

**BILD**

# Use of Mechanical Devices: restrictive physical intervention

Principles for Practice

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## Foreword

This document has been developed over a three year period. There have been several rounds of consultation and contributions have been received from many practitioners whose contributions are gratefully acknowledged.

This is a very important area of practice that challenges professionals within services for people with severe learning disabilities and or autistic spectrum conditions. Mechanical restraint devices are on occasions used as a response for the reactive management of self injurious behaviour. Self injurious behaviours indicate significant, emotive and distressing phenomena for the individual, their carers and service providers, Wolverson (2006)

Murphy (1999) defined self-injurious behaviour (SIB) as any behaviour initiated by the individual that directly results in physical harm to that individual.

Self injury can include:

- Head banging, head-hitting/face-slapping/striking face and chest with knees, facial banging/knocking
- Hair pulling (trichillotomania), severe head rubbing
- Skin picking, wound picking
- Eye gouging, eye poking, poking of rectum and sexual organs, severe rubbing or pulling of genitals, severe skin rubbing.
- Eating inedible substances (pica), eating faeces (corprophagia) or eating of foreign bodies
- Knuckle biting
- Limb biting
- Skin cutting
- Chin knocking
- Self-induced vomiting/vomiting and re-ingesting
- Hitting body parts against hard surfaces

The guidance in this document focuses on the use of mechanical devices with service users who are presenting with severe self injurious behaviour. It does not specifically address the use of mechanical devices used in other contexts. The use of therapeutic aids or harnesses might in some circumstances constitute a mechanical device, This should be addressed within service policies relating to the appropriate use of such equipment including side lying boards, wheel chair restraints or five point harnesses: it is likely some of the broad principles outlined in this document could be applied in relation to such procedures.

For many people, the term “mechanical restraint” conjures up ideas of strait jackets and images of Victorian asylums; as it is an intervention option that

initiates an emotive response for professionals. However, it may also have a part to play in the care and treatment of a very small number of people. An anxiety about the practice has on some occasions led to services and practitioners using a mechanical device without policy or guidance. Anxieties have also led to organisations and practitioners discounting the use in situations where it may have been appropriate.

This document does not seek to encourage the use and application of mechanical devices but rather to clarify what may constitute a mechanical device or restraint procedure and enable staff to reflect upon their current practice and support services to develop appropriate policies, protocols and procedures. The emphasis must always be on prevention and what is in the best interest of the service user.

I would like to extend my thanks to Professor David Allen, who provided initial information and assistance in the preparation of this document. I gratefully acknowledge Dr Brodie Paterson and Professor Nigel Beail for their time, encouragement and comments with the draft versions. Their help and support has proved invaluable.

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# **Use of Mechanical Devices; for restrictive restraint - Principles for Practice**

## **Introduction**

At both the annual 2005 and 2006 behaviour support conferences delivered by the British Institute of Learning Disabilities (BILD), two round table events and a set of follow up workshops discussed the difficult ethical area of the use of mechanical devices for restrictive physical restraint in services for people with learning disabilities and autistic spectrum disorder /challenging behaviour.

The round table debates highlighted some specific areas of concern for practitioners and gaps in the guidance currently available. These issues were explored further in the workshops that followed.

## **Issues for practitioners:**

- **A lack of clarity and guidance for professionals**
- **Often parents or carers insist on professionals identifying ways to prevent injury or stop self injurious behaviour**
- **A lack of professional understanding or expertise**
- **A lack of consistent advice and absence of frameworks**
- **Lack of understanding and agreement about what might constitute a mechanical device**
- **A 'feeling' that they (mechanical devices) are more widely used within children's services and education than in services for adults (although this is not supported by research).**

## **Other areas of concern:**

- **Issues specific to supporting people who might self injure, for example a lack of skilled staff to support people and pressure on resources**
- **A lack of appropriate evidence base as the use of mechanical devices is often linked to management of violence as opposed to self injury**

## **Categories for the use of mechanical devices to restrain people:**

- **Advanced planning as part of a behavioural support strategy**
- **As part of a therapeutic intervention**
- **Reactively to reduce risk to the individual and/or others as a result of their behaviour**

Due to the nature and application of mechanical devices, it is unlikely that they will be used in an emergency situation in services for people with learning disabilities and or autistic spectrum conditions.

Oliver et al (1987) found that 13% of people with Learning Disabilities who exhibited self injurious behaviour in his study wore protective devices or experienced mechanical restraint at least some of the time. Emerson (2002) suggests some 5% of children and 7% of adults with self injurious behaviour and other forms of challenging behaviour sometimes or usually have experienced the use of mechanical restraint as a method of behaviour management.

It has also been suggested by Male (2003) that teachers are more likely to use restraint to manage self injurious behaviour, although it is not clear that this distinguished between restrictive physical restraint procedures and the application of restrictive devices .

The use of mechanical devices to restrain people has long been contentious in psychiatric services in the UK; Deb et al (2005) reflected the historical influence of the non restraint movement, whereas some American studies have shown significant reduction in injuries to staff and patients following the use of mechanical devices to restrain people.

#### European Council Guidance

The Council of Europe ( 2004) state that the benefits of using physical restraint and seclusion should be in proportion to the risks entailed:

*'principles of least restriction, persons with mental disorder should have the right to be cared for in the least restrictive environment available with least restrictive treatment available taking into account their health needs and the need to protect the safety of others.'*

#### **Definitions**

Over the years, a number of organisations, individuals and researchers have offered definitions relating to the use of mechanical devices to restrain;

“Mechanical restraint refers to the use of belts, handcuffs and the like, which restrict the patient's movements or totally prevent the patient from moving. Other interventions loosely referred to as seclusion and restraint, such as time out”.  
Sailaset et al (2006)

The Joint Guidance for the Use of Restrictive Physical Interventions, DoH/DfES (2002) defines mechanical device in section 3.1 stating that it may be:

*'the use of a protective helmet to prevent self-injury as non-restrictive and the use of arm cuffs or splints to prevent self-injury as restrictive'*

The joint guidance also suggests that the use of 'belts or cuffs to restrict movement' are associated with elevated levels of risk. However, Hill & Spreat 1987 concluded that a mechanical device was less risky in general terms than personal (physical) restraint.

This document defines mechanical restraint within services for people with learning disability and/or autism as:

***'As a last resort, the application and use of materials or therapeutic aids such as:***

- ***belts,***
- ***helmets***
- ***clothing,***
- ***straps,***
- ***cuffs.***
- ***splints***
- ***specialised equipment,***

***designed to significantly restrict the free movement of an individual, with the intention of preventing injury; as a result of behaviour that poses significant and proportionate risk to the individual of serious long term harm or immediate injury. The use of the device must be based on the findings of a behavioural risk assessment'.***

*Mechanical devices may be:*

- *partial in that it significantly impairs the free movement of a limb  
or*
- *total in that the person may be unable to freely walk or stand as a result of the application of the restraint.'*

The appropriate use of therapeutic aids such as side lying boards or stands designed to enhance and support physical therapies are not addressed within this guidance. However, services must be aware that a statement of policy to define the appropriate use of such equipment would be in line with best practice to ensure the use of such devices is not abused.

## **Principles for Good Practice**

It is proposed that the use of a mechanical device as part of a proactive and preventative behavioural approach is applied within the three following approaches:

## Level 1

- **Advanced planning as part of a behavioural support strategy**

*This would include the development of a behaviour support plan based on the results of a functional assessment, which has been risk assessed and contains short term and long term goals in behaviour prevention, support, de-escalation as well as reactive management. The aim of the behaviour support plan will be to reduce and ultimately eliminate the use of any mechanical device via a functional analysis, the development of an individualised positive support plan*

## Level 2

- **As part of a short term therapeutic intervention in a reactive context**

*A short term management solution applied for a given period while alternative and less restrictive supports are put in place to reduce the immediate critical level of risk to the individual, and/or others, (this may arise as a result of tactile defensive behaviours, sensory driven behaviours or an ecological mismatch).*

## Level 3

- **To reduce risk to the individual from their environment as a result of their behaviour which is judged to be of risk to themselves in cases where the person appears to have no control over that behaviour**

*This may mean the application of a mechanical device as a long term approach and in some very rare circumstances form part of a lifetime solution, when the individual's behaviour results from a biological stereotype or phenotype and can not be managed in less restrictive ways.*

## Using a Mechanical Device for the Purpose of Restraint

It is recommended that the following checklist is worked through when considering the use of any mechanical device:

1. Is there any alternative way of preventing the behaviours which are of concern?
2. Has a full and detailed behavioural risk assessment been conducted and is the response judged to be proportionate to the level of risk identified?
3. How will the person be supported when they are wearing the device? as a high risk intervention it may not be appropriate the person be left alone when wearing it?
4. Does the appliance have social validity? How will the public perceive the device and what implication does this have for its use? In comparison to other options, including the use of a restrictive physical intervention (RPI)

what is the social validity for the use of the restraint device? For example would the use of an RPI increase the health risk to the person in the immediate or long term or would the RPI in its self act to reinforce the behaviour?

5. Is the application of a mechanical device non-reinforcing in the context that it will be used?
6. How will the person's day to day life be affected? It will be important to identify resources that will be necessary to ensure the application does not affect lifestyle opportunities.
7. How will staff be supported and trained in the application of the device and will resources be identified to support this?
8. How will the device be applied and used? The practicalities of use and the ease with which it may be applied must be considered, particularly if the behaviour places staff at risk.
9. How will the use of the device be monitored and what cross references can be made to child protection or vulnerable adult procedures to ensure the rights of the individual are protected?
10. Are there any sensory issues which may affect the use of the equipment in relation to the individual?
11. Does the positive behaviour support plan identify how the individual will receive positive contacts and reinforcers at times when the restraint is not in use?
12. How will the restraint be phased out and what timescales are the team working towards?
13. Is there a robust system of recording to audit the use of the intervention? It will be important to audit the pre and post mechanical restraint periods to ensure that the target behaviour does not increase at these times

## Organisational Issues

It is important that the organisation has a robust and transparent approach to supporting employees and service users. The following highlights the required principles for practice within organisations:

- **Risk Assessment** - The organisation should have appropriate policies relating to risk assessment and risk reduction strategies in supporting people with challenging behaviour.
- **Relevant live Policies** – specifically focussed on the prevention and management of challenging behaviour as well as a policy statement relating to the use of mechanical devices. This policy must detail the process that employees will undertake when considering the use of a mechanical device.
- **Person Centered Strategies**- ensuring positive behaviour support and lifestyle choices to enable individuals who exhibit socially invalid behaviour to live a full life and reach their potential

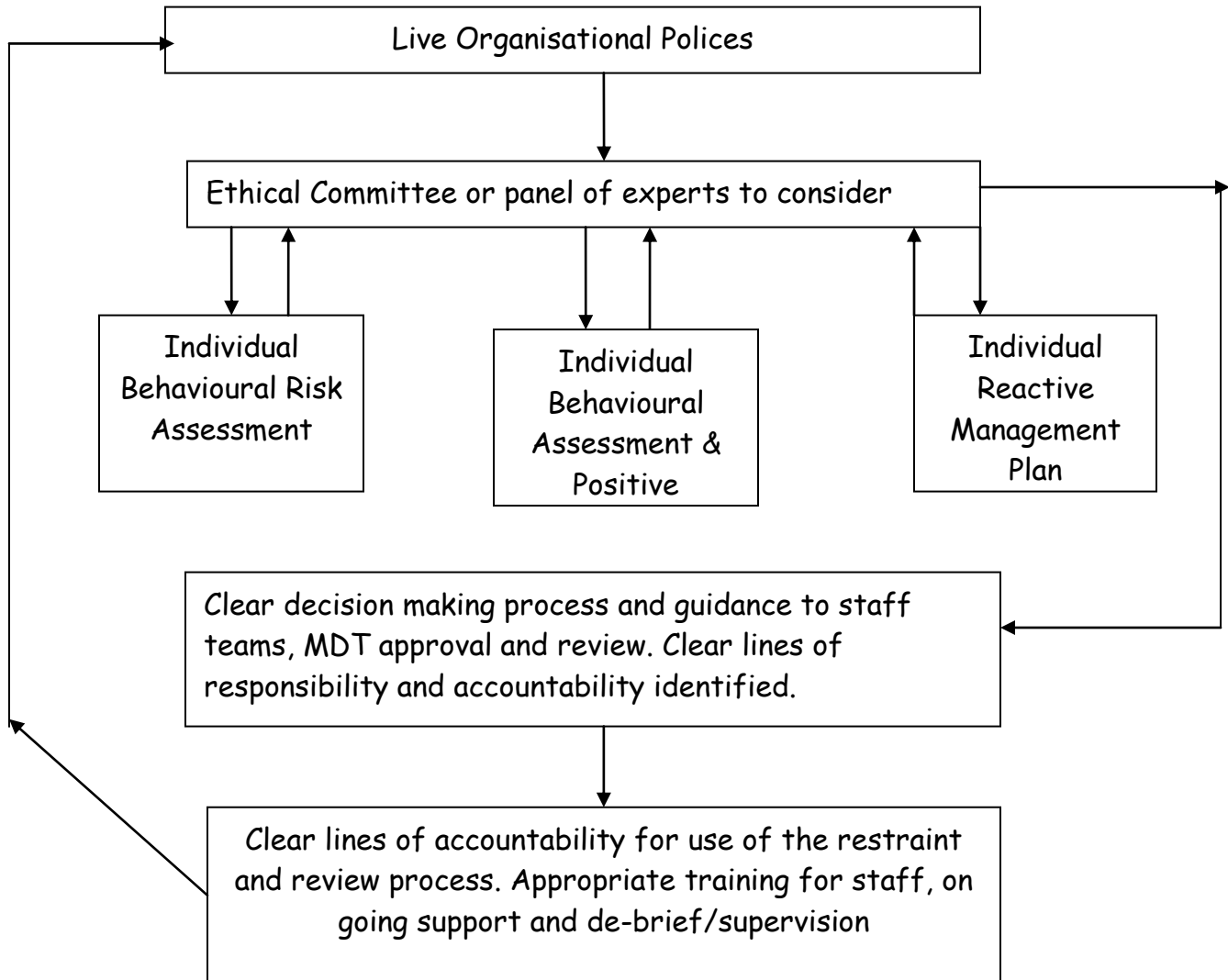


- **Ethical Committee** - should be developed to consider each case, as the use of local expertise will be important in supporting the development of such a committee
- **Structured Reviews/ supervision** - of the use of any mechanical device must take place in a context that ensures regular scheduled reviews and provides a supportive opportunity for staff involved in the strategy to discuss its application and any concerns they may have
- **Recording and Monitoring procedures** – organisations must ensure there are appropriate recording and monitoring procedures in place. This must also include a review of the equipment itself to ensure it is still 'fit for purpose' as it can decay in use.
- **Adult protection/Child protection** – safeguarding issues must be addressed and taken account of and documented according to local policy and procedures as well as national guidance
- **Mental Capacity Act** – The due process of best interest must be addressed and assessed in accordance with the Act to ensure:
  - The involvement of parents, carers and advocates
  - Human rights and legal issues accounted for and documented
  - Articulation of a co-ordinated response and approach
- **Training:** The Council of Europe recommendations regarding the use of restraint require that staff likely to be involved in the use of any form of restraint receive appropriate training. This includes
  - the safe use of any device to effect restraint protecting the dignity, human rights and fundamental freedoms of persons with mental disorder; (which includes learning disability and autistic spectrum disorder) understanding how to prevent and control violence; and how to avoid the use of restraint or seclusion;
  - limited circumstances in which different methods of restraint or seclusion may be justified, taking into account the benefits and risks entailed, and the correct application of such measures.

Such training should be designed with reference where appropriate to CFSMS guidance on the required learning outcomes of such training and relevant sector guidance and legislation Where the restraint is used principally as part of a response plan for severe self injurious behavior it is important that staff receive training on self injury and causation in people who have a learning disability / autistic spectrum disorder

## Policy and Practice

The following model is suggested for Practice:



## Summary

This document should be used by services and professionals within services with reference local policies, protocols and procedures.

It is important that the use of any restrictive intervention, including the use of mechanical restraint is only ever considered as a last resort when significant risk is present and no other alternative has been found to be effective in reducing or preventing the assessed risk.

It is equally important that where possible, alternatives to the use of a restrictive physical intervention continue to be explored and positive behaviour change strategies continue to be implemented.

Restrictive interventions, including mechanical restraint will only manage the level of risk, and its use and application will not reduce the level of risk on its own, because once it is removed the behaviour will very likely continue to be exhibited by the person. In some exceptional and rare circumstances, such as where a diagnosis of Lesch Nyhan Syndrome is present no viable alternative to the use of mechanical restraint, even in the long term, as the behaviour is biologically driven.

Mechanical restraint should continue to be a restrictive physical intervention that services and professional consider with some degree of discomfort; for to become complacent about such practice would lead to the possibility of abusive practices emerging. However, this is not a reason to discount the use of such a device where it may be of longer term benefit to the person who is affected by their own self injurious behaviour.

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