# Medical Reference Cards

**github.com/alping/medical-reference-cards**

- General -

# C-ABCDE

## C Catastrophic bleeding / Cardiac arrest

## A Airways

Check airway
Thorax movement
See, listen, feel
Paradox. breathing?
Stridor?

1. Chin lift/Jaw thrust
2. Naso/Oropharyngeal airway
3. Suction
4. Laryngeal mask airway
5. Intubation
6. Coniotomy

## B Breathing

Respiratory rate
Thorax movement
Auscultation
Cyanosis

1. Oxygen
2. Ventilation
3. Decompression
4. Chest tube

## C Circulation

Colour (Pale)
Cold/Sweaty
Pulse (Rad / Fem / Car)
Abdomen/Pelvis

1. Tilt bed
2. Fluids (PVC, IO, CVC)
3. Vasoactive drugs (Adrenalin IM)

## D Disability

AVPU/GCS
Pupils
Movement of extrem.

1. Support ABC
2. Glucose
3. Antidote

## E Exposure

Check whole body
Prevent hypothermia
Prevent further injury

1. Log roll
2. Warm blankets
3. Warm fluids

- General -

# SBAR

## S Situation

Own name, title, and unit
Patients name, sex, and age
Patients social security / identification number
Describe situation briefly
***I'm contacting you to...***

## B Background

Previous and current illness
Relevant medical history
Allergies
Contagiousness

## A Assessment

A: Airway
B: Breathing, saturation
C: Heart rate, blood pressure
D: Consciousness, pain, oriented to time / place / person
E: Temperature, skin, colour, abdomen, urine production
***Brief assessment***

## R Recommendation

Immediate action (Care, monitoring, transfer, treatment)
Further examinations (Radiology)
Time frame (How often...? How long...? Next contact...?)

**Confirmation of communication**
*Questions / Agreement*

- Laboratory -

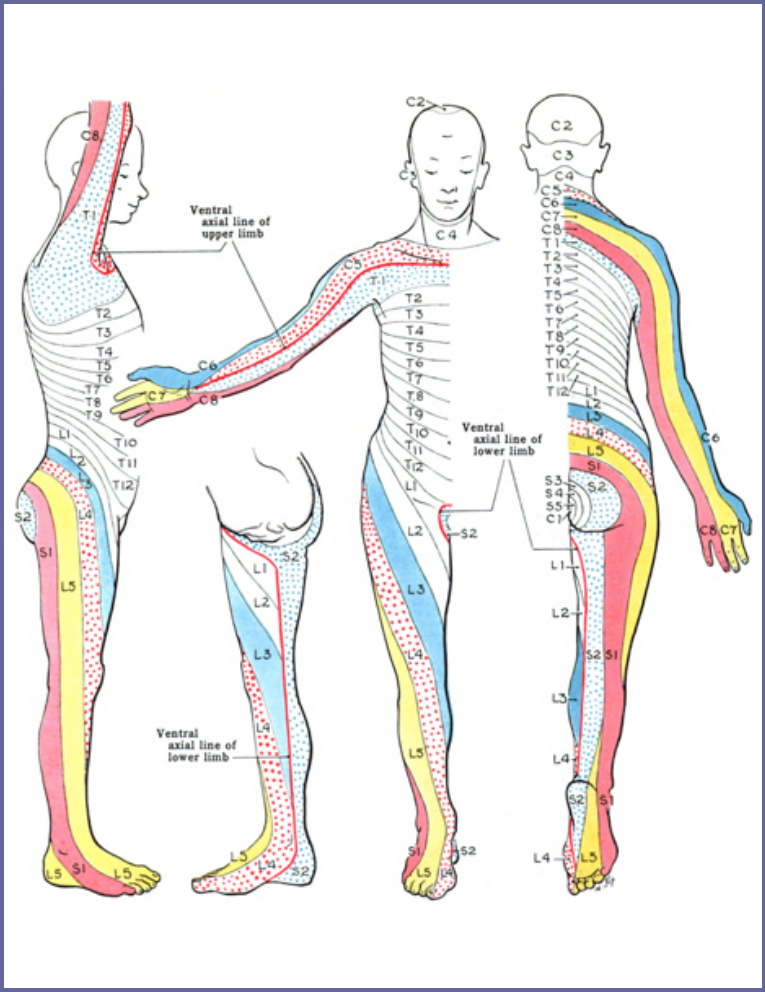
# Lab reference (Swe)

| Sys. | Component | Subgroup | Ref. interval | Unit |
|---|---|---|---|---|
| P/S | ALAT | Male | 0,15 – 1,1 | µkat/L |
| | | Female | 0,15 – 0,75 | µkat/L |
| P/S | ALP | | 0,60 – 1,8 | µkat/L |
| P/S | Amylas | | 0,40 – 2,0 | µkat/L |
| P/S | Albumin | 18 – 40 y. | 36 – 48 | g/L |
| | | 41 – 70 y. | 36 – 45 | g/L |
| | | >70 y. | 34 – 45 | g/L |
| P/S | ASAT | Male | 0,25 – 0,75 | µkat/L |
| | | Female | 0,25 – 0,60 | µkat/L |
| P/S | Bilirubin | | 5 – 25 | µmol/L |
| P/S | Calcium | | 2,15 – 2,50 | mmol/L |
| P/S | CK | Male 18 – 50 y. | 0,80 – 6,7 | µkat/L |
| | | Male >50 y. | 0,70 – 4,7 | µkat/L |
| | | Female | 0,60 – 3,5 | µkat/L |
| P/S | Fosfat | Female | 0,80 – 1,5 | mmol/L |
| | | Male 18 – 50 y. | 0,70 – 1,6 | mmol/L |
| | | Male >50 y. | 0,75 – 1,4 | mmol/L |
| fP | Glukos | | 4,2 – 6,3 | mmol/L |
| P/S | GT | Male 18 – 40 y. | 0,15 – 1,3 | µkat/L |
| | | Male >40 y. | 0,20 – 1,9 | µkat/L |
| | | Female 18 – 40 y. | 0,15 – 0,75 | µkat/L |
| | | Female >40 y. | 0,15 – 1,2 | µkat/L |
| P/S | Järn | | 9 – 34 | µmol/L |
| P/S | Järnmättnad | Male | 0,15 – 0,60 | |
| | | Female 18 – 50 y. | 0,10 – 0,50 | |
| | | Female >50 y. | 0,15 – 0,50 | |
| P | Kalium | | 3,5 – 4,4 | mmol/L |
| S | Kalium | | 3,6 – 4,6 | mmol/L |
| P/S | Kolesterol | 18 – 30 y. | 2,9 – 6,1 | mmol/L |
| | | 31 – 50 y. | 3,3 – 6,9 | mmol/L |
| | | >50 y. | 3,9 – 7,8 | mmol/L |
| P/S | HDL-Kolesterol | Female | 1,0 – 2,7 | mmol/L |
| | | Male | 0,80 – 2,1 | mmol/L |

# Lab reference (Swe)

| Sys. | Component | Subgroup | Ref. interval | Unit |
|---|---|---|---|---|
| P/S | LDL-Kolesterol | 18 – 30 y. | 1,2 – 4,3 | mmol/L |
| | | 31 – 50 y. | 1,4 – 4,7 | mmol/L |
| | | >50 y. | 2,0 – 5,3 | mmol/L |
| P/S | Kreatinin | Male | 60 – 105 | µmol/L |
| | | Female | 45 – 90 | µmol/L |
| P/S | LD | 18 – 70 y. | 1,8 – 3,4 | µkat/L |
| | | >70 y. | 1,9 – 4,2 | µkat/L |
| P/S | Magnesium | | 0,70 – 0,95 | mmol/L |
| P/S | Natrium | | 137 – 145 | mmol/L |
| P/S | Pankreasamylas | | 0,15 – 1,10 | µkat/L |
| P/S | Protein | | 64 – 79 | g/L |
| P/S | TIBC | | 47 – 80 | µmol/L |
| P/S | Triglycerider | | 0,45 – 2,6 | mmol/L |
| P/S | Urat | Male | 230 – 480 | µmol/L |
| | | Female 18 – 50 y. | 155 – 350 | µmol/L |
| | | Female >50 y. | 155 – 400 | µmol/L |
| P/S | Urea | Male 18 – 50 y. | 3,2 – 8,1 | mmol/L |
| | | Male >50 y. | 3,5 – 8,2 | mmol/L |
| | | Female 18 – 50 y. | 2,6 – 6,4 | mmol/L |
| | | Female >50 y. | 3,1 – 7,9 | mmol/L |
| B | Hemoglobin | Female | 117 – 153 | g/L |
| | | Male | 134 – 170 | g/L |
| B | EVF | Female | 0,350 – 0,458 | |
| | | Male | 0,393 – 0,501 | |
| B | Erytrocyter | Female | 3,94 – 5,16 | 1012/L |
| | | Male | 4,25 – 5,71 | 1012/L |
| B | MCV | | 82 – 98 | fL |
| Erc | MCH | | 27,1 – 33,3 | pg |
| Erc | MCHC | | 317 – 357 | g/L |
| B | Leukocyter | | 3,5 – 8,8 | 109/L |
| B | Trombocyter | Female | 165 – 387 | 109/L |
| | | Male | 145 – 348 | 109/L |

# Dermatomes


Ventral axial line of upper limb
Ventral axial line of lower limb
Ventral axial line of lower limb
C2
C3
C4
C5
C6
C7
C8
T1
T2
T3
T4
T5
T6
T7
T8
T9
T10
T11
T12
L1
L2
L3
L4
L5
S1
S2
S3
S4
S5

# Myotomes

| Segment | Function |
|---|---|
| **C1/C2** | neck flexion/extension |
| **C3** | neck lateral flexion |
| **C4** | shoulder elevation |
| **C5** | shoulder abduction |
| **C6** | elbow flexion/wrist extension |
| **C7** | elbow extension/wrist flexion |
| **C8** | finger flexion |
| **T1** | finger abduction |
| **L2** | hip flexion |
| **L3** | knee extension |
| **L4** | ankle dorsi-flexion |
| **L5** | great toe extension |
| **S1** | ankle plantar-flexion/ankle eversion/ hip extension |
| **S2** | knee flexion |
| **S3–S4** | anal wink |

# Neurological exam.

| The whole time |
| --- |
| Psychiatric: Wakefulness, oriented to time/place/self |
| Motor: Facial expressions, general |
| Dysarthria, dysphasia, right or left handed |
| Higher cortical functions: Apraxia, spatial function, neglect |

| Standing |
| --- |
| Walk across the room |
| Walk on toes/heels |
| Squat and rise |
| Sight and hearing |

| Sitting |
| --- |
| Face: Symmetry, ptos, corneal reflex |
| Pupils: Size, reaction to light |
| Eye movements: Nystagmus, diplopia |
| Sight: Donder's test |
| Mouth and throat: Symmetry, swallow reflex, gingival hyperplasia, cranial nerve XII |
| Sensibility to light touch, vibration, temperature, and pain |
| Motoric function for cranial nerve V, VII, XI |
| Reflexes in arms and legs |
| Grasset's test |
| Auskultation of lungs |
| Palpate lymph nodes |
| (Smell and taste) |

| Lying down |
| --- |
| Neck stiffness |
| Muscle strength: proximal + distal, in arms and legs |
| Muscle tonus, atrophies, fasciculation, tremor, |
| Heel-knee test |
| Dysdiadochokinesis |
| Abdominal reflexes |
| Barré’s test |
| Babinski's sign |
| Fundus examination |
| (Primitive reflexes: Grasping reflex, palmomental, glabellar, sucking) |

# Glasgow Coma Scale

| | Respone | Score |
|---|---|---|
| Eye opening response | Spontaneously | 4 |
| | To speech | 3 |
| | To pain | 2 |
| | No response | 1 |
| Best verbal response | Oriented to time, place, and person | 5 |
| | Confused | 4 |
| | Inappropriate words | 3 |
| | Incomprehensible sounds | 2 |
| | No response | 1 |
| Best motor response | Obeys commands | 6 |
| | Moves to localized pain | 5 |
| | Flexion withdrawal from pain | 4 |
| | Abnormal flexion (decorticate) | 3 |
| | Abnormal extension (decerebrate) | 2 |
| | No response | 1 |
| Total score | Best response | 15 |
| | Comatose patient | ≤8 |
| | Totally unresponsive | 3 |

# Normal Physiology

| Age | RR (/min) | HR (/min) | SBP (mmhG) |
|---|---|---|---|
| **0-1 m** | 30-60 | 110-160 | 65-90 |
| **1-12 m** | 30-40 | 110-160 | 70-90 |
| **1-2 y** | 25-35 | 100-150 | 85-35 |
| **2-5 y** | 25-30 | 95-140 | 80-110 |
| **5-12 y** | 20-25 | 80-120 | 90-110 |
| **>12 y** | 15-20 | 60-100 | 100-120 |

| Age | W. (kg) ♀ | H. (cm) ♀ | W. (kg) ♂ | H. (cm) ♂ |
|---|---|---|---|---|
| **0 m** | 2.8-4.2 | 46-54 | 2.9-4.4 | 47-55 |
| **3 m** | 4.6-7 | 56-64 | 4.8-7.5 | 57-66 |
| **6 m** | 6-9.3 | 62-71 | 6.4-10 | 63-73 |
| **1 y** | 8-12 | 70-80 | 8.5-13 | 71-82 |
| **5 y** | 15-25 | 102-120 | 15.5-25 | 110-112 |
| **18 y** | 46-80 | 156-180 | 55-94 | 167-194 |

| Age (m) | 1-2 | 2-4 | 4-6 | 6-8 | 8-10 | 10-12 |
|---|---|---|---|---|---|---|
| **W. gain (g/w)** | 175 | 150 | 125 | 100 | 75 | 50 |

| W. (kg) | Fluids (ml/kg/24h) |
|---|---|
| 2-8 | 150 |
| 6-10 | 115-120 |
| 0-10 | 100 |
| 10-20 | 50 |
| >20 | 20 |

| A. (y) | ml/kg/hour |
|---|---|
| 0-1 | 2-4 |
| >1 | 1-2 |
| **▲ Urine / Oliguri ▼** | |
| 0-1 | <1 |
| >1 | <0.5 |

# Normal Physiology

| Months | Gross motor | Fine motor | Cogn. & Comm. |
|---|---|---|---|
| 1-2 | Lift head when prone | - | Smile in resp. to face/voice, visual pref. for human face |
| 2-3 | Head steady in sitting | - | - |
| 3-4 | Lift head & chest w. ext. arms | Grasps rattle | Sustain contact, displeasure if soc. contact broken, “aah, ngah” |
| 5-6 | Roll over | Transfer objects hand to hand | Monosyllabic babble |
| 6-7 | Sit with support | - | Polysyllabic babble, vowel sounds, enjoys mirrors |
| 7-8 | Sit without support, crawl | Thumb-finger grasp | Suspicious/afraid of strangers |
| 9-10 | Pull to standing pos, walk holding furniture | Pincer grip, bangs objects together. | Play peek-a-boo, wave bye-bye, respond to own name |
| 12-18 | Walk alone | Turn pages in book, scribble, build 2-cube tower | Speak a few words |
| 4 yrs | Walk on a straight line, jump on one leg | Button clothes | Answer questions, understand prepositions |