Appendix 4 contains an eating disorder checklist for frontline staff to use in emergencies.

It is important to note that risk parameters for adults cannot be applied to children and young people without adjustment for age and gender.

This is a guide to risk assessment and cannot replace proper clinical evaluation. However, a patient with one or more red ratings or two or more amber ratings should probably be considered high risk.

Table 1: Risk assessment framework for assessing impending risk to life



Red: High impending risk



Amber: Alert to high concern for impending risk to life



Green: Low impending risk to life

Medical history and examination

Weight loss

Recent loss of weight of ≥1kg/week for 2 weeks (consecutive) in an undernourished patient³⁴

Rapid weight loss at any weight, e.g. in obesity or ARFID

Recent loss of weight of 500-999q/week for 2 consecutive weeks in fluctuating weight an undernourished patient¹²⁶

Recent weight loss of <500g/week or

BMI and weight

- Under 18 years: m%BMI³⁵ <70%
- Over 18: BMI <13
- Under 18: m%BMI 70- Under 18: m%BMI 80%
- Over 18: BMI 13-14.9
- >80%36
- Over 18: BMI >15

HR (awake)

Cardiovascular health^{37 38}

<40

Standing systolic BP below 0.4th centile for age or less than 90 if 18+, associated with recurrent syncope and postural drop in systolic BP of >20mmHg or increase in HR of over 30bpm (35bpm in <16 years)

40-50

Standing systolic BP <0.4th centile or <90 if 18+ associated with occasional syncope; postural drop in systolic BP of >15mmHg or increase in HR of up to 30bpm (35bpm in <16 years)

>50

- Normal standing systolic BP for age and gender with reference to centile charts
- Normal orthostatic cardiovascular changes
- Normal heart rhythm

³⁴ Patients losing weight at higher BMI should be assessed for other signs of medical instability and weight loss strategies to determine risk.

³⁵ Also known as weight for height percentage.

³⁶ Note these do not denote a healthy weight but rather a weight above which other parameters in this risk framework may better reflect risk.

³⁷ https://pubmed.ncbi.nlm.nih.gov/24067349/

³⁸ https://www.nhlbi.nih.gov/files/docs/guidelines/child_tbl.pdf



Red: High impending risk



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Assessment of hydration status

- Fluid refusal
- Severe dehydration (10%): reduced urine output, dry mouth, postural BP drop (see above), decreased skin turgor, sunken eves, tachypnoea, tachycardia
- Severe fluid restriction
- Moderate dehydration (5-10%): reduced urine output, dry mouth, postural BP drop (see above), normal skin turgor, some tachypnoea, some tachycardia, peripheral oedema
- Minimal fluid restriction
- No more than mild dehydration (<5%): may have dry mouth or concerns about risk of dehydration with negative fluid balance

Temperature

<35.5°C tympanic or 35.0°C axillary

<36°C

>36°C

Muscular function³⁹: **SUSS Test**

Unable to sit up from lying flat, or to get up from squat at all or only without noticeable by using upper limbs to help (Score 0 or 1)

Unable to sit up or stand from squat difficulty (Score 2)

Able to sit up from lying flat and stand from squat with no difficulty (Score 3)

Muscular function: **Hand grip** strength⁴⁰

Male <30.5kg. Female <17.5kg (3rd percentile) Male <38kg. Female <23kg (5th percentile) Male >38kg. Female >23kg

Muscular

function: MUAC⁴¹

<18cm (approx. BMI<13) 18-20cm

(approx. BMI<15.5)

>20cm (approx. BMI >15.5)

Other clinical Life-threatening state

medical condition. e.g. severe haematemesis, acute confusion, severe cognitive slowing. diabetic ketoacidosis, upper gastrointestinal perforation, significant alcohol consumption

Non-life-threatening physical compromise, e.g. mild haematemesis, pressure sores

Evidence of physical compromise, e.g. poor cognitive flexibility, poor concentration

³⁹ No muscle function test has been researched in patients <18 years.

⁴⁰ https://pubmed.ncbi.nlm.nih.gov/19129352/

⁴¹ https://pubmed.ncbi.nlm.nih.gov/12765671/



Red: High impending risk





Green: Low impending risk to life

ECG abnormalitie

- <18 years: QTc >460ms (female), 450ms (male)
- 18+ years: QTc >450ms (females), 430ms (males)
- And any other significant ECG abnormality
- <18 years: QTc >460ms (female), 450ms (male)
- 18+ years: QTc >450ms (females), >430ms (males).
- And no other ECG anomaly
- Taking medication known to prolong QTc interval
- <18 years: QTc <460ms (female), 450ms (male)
- 18+ years: QTc <450ms (females), <430ms (males)

Biochemical abnormalitie

s⁴²

- Hypophosphataemia and falling phosphate
- Hypokalaemia (<2.5mmol/L)
- Hypoalbuminaemia
- Hypoglycaemia (<3mmol/L)
- Hyponatraemia
- Hypocalcaemia
- Transaminases >3x normal range
- Inpatients with diabetes mellitus: HbA1C >10% (86mmol/mol)

- Haematology Low white cell count
 - Haemoglobin <10g/L

Disordered eating behaviours

Acute food refusal or estimated calorie intake <500kcal/day for 2+ days

⁴² https://www.rcpch.ac.uk/sites/default/files/rcpch/HTWQ/Reference%20ranges%20Jan%2018.pdf



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with management plan

- **Engagement** Physical struggles with staff or parents/carers over nutrition or reduction of exercise
 - Harm to self
 - Poor insight or motivation
 - Fear leading to resistance to weight gain
 - Staff or parents/carers unable to implement meal plan prescribed

- · Poor insight or motivation
- Resistance to weight gain
- · Staff or parents/carers unable to implement meal plan prescribed
- Some insight and motivation to tackle eating problems
- Fear leading to some ambivalence but not actively resisting

- Some insight and motivation to tackle eating problems
- May be ambivalent but not actively resisting

Activity and exercise

High levels of dysfunctional exercise in the context of malnutrition (>2h/day)

Moderate levels of dysfunctional exercise in the context of malnutrition (>1h/day)

Mild levels of or no dysfunctional exercise in the context of malnutrition (<1h/day)

Purging behaviours

Multiple daily episodes Regular (=>3x per of vomiting and/or laxative abuse

week) vomiting and/or laxative abuse

Self-harm and suicide

Self-poisoning, suicidal Cutting or similar ideas with moderate to behaviours, suicidal high risk of completed ideas with low risk of suicide

completed suicide

Key: °C = degrees Celsius; ARFID = avoidant restrictive food intake disorder; BMI = body mass index; BP = blood pressure; bpm = beats per minute; cm = centimetre; ECG = electrocardiogram; g = grams; h = hour; HR = heart rate; kcal = kilocalories; kg = kilogram; L = litre; mmHg = millimetres of mercury; mmol = millimole; mol = mole; ms = millisecond; QTc = corrected QT interval; SUSS Test = Sit Up-Stand-Squat Test.