



Clinical Practice Guidelines: Behavioural disturbances/ acute behavioural disturbance

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Acute behavioural disturbance

July, 2022

This Clinical Practice Guideline (CPG) provides advice and recommendations for Queensland Ambulance Service (QAS) clinicians regarding the management of patients with acute behavioural disturbance (ABD) in the pre-hospital setting. This CPG applies to children, young people (under 18 years of age) and adults (including patients over 65 years of age).

ABD is defined as:

Behaviour that puts the patient or others at immediate risk of serious harm and may include threatening or aggressive behaviour, extreme distress, and serious self-harm which could cause major injury or death.^[1]

Patients exhibiting an ABD pose significant health risk to themselves and others, including ambulance clinicians, Queensland Police Service (QPS) officers, and other health professionals that are involved in the assessment and management of the patient.

In this CPG, the following topics are discussed:

- Key management principles for ABD
- Common ABD presentations
- The causes of ABD
- Assessment of a patient exhibiting ABD
- The legal framework in which management decisions regarding patients with ABD are made
- Guidelines for the implementation of a verbal de-escalation strategy
- Definition of restraint
- Guidelines for the use and application of **physical restraint** in the pre-hospital setting:

Key Management Principles

The aims of management involving a patient exhibiting ABD, is to **reduce the risk of harm** to the patient and others at the scene, **ascertain the most likely cause(s)** of the ABD, and if indicated, **transfer the patient to definitive care** when it is safe to do so. The overarching goal is to achieve this, while **using the least restrictive means possible** and **ensuring compliance with all legal requirements.**^[2]

When attending a patient in these circumstances, an assessment of the patient's behaviour is necessary. The focus of this initial assessment is to determine the most likely cause of the ABD presentation. Thereafter, a graded response is used in which there is an appropriate and timely escalation in management strategies, to ensure the safety of both the patient and the attending ambulance clinicians.

The **initial management strategy** involving a patient with ABD is **verbal de-escalation.**^[2-4] If verbal de-escalation has been attempted and found to be ineffective, the ambulance clinician may need to consider appropriate and timely escalation in management strategies, such as physical restraint (discussed in this CPP) and emergency sedation (see *CPP: Acute Behavioural Disturbances – Emergency Sedation*) to ensure the safety of the patient, the attending ambulance clinicians, and others.

Common ABD presentations^[5-7]

Common ABD presentations can include one or more of the following behaviours:

- agitation
- panic
- yelling
- disorganised behaviours
- threatening self and/or other
- aggressive and violent behaviour

Causes of ABD

There are several possible causes of ABD, and in some cases, the cause can be multifactorial. Identifying the underlying cause of the ABD will provide direction on how best to support the patient and guide the most appropriate care.^[2]

The causes of ABD have been classified into five general categories:^[1,2]

- a. *Substance toxicity* with substances such as: alcohol, hallucinogens, psychostimulants (amphetamine type substances and cocaine), benzodiazepines, ketamine, LSD, cannabis, or other drug toxicity.
- b. *Medical conditions and other organic disorders*, for example: encephalitis, meningitis and other infections, encephalopathy (particularly from liver or renal failure), seizures (post-ictal state), hypoglycaemia, electrolyte disturbances, hypoxia, head injury, acute delirium, and dementia.
- c. *Acute mental health conditions* e.g: schizophrenia, bipolar disorder, psychotic disorders, anxiety disorders, borderline and anti-social personality disorders.
- d. *Situational* and other factors such as: overwhelming stress, pain, and an inability to communicate effectively.

- e. *Behavioural disorders* which may include: an exacerbation of an existing intellectual disability, impulse control disorders, autism, behavioural disorders, and acquired brain injury.

Assessment of the patient exhibiting ABD

It is essential that an initial assessment is undertaken to determine the most likely cause(s) of ABD, and the potential risks to which the patient, clinicians, and bystanders may be exposed.

The safety of clinicians, bystanders, and patient is a priority. Before conducting an assessment, the ambulance clinician should consider and implement the following steps with the aim of ensuring the safety of all concerned:^[8]

- Do not approach a patient who is holding or has access to a potential weapon.
- Seek urgent assistance from the QPS if a weapon is present, or if the clinician is feeling threatened or unsafe.
- Where possible, identify a space where the assessment can be conducted and where distractions are minimised.
- Remove unnecessary bystanders from the immediate vicinity, acknowledging that family and significant others may have an important role in assessment of the patient.
- Consider risks such as environmental hazards and the possibility of the patient absconding.
- Plan your approach so that clinicians can exit the area safely and promptly if required to do so.
- Approach the patient in a calm, confident manner and avoid sudden or threatening gestures.
- If possible, the patient with ABD should not be assessed by a clinician on their own. The primary clinician assessing the patient should have at least one other clinician or support person in attendance.

In some circumstances, a detailed assessment of the patient presenting with ABD may not be possible due to the degree of agitation and/or aggression exhibited by the patient. Assessment may need to be facilitated by first implementing techniques such as verbal de-escalation strategies, or other management procedures such as emergency sedation. When the patient is less agitated and the potential risk for harm has been reduced, a more detailed assessment may be possible.^[2,3]

The assessment, when it is safe to conduct, should include the following:

- Collateral history and other information from reliable and credible sources such as family, carers, and others that may be in attendance
- a detailed clinical history
- social history
- history of drug and/or alcohol consumption
- physical examination – when safe to do so
- vital signs survey (HR, BP, RR, T°, SpO₂, BGL)
- Sedation Assessment Tool (SAT) score (*see below*).

SEDATION ASSESSMENT TOOL		
Score	Responsiveness	Speech
+3	Combative, violent, out of control	Continual loud outbursts
+2	Very anxious and agitated	Loud outbursts
+1	Anxious/restless	Normal/talkative
0	Awake and calm/cooperative	Speaks normally
-1	Asleep but rouses if name is called	Slurring or prominent slowing
-2	Responds to physical stimulation	Few recognisable words
-3	No response to stimulation	Nil

Note: The SAT provides a rapid assessment of the patient with a numerical score level of anxiety and agitation, the results of which can guide clinician decision making in relation to the possible need for sedation, and if sedation is used, the patient’s response to sedation. See *CPP: Behavioural Disturbances – Emergency Sedation – Acute Behavioural disturbance*.

Ambulance clinicians must consider the possibility of an underlying medical condition that could be potentially life threatening, and which may present with ABD. Factors that may alert the clinician to a potentially serious medical condition are:

- first presentation/episode of ABD in a person aged 45 years or older
- abnormal vital signs
- focal neurologic findings
- decreased awareness of surroundings
- difficulty paying attention
- absence of a clear trigger for ABD

It is important to note that the clinical condition of the patient with ABD can change quickly. Frequent assessments must therefore be performed. Engagement with the patient for this purpose may also assist the clinician to learn more about the patient, build rapport, and potentially identify the underlying cause(s) of the ABD.^[8]

The legal framework – management of a patient with ABD

As stated above, the principal aim of management involving a patient exhibiting an ABD, is *to reduce the risk of harm* to the patient and others at the scene, *ascertain the most likely cause(s)* of ABD, and if indicated, *transfer the patient to definitive care* when it is safe to do so.

The overarching goal is to achieve these management outcomes, while *using the least restrictive means possible*.

The use of restrictive interventions such as physical restraint or sedation may only occur in the management of a patient with ABD, if it is done within the following legal framework:

Adult Patient

- Adult patient **with decision-making capacity** – with the patient’s consent.^[9]
- Adult patient **with impaired decision-making capacity** – with the consent of the patient’s substitute decision-maker (guardian, attorney or statutory health attorney).^[10]
- Adult patient **with impaired decision-making capacity** in circumstances where the **treatment is necessary to avert an imminent risk** to the life or health of the patient – no consent is required.^[11]
- Adult patient that meets the **criteria for an Emergency Examination Authority (EEA)** under the *Public Health Act 1995 (Qld)* – no consent is required.^[12] Refer to *CPP: Behavioural Disturbances – Emergency Examination Authority*.

Child patient

- Child patient – **parent/care giver present** – with the consent of the child’s parent.^[13]
- Child patient – in circumstances where the treatment is necessary and **urgent** to avoid a serious risk to the child’s life or health and where **no parent/caregiver is present** and there is no less restrictive means available to the clinician – no consent is required.^[14]
- Child patient that meets the criteria for an Emergency Examination Authority (EEA) under the *Public Health Act 1995 (Qld)* – no consent is required.^[12] Refer to *CPP: Behavioural disturbances/Emergency Examination Authority*.

Implementation of Verbal de-escalation

The **initial approach** to a patient with ABD should be focused on attempting to de-escalate the behaviour.

De-escalation involves a combination of **strategies and techniques** that are aimed at reducing a patient’s agitation or aggression. The strategies include:

- modification of the environment when it is possible to do so;
- verbal and non-verbal communication to engage the patient in a conversation and establish a rapport; and
- working with the patient to identify appropriate solutions.^[2-4,8]

It is essential that the clinician approaches de-escalation with both **respect and consideration of the patient and their circumstances**. The ambulance clinician must **remain calm** and must monitor their own emotional response towards the patient.

The clinician must also be mindful of any **issues that may hinder** the de-escalation process, such as the environment in which the de-escalation is to take place, language or cultural barriers that may exist, or the presence of an underlying medical condition and the potential impact of such a condition.

When preparing and implementing verbal de-escalation, the clinician should consider, and be guided by the ten principles of de-escalation which are set out below.

Ten principles of de-escalation

The ten principles of de-escalation are:^[8]

1. Respect personal space
2. Do not be provocative
3. Establish verbal contact
4. Be concise
5. Identify wants and feelings
6. Listen closely to what the patient is saying
7. Identify areas upon which to agree
8. Set clear limits
9. Offer choices and optimism
10. Evaluate the outcome of de-escalation and consider further options

Principle 1. *Respect personal space*

Create a safe environment for the patient and remove bystanders and unnecessary persons from the immediate area, or where they can be seen by the patient.

When approaching the patient, ***create a reactionary gap*** of a minimum of two arm's lengths distance between the clinician and the patient. This reactionary gap will provide the patient with sufficient space and will also place the clinician in a position to avoid contact with the patient, should the patient attempt to strike or kick out in the direction of the clinician.

If the patient requests that the clinician get out of the way, then do so.

Principle 2. *Do not be provocative*

The clinician should demonstrate, by ***body language***, that they will not harm the patient and that they are there to listen to what the patient has to say. Any body language that could be interpreted as confrontational should be avoided. The following positions of safety are recommended:

- Position oneself at an angle to the patient, and not directly facing the patient
- Maintain a natural stance
- Hands should remain visible and not clenched (open hand stance)
- Avoid placing hands on hips
- Avoid pointing or wagging fingers
- Arms should be relaxed and not folded
- If moving, do so slowly and gently
- Adopt a calm tone when speaking
- Use culturally appropriate eye contact
- Do not stare at the patient
- Do not challenge the patient or offer any comments that may be insulting or humiliating.

Principle 3. *Establish verbal contact*

Multiple people interacting with an agitated patient can exacerbate the situation, resulting in an escalation of ABD. It is recommended that ***only one clinician verbally interact*** with the patient. This clinician should be the person that is then designated and responsible for implementing the verbal de-escalation.

The clinician should ***introduce themselves*** by name and title, ***explain*** that their ***role*** is to keep the patient safe, orientate the patient as to where they are (if disorientated), ask the patient for their name and how they would like to be addressed.

Principle 4. *Be concise*

A patient that is agitated may not be able to process information that is provided. The clinician should ***use short sentences and simple terms*** that the patient is capable of understanding. Allow the patient time to process the information and possibly respond, before any additional information is provided.

It is also important to ***repeat information*** that has been provided. Repetition is essential when making requests of the patient, offering choices and proposing alternatives to that which the patient may be seeking.

Principle 5. *Identify wants and feelings*

An example of a 'want' could be a request to be provided with medication, or to express feelings to an empathic listener. The clinician should ***ask the patient how they feel***, and what they ***would like to achieve***.

The patient's body language, possible past encounters that the clinician may have had with the patient, and even seemingly trivial things that the patient may say, can assist the clinician to identify the patient's wants and feelings. Identifying that which the patient wants, enables the clinician to respond empathically, and to express a desire to help the patient achieve that which they want. This may facilitate rapid de-escalation of the patient's agitation.

Principle 6. *Listen closely to what the patient is saying*

The clinician must **actively listen** to the patient and convey, by either verbal acknowledgement or body language, that the clinician is paying attention to that which the patient is saying, and to the patient's feelings.

The clinician should **repeat back to the patient**, information that the patient has shared with the clinician. This will indicate to the patient that the clinician is listening. **Clarifying statements** such as *'tell me if I have got this right ...'* (followed by the clinician's interpretation of the exchange), will also confirm that the clinician is listening and most importantly, that the clinician is eager to understand that which the patient is saying.

Principle 7. *Identify areas upon which to agree*

An effective way to develop a rapport with the patient is to identify a situation upon which the patient and clinician can agree. The clinician should look for areas in which this may be possible. There are three ways in which the clinician can potentially agree with the patient:

- **Agree with the truth**

An example of agreeing with the truth could be a patient who is agitated following multiple attempts to open their front door. The clinician may comment *'that door certainly is very tight. Would you like me to try?'*

- **Agree with the principle**

An example of agreeing with the principle could be an agitated patient who is furious regarding the disrespectful treatment that they have received from their landlord. The clinician is not required to comment on the that, but to say that *'everyone deserves to be treated with respect'*.

- **Agree with the odds**

An example of agreeing with odds could involve a patient that is agitated because of the time that he or she has been waiting for a taxi to arrive. The clinician could say that *'anyone would be upset about such a lengthy wait'*.

Principle 8. *Setting boundaries*

The clinician must **inform the patient regarding behaviours** that are acceptable, and those that are not. By way of example, injuries to the patient and to others are not acceptable and this information must be conveyed.

Setting clear limits demonstrates that the clinician intends to help the patient, and a desire to do so without being abused.

Principle 9. *Offer choices and optimism*

Offering a choice can empower a patient who may believe that the only option is to engage in physical violence. The clinician should propose alternatives to violence. The offer of other items, such as a blanket if the temperature is cold, or a bottle of water, could be viewed by the patient as acts of kindness.

Do not offer something that cannot be provided.

Principle 10. *Evaluate the outcome of verbal de-escalation and consider further options*

If successful and the patient's behaviour has been modified, consider the likely cause(s) of ABD, and if reversible, manage according to relevant CPGs.

Physical Restraint

If verbal de-escalation is not successful, the clinician should consider appropriate and timely escalation of management strategies, such as physical restraint (*CPP: Behavioural disturbances / Emergency sedation – Acute behavioural disturbances*) to ensure the safety of both the patient and the attending ambulance clinicians.^[2-4]

In this section of the CPG, the following topics are discussed:

- Definition of restraint
- Guidelines for the use and application of physical restraints in the pre-hospital setting
 - When to restrain
 - How to restrain
 - Management of a restrained patient
 - Physical restraint safety risks
 - Documentation

Definition of restraint

Restraint is a restrictive intervention that relies on external mechanisms to limit the voluntary movement, and the physical response of the person. Restraint is described using the three modalities:

- **Physical restraint:** involves the use of any part of another person's body, that is applied to a person for the primary purpose of controlling the patient's behaviour in circumstances where that behaviour may result in the harm to the patient or others.
- **Mechanical restraints:** involves the use of a device, material, or item of equipment (i.e. a belt, rope, handcuffs) that is applied to the patient for the purpose of controlling the patient's behaviour in circumstances where that behaviour may result in the harm to the patient or others.

Mechanical restraints are not provided to ambulance clinicians for use in the management of a patient with ABD. **Ambulance clinicians are not authorised by QAS to apply a mechanical restraints to a patient in any circumstance.** If mechanical restraints are applied by QPS officers or correctional officers, these officers must remain present with the patient while the restraints remain in place.

- **Pharmacological restraint:** involves the administration of a sedative medication to calm the patient and prevent the patient from causing harm to themselves or others (Pharmacological restraint is addressed in *CPP: Behavioural Disturbances/Emergency Sedation – Acute behavioural disturbance*)

Guidelines for the use and application of physical restraint

When to restrain

There are two circumstances in which the ambulance clinician may need to apply physical restraint. The first is in response to an emergency, where there is an urgent need to **protect the patient, ambulance clinicians, or others from physical harm**, and the second is **to provide treatment and care**, which includes facilitating the administration of emergency sedation.^[2,15]

Urgent physical restraint to protect the patient and others from physical harm

Emergency situations can arise unexpectedly, and the requirement for the use of physical restraint, cannot always be planned or prevented. Urgent physical restraint of a patient should only be used in **extreme circumstances**, where the patient's behaviour poses an **imminent risk to the life, health or safety** of themselves or others, and where there is no less restrictive means immediately available to the ambulance clinician for the purpose of protecting the patient, themselves, and others from physical harm.

Treatment and care/physical restraint to facilitate emergency sedation

The clinical management of the patient with ABD may include the administration of emergency sedation. Brief **hands-on** physical restraint of a patient may be required to restrict a patient's body movements **while emergency sedation is being administered**. Immobilisation of the patient in these circumstances is achieved through the control of the patient's limbs, and support of the patient's head.^[2]

Physical restraint applied in these circumstances, is only applied until such time as the medication has been administered, and the patient is calm and no longer poses a risk to themselves or others.

How to restrain

If emergency physical restraint is required for the purpose of protecting the patient, the ambulance clinician, and others from harm, or to facilitate the administration of emergency sedation, the ambulance clinician should request immediate QPS attendance.

Physical restraint of a patient carries a risk of injury to both the patient and the ambulance clinicians. To minimise the risk of injury, the ambulance clinician should implement the following 7 step process:^[5,15]

1. Request urgent QPS attendance

QPS officers should be in attendance in all cases where a patient poses a threat to ambulance clinicians or others. The attending ambulance clinician should request immediate QPS attendance. If QPS is not immediately available, QAS clinicians should retreat to a safe place and await the arrival of QPS officers. If there is no option to retreat and an emergency has arisen, QAS ambulance clinicians may use reasonable force to defend themselves against an imminent threat of harm, and to physically restrain the patient to prevent the patient from harming themselves, the ambulance clinicians, or others.

2. Request CCP backup code 1 (if available)

3. Assemble a team

Assemble a team to assist/facilitate with the physical restraint of the patient:

- a. Where possible, assemble four personnel (including QPS officers if present), each to restrain one of the patient's limbs; and
- b. A clinical leader to provide direction during the restraint, and to monitor the patient's head, neck, chest, and airway; and
- c. Additional ambulance clinician if emergency sedation is required.

4. Communicate with the patient

Maintain constant communication with the patient before and during the period of restraint. Explain what is happening, why it is happening, and how the patient can help.

5. Respect the patient's dignity

The patient's dignity should be maintained during the period of restraint and where possible, the method of restraint should be individualised so that dignity can be respected, and the amount of force/restriction applied, is no more than necessary.^[15]

6. Position the patient safely

There are no techniques to restrain a patient that are completely free of risk. To position the patient as safely as possible, the ambulance clinician should:^[15-21]

- Place the patient in a lateral position (on their side) with the patient's hands restrained in front of their body
- Control the patient's limbs (each limb restrained by a member of the restraint team if possible)
- Ensure that the patient's airway remains clear and that the patient can breathe without difficulty
- Avoid prone position as this can result in positional asphyxia
- Avoid supine position
- Avoid restraining limbs behind the patient's back as this will hinder continual assessment and urgent intervention if the patient's condition deteriorates and urgent treatment is required.

7. Careful attention must be paid to the following:

- **Do not** use techniques or positions that restrict the patient's airway or circulation
- **Do not** apply direct pressure to the patient's face, neck, chest, abdomen, back or pelvic area
- **Do not** block the patient's nose or mouth, or flex the patient's head towards their knees (may cause positional asphyxiation)
- **Do not** inflict pain or use any technique that causes the patient to suffer pain
- **Do not** obstruct the patient's mouth or ears (may prevent the patient from communicating with the ambulance clinician).

Management of a restrained patient

It is essential that a team approach is adopted, with the most senior ambulance clinician at the scene taking the role of team leader.

1. Continual visual monitoring of the patient

The patient must be under continual visual observations for any signs of distress, difficulty breathing, continual struggling, facial grimacing to indicate the patient may be suffering from physical or psychological stress associated with the use of physical restraint.^[4] (see below: *risks associated with physical restraint*)^[2,3]

2. Regular vital signs monitoring

Vital signs must be monitored and recorded at **five-minute** intervals:^[2]

- Respiratory rate and pulse oximetry
- Heart rate and blood pressure
- Glasgow coma score (GCS) assessment
- Sedation Assessment Tool (SAT) score
- Perfusion assessment distal to the areas where physical restraint is applied
- Blood glucose level (**initial**)
- Temperature (initial and then every **fifteen minutes**)

3. Limit the duration of restraint

The period during which a patient is physically restrained must be limited to the **shortest time possible**, to provide protection and prevent harm. Ideally, physical restraint should not exceed 10 minutes.^[2] If the patient is being restrained to facilitate emergency sedation, the patient must not be restrained for any longer than is required for the sedation to take effect.

4. Documentation

Comprehensive clinical documentation should include the following:^[5]

- Information received from QPS officers and/or others at the scene regarding the patient's behaviour and any QPS interventions (*see opposite*) prior to the arrival of QAS.
- the clinical assessment findings

- the reasons for physically restraining the patient
- the restraint procedure that was used
- the commencement time (time on) and completion time (time off) of physical restraint
- the vital signs and other observations undertaken (as listed above), and results obtained
- the care provided to the patient

5. Notify the receiving hospital

The receiving hospital should be notified of the impending arrival of a patient that has been physically restrained due to an ABD, so that appropriate hospital resources can be allocated to ensure rapid assessment and management.

Physical restraint safety risks

Physical restraint carries a potentially high risk of injury to both the patient and the ambulance clinician. The factors that are known to contribute to significant patient related risks include: the position in which the patient is restrained (**positional risk**), the application of direct pressure to specific areas of the patient's body (**pressure related risk**), the physical exertion expended by the patient during restraint (**exertional risk**), and the patient's general health and co-morbidities, and possible toxicology (**patient's health**).

Positional risk

Postural factors can increase the risk of harm to the patient during physical restraint.^[18] Ambulance clinicians, police and other health professionals that are present when a patient is physically restrained, must be aware of these risks and implement strategies to avoid harm that can be caused or exacerbated by the position in which the patient is physically restrained.

- **Prone position:** Restraint of a patient in a prone position (face down) can impede breathing and may result in positional asphyxia and death^[16,17,19,22]. The prone position must be avoided, however, if during a period of physical restraint, the patient is inadvertently placed, or subsequently moves to a prone position, the patient must be repositioned as quickly as possible. The patient **must not** remain in the prone position for longer than two minutes.^[2]

- **Supine position:** Restraint of a patient in a supine position (on the patient's back) may contribute to the risk of aspiration, should the patient vomit. The supine position should be avoided, however, if the patient is required to be placed in the supine position for a short period, it is essential that an ambulance clinician is located at the patient's head, and is continually monitoring the patient's airway, and observing the patient for vomiting or regurgitation.

Pressure related risk

The application of pressure, such as that exerted by the weight of a person applying the physical restraint, can potentially result in harm to the patient. The person applying the physical restraint must be aware of the potential for harm and must put in place measures to ensure that any pressure that is applied, is reasonable, and that pressure is not applied to areas such as the chest, back, abdomen, pelvis, neck, face, or head.^[4,5,22]

Weight applied to the patient's *chest, back, or abdomen*, can restrict the movement of the patient's chest and diaphragm, which can result in a reduction of the patient's ventilatory capacity, causing hypo ventilatory respiratory failure. Hypo ventilatory respiratory failure can be further exacerbated if the patient is placed in the prone position.^[4,22]

Weight applied to the patient's *abdomen and pelvis* can cause an increase in the patient's intra-abdominal pressure, the impact of which can prevent venous return, resulting in cardio-pulmonary compromise.^[2,4,22]

Exertional Risk & Health Status Risk

Sudden, unexpected death can occur in circumstances where a patient suffering from extreme agitation, or 'excited delirium', is physically restrained. There are multiple factors that may contribute to death in these circumstances. They include forceful struggle against the restrain, exertion induced hyperthermia and acidosis, psychostimulant drug toxicity, underlying heart disease, positional asphyxia related to restraint technique, and obesity.^[2]

