

Index

- accidental hypothermia, 26
 activated partial
 thromboplastin time, 88
 active rewarming, 169, 184–185
 adhesive water mattresses, 143–144
 airway, 32
 airway heating and humidification, 164
 alfentanil, 50, 185
 amino acids, 167
 amplification phase of coagulation, 85
 angiogenesis, 104
 anorexia nervosa, 33
 antidepressant, 35
 antipsychotic, 36
 arrhythmia, 3, 94, 98, 100
 arteriovenous shunt, 21, 23, 53, 59
 arthroscopic surgery, 158
 atracurium, 83
 atropine, 38, 40
 autonomic thermoregulation, 9, 16, 18, 20, 36, 44
 axillary temperature, 127
 Aδ-fibre, 13, 61
- behavioural thermoregulation, 15, 17–18, 44
 benzodiazepine, 37, 53, 65
 bladder temperature, 124
 blood loss, 85, 89
 brown adipose tissue, 25
 buspirone, 186
- caesarean section, 107, 181
 carbon dioxide production, 26
 cardiac arrest, 3, 98, 100
 C-fibre, 13, 61
 chemotaxis, 103–104
 circadian rhythm, 17
 circulating water mattress, 5, 143
 clonidine, 38–39, 66, 186
 clot formation time, 88
 clotting time, 88
 cold-sensitive neuron, 19
- conduction, 29, 31, 55
 conductive warmer, 5, 143, 169, 180
 pressure ulcer, 150
 risk of burns, 147
 convection, 29–30, 55
 core temperature, 17, 33, 115
 costs, 103, 109
 cytochrome P450, 78–79
- desflurane, 48, 79
 dexmedetomidine, 65, 66, 186
 diabetes mellitus, 33
 distal oesophagus, 116–117
 dolasetron, 39
 double-sensor thermometer, 114, 124
- EEG, 80, 142
 emissivity, 28
 endovascular warming catheter, 166
 energy expenditure, 26–27, 66
 enflurane, 46, 79
 ENT surgery, 48, 180
 ephedrine, 55
 epidural anaesthesia, 59, 63, 68
 evaporation, 31–32, 55, 73
- feeling cold, 91
 fever, 26, 93
 fluid warmer, 3, 5, 152, 179
 air embolism, 157
 risk of burns, 156
 risk of infection, 156
 flunitrazepam, 38
 forced-air warmer, 5, 29, 128, 169, 178
 laminar air flow, 139, 141
 noise, 142
 overheating, 138
 risk of burns, 138
 forearm–fingertip temperature gradient, 22, 93
 fructose, 167
 guideline, 8, 72, 155, 168
- halothane, 45–46, 79
 heat- and moisture-exchanging filters (HME), 164
 heat balance, 32
 heat exchange, 9
 heat loss, 8, 32, 52, 55, 59–60, 68
 heat loss from surgical incision, 73
 heat production, 44
 heat production of the body, 32, 52, 55, 59
 hereditary fructose intolerance, 167
 hyperthermia, 26
 hypothalamus, 10, 15–16, 18, 22, 25, 46, 61
 hypothyreosis, 35
 hypoxaemia, 94, 96
- iliac artery, 116
 incidence of perioperative hypothermia, 75
 infrared thermometry of the aural canal, 126
 infrared-A, 162
 infrared-B, 162
 infrared-C, 162
 infrared-thermometer, 111
 initiation phase, 85
 insula, 15–17
 insulation, 159, 161, 180
 interferon-γ, 104
 interleukin-2 (IL-2), 104
 intra-abdominal surgery, 180
 intracerebral surgery, 180
 irrigation fluid, 74, 158
 isoflurane, 47, 79
- ketamine, 65–66, 186
- lateral spinothalamic tract, 14–16
 length of stay
 hospital stay, 109
 intensive care unit, 109
 postanaesthetic care unit, 97
 leukocyte, 104

- limbic system, 15–16
 linear phase, 52, 55
 lymphocyte, 104
- malignant hyperthermia, 26, 115
 mass insulator, 159, 161
 massive transfusion, 3
 maximum clot firmness, 88
 meperidine, 50, 185–186
 midazolam, 37–39, 50, 65–66, 80
 mivacurium, 84
 morphine, 63
 muscle relaxants, 52, 81
 myocardial infarction, 98, 100, 102
 myocardial ischaemia, 94, 98, 100
- nasopharynx, 116, 121
 nefopam, 185
 negative pressure warmer, 165
 neostigmine, 84
 neuraxial anaesthesia, 59, 61–62, 172
 newborns, 4, 25, 55, 181
 non-shivering thermogenesis, 25
 non-thermoregulatory shivering, 92–93
- obesity, 32, 54–55
 oesophageal warmer, 165
 ondansetron, 39, 186
 operating room temperature, 71
 opioids, 40, 50, 65, 81
 oral temperature, 123
 orthopaedic surgery, 89, 96, 107, 181
 oxidative killing, 104
 oxygen consumption, 26
- paediatric surgery, 183
 pain, 93–94, 96
 paraplegia, 35
 patients undergoing targeted temperature management, 183
 peripheral nerve block, 64
 phagocytosis, 104
 pharmacodynamics, 80
 pharmacokinetics, 78–79, 81
- phenylephrine, 55, 62
 plasmatic coagulation, 85–86
 plateau phase, 52, 55
 platelet function, 85–86, 88
 pneumonia, 107
 postoperative protein catabolism, 108
 premedication, 36
 prewarming, 62, 168–170
 induction room, 172
 on the ward, 172
 preoperative holding area, 172
 prilocain, 84
 propagation phase, 85
 propofol, 49, 65, 80
 prothrombin time, 88
 pulmonary artery, 116
- radiant insulator, 159, 161
 radiation, 28, 30, 55
 radiative warmer, 162
 rectal temperature, 125
 redistribution of heat, 44, 52, 54–55, 59, 62, 68, 170, 172
 redistribution phase, 52, 54
 regional anaesthesia, 59, 65–66
 remifentanyl, 50, 65–66, 81, 93
 rocuronium, 81, 83
 rotational thrombelastometry, 88
- sedation, 65
 self-warming blankets, 144
 sepsis, 107
 sevoflurane, 48, 79
 shivering, 5, 16, 21, 23, 52, 60, 91, 92, 94
 oxygen uptake, 8, 93
 thermoregulatory shivering, 23
 spinal anaesthesia, 59, 63, 66
 subcutaneous tissue oxygenation, 103
 sublingual temperature, 123
 sugammadex, 84
 surgical skin preparation, 72–73
 sweating, 16, 21, 31
- temperature-sensitive neuron, 10
 temporal artery temperature, 127
- tetraplegia, 35
 thalamus, 10, 15
 thermal steady state, 17, 170
 thermistor, 111
 thermocouple, 111
 thermoreceptor, 9–11
 thermoregulation, 8–9, 44, 59, 61
 thermoregulatory shivering, 92–93
 thermoregulatory threshold, 44
 thermoregulatory vasoconstriction, 21, 32, 103
 thermosensation, 9–10
 thermosensitive neuron, 12, 16, 19
 thoracic surgery, 180
 thrombelastography, 88
 tourniquet, 56
 tramadol, 185
 transfusion requirement, 85, 89
 transurethral resection of the prostate, 74, 158
 treatment of shivering, 184–185
 TRP channel, 10–11
 tumour necrosis factor- α (TNF- α), 104
 tympanic membrane, 113, 116, 119
- unstable angina, 98, 100
 urapidil, 186
- vasoconstriction, 16, 21
 vasodilation, 16, 21
 vecuronium, 81
 von Willebrand Factor (vWF), 85
- warm-sensitive neuron, 19–20, 46
 water warming garment, 143–144
 wound infection, 103, 105, 107
 wound infections, 105
 wound temperature, 88–89
 zero-heat-flux thermometer, 111, 113, 124