  techniques, 76–82
    alcohol based hand rubs, 71–6, 80
    removing rings and watches76
    standard technique, 76–81
    surgical hand washing, 89
washbasins, 81–2

hands
  care of, 82–3
  emollient hand cream, 83–4
  microbial colonisation of, 68
  prevention of irritant dermatitis, 82–3
  resident bacteria, 68–9
  as source of hospital-acquired infection, 69–70
  transient bacteria, 68–9
  when to clean, 70, 74f

Hazardous Waste Regulations 2005, 183

hazardous wastes, 183, 184t, 185–90
  alternative non-burn processes, 189f
  amalgam waste, 193–4
  anatomical waste, 191
  bulk storage, 197–8
  clinical waste, 190–1
  consignment notes, 198–9
  dental healthcare waste streams, 184–5
  European waste catalogue codes, 187t
  extracted teeth, 191
  high temperature processes, 188f
  legislation, 182–4
  low temperature processes, 189f
  prescription only medicines waste, 192–3
  radiographic, 193
  safe handling and storage of, 195–7
  segregation and disposal of, 197–8
  transfer notes, 198
  transport of, 198
  types of, 189–90

Health and Safety at Work Act 1974, 9–10, 51, 85
Health and Social Care Act approved code of practice, 7–8, 9t

health care-associated infections (HCAIs), 18–19
health care workers (HCWs), 46
health clearance, 38, 46–51
  additional health checks/clearance, 48–50
  duty of care, 50–1
  standard health checks, 46–7

health technical memorandum (HTM), 13
  HTM 01–05, 107–10
  HTM 07–01, 183–4

heat-sensitive equipment, disinfection of, 144–6, 215t

hepatitis viruses
  hepatitis B immunoglobulin (HBIG), 43, 65t
  hepatitis B vaccine, 43–5, 64–6
  hepatitis B virus, 18, 22–3
  hepatitis C virus, 18, 23–4
  herpes simplex virus (HSV), 18–21
human immunodeficiency virus (HIV), 24–5, 50, 54–5, 60–1

hypersensitivity, 83, 89–90
immediate hypersensitivity, 83, 89

immunisation programme, 39–46
  hepatitis B, 43–5
  measles mumps and rubella (MMR), 39–41
  tuberculosis, 42–3
  varicella, 41–2

incineration, 182, 185f, 186–8

index case, 18
infection, 19–29
emerging/re-emerging pathogens, 28–9
route, 19–20
transmission, 20–3
control, 1–15
daily, clinical pathway, 208–11t
laws, 7–12
policy, 12
procedures, 13
risk assessment, 3–7
standards and guidance, 12–13
team approach, 13–5
influenza, 26–7
iodophors, 72t, 214t
irritant dermatitis, 82–3
latex allergies, 88
latex-free environment, 88–9
legionellae, 170–2
Legionnaires’ disease, patients at risk of, 171t
Legionnaires’ disease: The control of legionella bacteria in water systems. Approved Code of Practice L8, 174t, 179t, 180
macrowaves, 189f
masks, 91–5
best practice guide, 92
as personal protective equipment, 92
respirator, 94–5
respiratory hygiene, 95
surgical, 91–3
Medical Devices Regulations 2002, 105–7
methicillin-resistant Staphylococcus aureus (MRSA), 18–19
microfibre cloths, 155
microwaving, 189f
mouthpieces, 97–8
mouth-to-mouth resuscitation, protection during, 97–8
mycobacterium, 145t, 146
BCG, 25–6, 40t, 45–6
in DUWL, 169, 172
natural rubber latex, 88–90
needles, 54–60
resheathing of, 58f
safe disposal of, 59–60
safe handling of, 56–8
safety needles, 58–9
N-type sterilizers, 130–1
occupational health, 34–52
anti-discrimination legislation, 50
exposure-prone procedures, 47–8
health clearance, 46–7
immunisation programme, 39–45
pre-employment health assessment, 46–7
risk activities in dentistry, 34
safety culture, 35–7
staff health records, 37–9
women of childbearing age, 39–43
opportunist pathogens, 16–7
pandemic influenza, 27
peracetic acid, 145, 175t, 215t
percutaneous transmission, 22
personal protective equipment (PPE), 85–6
face shields, 95–7
gloves, 86–8
goggles, 95–7
masks, 91–5
plastic aprons, 102–4
putting on, 97
removing, 97
respirator masks, 94–5
surgical gowns, 104
phenolic, 215t
plasma technology, 188f
plastic aprons, 102–4
pocket resuscitation masks, 97
polychloroprene, 88t
pre-employment health assessment, 38
prescription only medicines waste, 190t, 192–3
Pressure Systems Safety Regulations 2000, 11–12
protective clothing, 85–6
protective eyewear, 95–7, 197, 202
protein detection test, 126–8
Pseudomonas infection, 171–2
purified water, 132–3
pyrolysis, 188f

Reporting of Injuries, Diseases and Dangerous Occurrences Regulations, 7, 11
respirator masks, 26, 91, 93–5
respiratory hygiene, 95
respiratory syncytial virus (RSV), 95
risks, 2–6
  assessment of, 4–6
  management, 6–7
  relative risks, 2
rubella, 21, 39–41

safety culture, 35–7
safety sharps, 58–9
saliva ejectors, 161–2
severe acute respiratory syndrome (SARS), 30, 93, 95
sharp containers, 57t, 152
sharps injuries, 53–66
  accident risk assessment, 66
  avoiding, 56–67
  blood-borne virus infections, 53–6
  hepatitis C exposures, 62–4
  managing, 60–2
  occurrence, 55
  post-exposure prophylaxis, 64–6
  preventable, 56
  recording of, 66
  resheathing needles, 57
    safe disposal of sharps and needles, 59–60
    safe handling of sharps and needles, 56–60
    use of safety devices, 56–9
  risk assessment for BBV exposure, 62–4
sharp instruments in healthcare regulations 2013, 57t
single-use instruments, 142–4
  consequences of reuse, 142–4
  quality of, 143
  rationale for, 144
  and variant Creutzfeldt-Jakob disease, 144
specimens, 202–6
  collecting, 202–3
  fixed pathological, 205–6
  legal framework, 201
  mail and courier services, 205
  non-fixed diagnostic, 203–4
  public transport of, 204
  transport restrictions, 204–5
  transport to laboratory, 204–5
  waste disposal, 191
spittoons, 161
splatter, 162–4
standard hand hygiene technique, 76–80
standard infection control precautions (SICPs), 18
steam auger, 189f
steam penetration test, 135–6
sterilization, 130–42
  of heat sensitive instruments, 144–5
  instrument traceability, 141–2
  storage of unwrapped instruments, 139–40
sterilizers, 130–40
  installation of, 131
  loading, 130, 138
  operating, 11–12, 109, 116–17, 208–11t
  pressure, 134
  suitability of, 130–1
  storage of instruments, 138–40
  temperature, 134
  testing, 133–6
    automatic control test, 134–5
    chemical process indicators, 136–7
    failures, 135
    periodic testing, 133–4
    steam penetration test, 135–6
  validation of, 131
water reservoir, 132–3
  biofilm formation in, 132
  maintenance of, 133
  recycled water, 133
  steam purity, 132
  types of water, 132–3
S-type sterilizers, 131
superoxidized water, 216t
surface cleaning, 156–60
surgical gowns, 104
surgical hand washing, 73t, 81
syphilis, 43
thermal washer disinfectors, 107, 122, 126–30
transmissible spongiform encephalopathy, 30–2
triclosan, 72t, 75, 215t
tuberculosis, 18, 25–6, 34, 40t, 93
tunics, 45–6
ultrasonic baths, 124–6, 128f
uniforms, 99–101
universal precautions, 18
unwrapped instruments, storage of, 138–40
vaccinations, 40t
varicella, immunisation and vaccination, 41–2
varicella zoster virus (VZV), 21
ventilation, 153
vinyl, 88t, 213t
visors, 95–7
wash hand basins, 151–2
water reservoir chamber, 132–3
women of childbearing age, 39–43
risks from rubella, 41
risks from syphilis, 43
risks from varicella, 41–2
varicella immunisation/vaccination, 39
World Health Organization, 41, 70
Zika virus, 19–20, 28
zoning, 156–60
zoonosis, 29–32