CLINICAL PRACTICE GUIDE

Managing non-fatal strangulation in the emergency department

OCTOBER 2022

NSW GOVERNMENT
AGENCY FOR CLINICAL INNOVATION
Emergency Care Institute

The information in this resource should not replace a clinician's professional judgement.

Agency for Clinical Innovation

1 Reserve Road St Leonards NSW 2065
Locked Bag 2030, St Leonards NSW 1590

T +61 2 9464 4666
E aci-info@health.nsw.gov.au | **aci.health.nsw.gov.au**

Produced by: Emergency Care Institute

Further copies of this publication can be obtained from the Agency for Clinical Innovation website at **aci.health.nsw.gov.au**

Preferred citation: NSW Agency for Clinical Innovation. *Managing non-fatal strangulation in the emergency department: Clinical practice guide*. Sydney: ACI; 2022.

SHPN (ACI) 220706
ISBN 978-1-76023-292-4

Version: V1.2; ACI_2856 [09/22] Date amended: October 2022

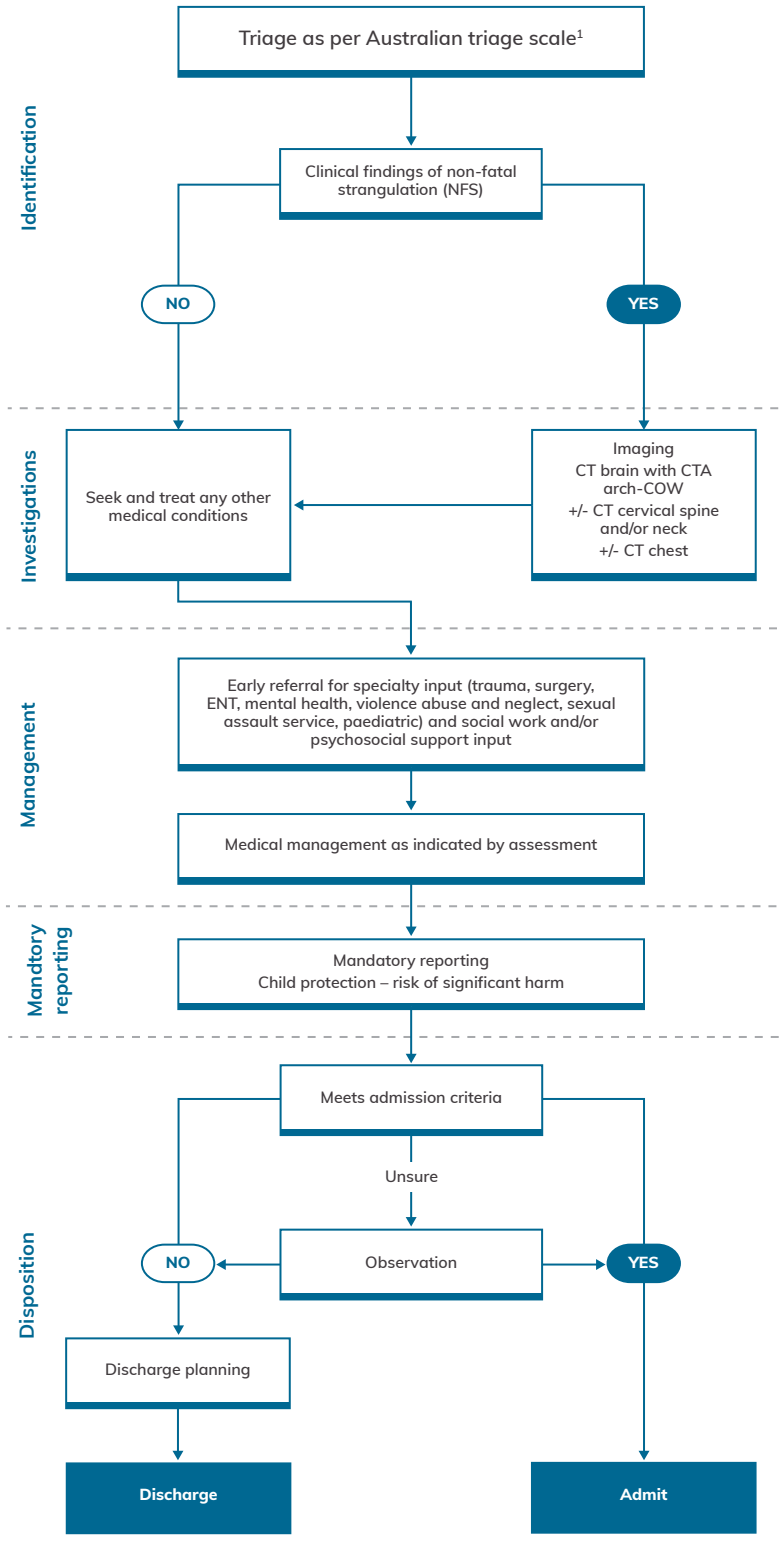
Trim: ACI/D21/1681

Contents

At a glance	1
Summary	2
Introduction	4
Non-fatal strangulation	5
Assessment of non-fatal strangulation	8
Information sharing and reporting to the police	11
Disposition	14
Caring for the healthcare worker	15
The paediatric population	16
Appendix 1: Additional resources for staff	17
Appendix 2: Additional resources for consumers	18
Appendix 3: Identification of domestic and family violence	19
Appendix 4: Western NSW LHD symptoms of strangulation (SOS) card	20
Appendix 5: Domestic and family violence risk assessment and safety planning	21
Appendix 6: Further guidance on information sharing, child protection reporting and reporting to Police	22
Acknowledgements	23
Glossary	24
References	27

At a glance

Non-fatal strangulation pathway



NFS RED FLAGS

Head/neurological

- Neurological signs or symptoms (seizures, new focal neurological deficits)
- Amnesia
- Incontinence
- Severe headache
- Near or complete loss of consciousness
- Changes in vision or sight
- Petechial haemorrhages (facial/oral/conjunctival)
- Mechanism of significant force

Neck

- Neck bruises or ligature marks
- Neck swelling or tenderness
- Unable to clinically clear cervical spine
- Dysphonia and/or aphonia
- Odynophagia

Chest

- Dyspnoea
- Subcutaneous emphysema

IMAGING

- CT brain and CT arch-COW for any NFS red flags
- CT cervical spine/neck if unable to clinically clear neck, and soft tissue for odynophagia, neck swelling, ligature marks, dysphonia, dyspnoea
- CT chest: Subcutaneous emphysema, dyspnoea

PSYCHOSOCIAL WORKER INVOLVEMENT

Social worker, violence, abuse and neglect worker, sexual assault service support worker, Aboriginal health worker, multicultural health worker, refugee health worker

MANDATORY REPORTING

Child protection – all children suspected of significant risk of harm or actual harm (see guideline for more information)

ADMISSION CRITERIA

- History of significant blunt force
- Significant findings on imaging
- Ongoing symptoms
- Significant psychosocial distress
- Vulnerable population:
  - Children
  - Homeless
  - Elderly
  - Unsafe discharge setting
- Consider observation if very acute presentation or otherwise indicated

DISCHARGE PLANNING

- Risk assessment
- Safety plan and risk mitigation
- Ensure completion of mandatory reporting and document production of safety plan
- Online and written resources (SOS card)
- Advice as to when to seek further medical review

Summary

Non-fatal strangulation (NFS) is a potentially life-threatening injury. A person may present to the emergency department (ED) with this injury following trauma, deliberate self-harm or acts of violence from others.

This guide provides clinical support to those managing adult and paediatric patients who present with NFS.

History

Paediatric presentations: Due to many NSW EDs, being both adult and paediatric, we have included information throughout the document regarding paediatric presentations and considerations. For consolidated paediatric NFS information, please see the Paediatric population section of this guide.

Initial assessment should include a focused assessment of airway, breathing and disability in an appropriate environment (separate from the offender and/or with an accredited interpreter).

All patients presenting to the ED with a history or indicators of domestic and family violence, physical assault or sexual assault should be specifically asked about choking, pressure to the neck, or strangulation, as well as direct questions about domestic and family violence. Note that a variety of terms may be used to describe the event, and hypoxaemia may affect memory of the event.

Early referral

Social work or other available and/or relevant psychosocial workers should be consulted early in the management of NFS. This may include violence abuse and neglect or sexual assault service staff, along with Aboriginal health workers, multicultural or refugee health workers and/or interpreters, as indicated. Use of family members to translate is not appropriate in this context.

Presentations for NFS may trigger local referral pathways, including trauma or surgical, violence, abuse and neglect, sexual assault services, mental health, obstetrics or paediatrics.

Examination

A range of respiratory, vascular, neurological, and musculoskeletal signs and symptoms may indicate injury. **Red flags** include neurological signs or symptoms, amnesia, incontinence, severe headache, near or complete loss of consciousness, changes in vision or sight, petechial haemorrhages, neck bruises or ligature marks, neck swelling or tenderness, dysphonia, odynophagia, inability to clinically clear cervical spine, dyspnoea, subcutaneous emphysema, or a mechanism suggestive of significant force.

The presence of any red flag is an indication for imaging. For facial, cranial or neurological red flags, most centres will include a computerised tomography (CT) stroke protocol (non-contrast CT brain and CT arch-Circle of Willis (COW)) to assess for ischaemic, watershed or haemorrhagic stroke and carotid or vertebral artery dissection. For neck-related red flags, CT cervical spine and/or neck is indicated and a CT chest for subcutaneous emphysema.

Disclosure of information

Section 37(1A) of the Crimes Act NSW 1900 includes several offences regarding choking, suffocation and strangulation.[2] **Any request by the victim to report to NSW Police should be facilitated immediately.**

Health workers are encouraged to be familiar with legislation and policy (an overview is provided in this document). **Health workers should consult with their supervisor, social workers, district violence, abuse and neglect or sexual assault services staff, and/or the NSW Health Child Wellbeing Unit, about whether information can and should be shared without consent.**

Where a risk of harm to a child or young person is suspected, NSW Health staff are required to use the online Mandatory Reporter Guide (MRG)[3] and make a risk of significant harm (ROSH) report to the Child Protection Helpline where required. **The Child Protection Helpline can be contacted 24/7 on 132 111**. All children who report an inflicted strangulation, or if there is reason to suspect they may have been strangled, should be assessed by a paediatrician, or with paediatric consultation through the NSW Child Abuse and Sexual Assault Clinical Advice Line (CASACAL).

CASACAL is a 24/7 consultation line available to advise NSW Health staff on medical and forensic examinations, medical care (and documentation) for children and young people (up to their 16th birthday) who are suspected victims of sexual assault, physical abuse and neglect. CASACAL's contact number is **1800 244 531 (1800 CHILD1)**.

The NSW Health Suspected Child Abuse and Neglect (SCAN) Medical Protocol[4] is available through the NSW Health Policy Distribution System to record a forensically-oriented medical assessment of a child or young person.

Documentation should be thorough, noting that it may be relevant to later forensic or legal processes.

Disposition

Admission is warranted if there is significant pathology found on assessment and for anybody that is not considered safe to be discharged.

The paediatric population has a low threshold for admission and requirement for long term psychometric testing for hypoxic brain injury. Consider observation in the ED, or as an admitted patient, if the patient arrived at ED very soon after the incident. This is particularly important if the patient will be discharged to a home environment without access to support and reliable monitoring by family for delayed sequelae.

Most children with NFS presenting to primary care services should be transferred or referred to a centre with paediatric services for further assessment, management and psychosocial support.

In the absence of trained psychosocial support worker involvement, who can assist with discharge planning, clinicians should **seek support in assessing risk, producing safety plans and providing discharge advice**. Specific patient discharge advice resources may be available locally, while others available within this document including Western NSW Local Health District's Symptoms of strangulation (SOS) card (Appendix 4).

In some circumstances (notably domestic and family violence, sexual assault, or child abuse and neglect) **discharge advice may have to be given verbally without a written discharge plan to maintain confidentiality and safety of the patient.**

Caring for the healthcare worker

If you or any of your colleagues are affected by the presentation of the patient involved in domestic and family violence, **it may help to talk about this with a trusted colleague and/or to take part in a structured debrief.** Counselling and support can also be sought from your Employee Assistance Program.

Useful phone numbers

Child Protection Helpline **132 111**

NSW Health Child Protection and Wellbeing Unit **1300 480 420**

Child Abuse and Sexual Assault Clinical Advice Line (CASACAL) **1800 244 531 (1800 CHILD1)**

Introduction

Non-fatal strangulation (NFS) is a potentially life-threatening injury. A person may present to the emergency department (ED) with this injury following trauma, deliberate self-harm or acts of violence from others.

This guide provides clinical support to those managing adult and paediatric patients who present with NFS. It is intended to improve patient care by increasing healthcare workers' awareness of the potential risks and injuries resulting from NFS, and by outlining appropriate assessment and management or care coordination of an episode of NFS.

The guide emphasises the importance of follow up for people who have experienced NFS who are a population at high risk of poor outcomes.

While this guide is intended for acute management of NFS, many of the principles are applicable to delayed presentations.

Method

Evidence in this document has been gathered from a variety of evidence-based sources.

Evidence regarding clinical management of NFS included a PubMed title search for "strangulation" and was restricted to systematic reviews. This was supplemented with additional searches for specific aspects of assessment and management, as well as a snowball strategy and literature recommendations from subject matter experts.

Evidence around the psychosocial aspects was sourced from grey literature, particularly searches of the NSW Health Policy Distribution System, supported by Google searches of "non-fatal strangulation".

Application of this evidence was guided through experienced clinicians and staff from the NSW Ministry of Health. These included prevention and response to violence, abuse and neglect (PARVAN) and violence abuse and neglect teams from the Ministry of Health, Nepean Blue Mountains Local Health District, Northern NSW Local Health District and Western NSW Local Health District, specialist sexual assault services, child protection and wellbeing teams, and mental health teams.

In addition, review of the document was conducted by ED clinicians and interested ACI Emergency Care Institute members, as well as relevant ACI networks and institutes, with further review by the Aboriginal Strategic Leadership Group, and development of an Aboriginal Health Impact Statement.

Non-fatal strangulation

NFS can occur as a result of misadventure or injury, but can also occur in the context of domestic and family violence, deliberate self-harm, sexual assault, child abuse and neglect or assault by a non-family member. These specific contexts will result in important psychosocial considerations during assessment and management.

Significant injury or death can result from NFS through:[6-8]

- cerebral anoxia due to carotid arterial obstruction
- cerebral hypoxia due to vascular congestion, resulting from obstruction of venous drainage from the brain
- vascular injury with a subsequent risk of thromboembolic stroke or dissection, including carotid dissection
- pressure on the carotid sinuses reducing cerebral oxygenation through reflex bradycardia and vasodilation (potential mechanism)[4]
- asphyxia due to obstruction of the airway
- damage to the anterior structures of the neck, such as hyoid bone fracture, recurrent laryngeal nerve palsy, traumatic airway swelling and damage to the thyroid gland
- damage to the spinal cord and or column
- limitation of chest wall expansion resulting in critical reduction in ventilation.

The most serious complications of asphyxia are coma, seizures, stroke and long-term brain damage. The risk of death and neurologic injury increases when ligatures are used.

Less severe episodes of hypoxia can present with:[9]

- episodes of confusion or seizure-like events
- syncope
- acute visual changes resulting from Valsalva retinopathy (haemorrhagic retinopathy related to a sudden increase in intrathoracic pressure characterised by intra-retinal and sub-retinal haemorrhage over the macula)
- neck or throat pain or tenderness
- pain and/or difficulty swallowing
- vocal changes
- shortness of breath
- dizziness and feeling faint.

Symptoms of NFS injuries may not be visible at the time of assessment. Patients may be reluctant to disclose NFS, and/or not realise the danger associated with NFS. Specific questions should be asked (see History section of this guide for more detail) and a disclosure of NFS should be taken seriously.

In addition to physical injuries, longer term mental health complications are associated with NFS, including post-traumatic stress disorder.[10]

Non-fatal strangulation in the context of domestic and family violence

In Australia, 1 in 6 people experience violence from an intimate partner (1 in 4 women and 1 in 13 men).[11] Children experience abuse as direct victims and through exposure to adult partner violence.[12]

NFS is a significant indicator of escalating violence and is strongly associated with homicide.[13, 14] Survivors have an 8-fold increase in risk of death by homicide due to a family member.[15, 16]

In NSW, a quarter of all murder victims had previously been a victim of NFS.[6] Of all domestic and family violence-related homicides between 2000 and 2014, 1 in 4 victims were children killed by a relative. Of all children reported to child protection services (2012-2017), 1 in 4 children had experienced or been exposed to domestic and family violence.

In NSW Health services, violence, abuse and neglect services are available to support patients experiencing domestic and family violence. Violence, abuse and neglect are experienced by individuals and families across all of Australia's communities. However, there is clear evidence to suggest that particular groups of people and individuals experience multiple challenges that heighten the likelihood, impact or severity of violence, as well as experience additional barriers to seeking support and securing safety.[16-18]

These groups include: women in pregnancy and early motherhood, young women and girls, children, Aboriginal and Torres Strait Islander people, people living in rural and remote areas, older women, culturally and linguistically diverse people, migrants and refugees, people with disability or mental illness, and lesbian, gay, bisexual, transgender, intersex, queer/questioning and related identities (LGBTIQ+) people.[6]

Early involvement for specialist services regarding these populations should be arranged (see Management).

Where these services aren't locally available, other options may include using local community health resources. Appendix 1: Additional resources for staff, may support the clinician in addressing important aspects of care, as well as the Domestic violence – identifying and responding policy (PD2006_084).[19]

Non-fatal strangulation in the context of deliberate self-harm or attempted suicide

EDs are a key point of contact for people who have attempted suicide or who are at risk of suicide. EDs play an important role in the triage, assessment and management of people with mental health needs. In NSW Health services, mental health services exist who assist in supporting patients experiencing mental health issues, including deliberate self-harm.

A collaborative, patient-centred model of care that ensures the parallel assessment and treatment of a person's physical and mental health needs, may lessen a person's distress and improve patient outcomes.

A previous suicide attempt is a strong indicator of future suicide risk.[20] Attempted suicide by any means indicates the need for assessment by a mental health professional prior to discharge from the ED.

Healthcare workers should consider that a person may seek to minimise or hide a suicide attempt. Whilst in the ED the patient should be kept under observation to ensure they do not abscond or gain access to further means of harm. Empathic, non-judgemental and professional attitudes are important for the effective assessment and management of these patients.

Detailed guidance on the assessment and treatment of suicide risk is provided in these NSW Health guidelines:

- Mental health for emergency departments – a reference guide[21]
- Clinical care of people who may be suicidal (PD2022_043)[20]

Non-fatal strangulation in the context of sexual assault

As per the Responding to sexual assault (adult and child) policy (PD2020_006)[22], victims of recent sexual assault (past seven days) are to be screened for strangulation both at triage in the ED and in any sexual assault service response. Those patients that screen positive must be provided with an appropriate medical response, outlined within this document.

Each local health district (LHD) has a sexual assault service that can support clinicians in providing appropriate care to victims of sexual assault. These services should be engaged as early as practicable. Other support options for clinicians may include using local community health resources or see Appendix 1: Additional resources for staff which may support the clinician in addressing important aspects of care.

The Responding to sexual assault (adult and child) policy (PD2020_006)[23] states that patients referred to a sexual assault service by an ED, who later screen positive for strangulation, will have a pathway to be referred back to ED for further medical assessment.

Non-fatal strangulation in the context of assault

Patients may attend the ED following an alleged assault in which NFS has occurred. This may be clearly recounted by the patient or may be suspected, should the victim describe pressure to the neck with or without a loss of memory of a NFS event.

Non-fatal strangulation in the context of injury or misadventure

NFS may occur as a result of an accident, particularly in the paediatric population. In this context, there may be psychological trauma to the patient which requires support through psychosocial or mental health services.

In the paediatric population, clinicians may need to consider the safety of the child and whether a report to the Child Protection Helpline is required, depending on the context of the injury.

Non-fatal strangulation in the context of child abuse and neglect

NFS may occur as part of a pattern of ongoing physical abuse, perpetrated by a parent or carer. It may also feature as a form of excessive discipline (e.g. where a parent reports that they have choked a child or young person as a means to control other behaviours, such as self-harm or aggressive behaviours).

These children require further medical assessment and clinicians may need to consider the safety of the child and whether a report to the Child Protection Helpline is required, depending on the context of the injury.

Assessment of non-fatal strangulation

Initial assessment should include a focused assessment of:

- **airway**: noisy breathing, dysphonia, marks, swelling or bruising to the neck, throat pain or tenderness and a history of pressure or injury to the neck
- **breathing**: dyspnoea, respiratory distress and decreased oxygen saturations
- **disability**: Glasgow Coma Scale, mental state, subconjunctival haemorrhage or visual changes
- **environment**: separate the victim from the offender.

Hypoxia can manifest as confusion, agitation or behavioural disturbance, amnesia, drowsiness and slurred speech, and can be mistaken as a presentation of drug intoxication or mental health illness.

History

NFS should be considered in the differential diagnosis for a patient presenting with carotid dissection or any blunt neck injury, or memory gaps during a physical or sexual assault. Memory gaps immediately after being held by the neck are suggestive of potential loss of consciousness due to pressure on the neck.[12]

A history which is incongruent to the injury should raise a possibility of domestic and family violence. The patient may not give a clear history as the hippocampus is highly oxygen sensitive and victims may have no memory of the NFS or preceding events due to retrograde amnesia.[9, 23] Victims also may not view what happened to them as strangulation and may use the following terms:

- Choked me
- Held me by the neck
- Squeezed my neck
- Hands around my neck
- Tied me up around the neck
- Throttled me
- Had me in a choke hold
- Pinned me down
- Smothered me or gagged me
- Tried to drown me

Both NFS and the use of objects and/or weapons are risk factors for escalating violence and risk of serious injury from domestic and family violence.[13-16]

Identification of domestic and family violence

As indicated above, there is a significant interrelationship with NFS and domestic and family violence. Across all health settings, NSW Health workers should respond to domestic and family violence when a disclosure is made, or domestic and family violence is suspected due to inconsistent histories or other indicators.

Further guidance on identifying and responding to domestic and family violence can be found in your LHD's NSW Health Worker's Guide to Identifying and Responding to Domestic and Family Violence flip chart[24] (only available to those connected to the NSW Health VPN) and the NSW Health Domestic violence – identifying and responding policy directive (PD2006_084)[19]. Some further information can be found in Appendix 5: Domestic and family violence risk assessment and safety planning.

All patients who present following strangulation **should be asked direct questions about domestic and family violence**. NSW Health workers should only ask about domestic and family violence when the client is alone (or with an accredited interpreter).

Identification of sexual assault, child abuse and neglect

As described above, there is also an interrelationship between sexual assault, child abuse, neglect and NFS. Further guidance on identifying and responding to both sexual assault and child abuse and neglect can be found in Child wellbeing and child protection policies and procedures for NSW Health policy directive (PD2013_007)[25] and Responding to sexual assault (adult and child) policy (PD2020_0060)[22].

Examination

Relatively little force can result in arterial or venous occlusion and there may be no abnormal examination findings after NFS.[26]

The following findings increase the likelihood of injury.

Respiratory

- Dysphagia
- Dyspnoea or new onset respiratory distress
- Haemoptysis
- Hoarse and/or soft voice
- Laryngeal or crico-pharyngeal cartilage tenderness
- Loss of neck landmarks as result of soft tissue swelling
- Stridor
- Subcutaneous emphysema
- Tongue swelling

Vascular

- Carotid bruit

Neurologic[12]

- Altered mental status, amnesia, confusion, restlessness and/or agitation
- Any new neurological deficit (weakness or paraesthesia of any limb)
- Incontinence (urinary or faecal) at the time of the incident

Musculoskeletal

- Bruising to neck or jaw
- Midline C-spine tenderness
- Petechiae at or above the area where pressure was applied: eyes, eyelids (which require inversion), scalp, face, palate, neck, tympanic membrane or auditory canal

Red flags for potential serious underlying injury[15, 27-29]

- Neurological signs or symptoms (seizures, new focal neurological deficits)
- Amnesia
- Incontinence
- Severe headache
- Near or complete loss of consciousness
- Changes in vision or sight
- Petechial haemorrhages (facial, oral and conjunctival)
- Neck bruises or ligature marks
- Neck swelling or tenderness
- Dysphonia (change in quality of voice)
- Odynophagia (painful swallow)
- Inability to clinically clear cervical spine
- Dyspnoea (shortness of breath)
- Subcutaneous emphysema
- Mechanism suggestive of significant force (e.g. associated head trauma, lifted off the ground)

Investigations

The presence of any red flag is an indication for imaging:

- **For facial, cranial or neurological red flags:** most centres will include a CT 'stroke protocol' (non-contrast CT brain and CT arch-COW) to assess for ischaemic, watershed or haemorrhagic stroke and carotid or vertebral artery dissection.
- **For neck-related red flags:** CT cervical spine and/or neck is indicated, and a CT chest for subcutaneous emphysema.

Computed tomography angiography (CTA) of the head and neck is highly sensitive and specific (>95%) for assessing penetrating and blunt trauma of the neck. Carotid doppler is insufficient to assess the intracranial and vertebral vessels.[28, 29]

Cervical spine injury is uncommon in NFS without a supporting mechanism of injury involving hanging from a height. In these instances, a CT cervical spine is indicated.

Magnetic resonance imaging (MRI) may be indicated for assessment of long-term hypoxic damage resulting from NFS, however it is not routinely indicated in the ED assessment. MRI or magnetic resonance angiography (MRA) may be considered in younger patients as an alternative to CTA if concerns are raised regarding radiation exposure. The risks should be weighed against the potential additional trauma of the young person having to undergo the MRI or MRA procedure itself.

Patients with significant vocal changes or swallowing difficulties may require further specialty input to assess and document laryngeal injury (including significant oedema or bruising not visible externally) and advise on management.

Management

Referral to specialty and support services

Consider whether the presentation or identified red flags trigger any local referral or care pathways, such as trauma, surgery, violence, abuse and neglect, sexual assault services, mental health, obstetrics or paediatric services.

Social work or other available psychosocial workers (such as violence, abuse and neglect or sexual assault services staff) should be consulted early in the management of NFS. The involvement of Aboriginal health workers, where available, should be offered for all NFS patients who identify as Aboriginal or Torres Strait Islander. Multicultural or refugee health workers should be offered to culturally and linguistically diverse or refugee patients where available.

Interpreters should be used where required – use of family members to translate is not appropriate in this context.

Where these resources are not locally available, other options may include using local community health resources. In the context of domestic and family violence, contact with the Domestic Violence Helpline and/or a referral to the NSW Women's Domestic Violence Court Advocacy Service should be considered. Further resources to assist staff members can be found in Appendix 1: Additional resources for staff.

Domestic and family violence risk assessment and safety planning

Risk assessment and safety planning must be completed whenever domestic and family violence is identified. Wherever possible, this process should be supported by a psychosocial worker.

Health workers should familiarise themselves with Appendix 5: Domestic and family violence risk assessment and safety planning to inform risk assessment and safety planning.

Information sharing and reporting to police

Section 37(1A) of the Crimes Act NSW 1900 includes a number of offences regarding choking, suffocation and strangulation.[2] **Any request by the victim to report to NSW Police should be facilitated immediately**.

Under the Health Records and Information Privacy Act 2002, disclosing personal health information to police without consent is permitted where there are reasonable grounds to believe this is necessary to lessen or prevent a serious and imminent threat to a person's life, health or safety.[30] The Health Records and Information Privacy Act also permits health information to be shared with police in circumstances where there are reasonable grounds to believe that an offence may have been, or may be, committed and the disclosure is necessary for the police to exercise law enforcement functions. For further guidance, please refer to the NSW Health Privacy Manual for Health Information[31] and/or consult with your line manager.

Domestic violence

It should be noted that while the Crimes Act NSW 1900 enables reporting of domestic and family violence matters, it does not mandate reporting.[2] The decision to report to NSW Police or share information with other agencies is to be considered on a case-by-case basis, taking into consideration:

- **Domestic and family violence risk assessment (assessed threat level)** – see Appendix 5: Domestic and family violence risk assessment and safety planning
- Views of the victim, noting there are potential risks in reporting without the victim's consent, including the potential for increased risk should the perpetrator become aware of a report and further intervention
- Seriousness of the injuries and the offence
- The context of therapeutic relationship and risk of damaging this relationship

For further guidance on information sharing, child protection reporting and reporting to police, please see Appendix 6: Further guidance on information sharing, child protection reporting and reporting to police.

Sexual assault

See Section 4: Reporting responsibilities of the Responding to Sexual Assault (adult and child) policy and procedures (PD2020_006).[22] In relation to reporting sexual assault to police, it is recommended that workers consult with their local sexual assault service.

Where the victim of sexual assault is under 18, workers should refer to the Mandatory Reporter Guide (MRG)[3] and consider a report to the Child Protection Helpline (132 111).

Child protection responsibilities

> Where a risk of harm to a child or young person is suspected, NSW Health staff are required to report concerns to the Child Protection Helpline (132 111).

Children and young people who experience NFS as a result of child abuse and neglect can be at risk of significant harm (ROSH). Where the ROSH to a child or young person is suspected, NSW Health staff are required to make a ROSH report directly to the Child Protection Helpline. **The Child Protection Helpline can be contacted 24/7 on 132 111**.

Exposure to domestic and family violence poses a risk to a child's physical, emotional and psychological safety. Where domestic and family violence is suspected and/or there is potential risk of harm to a child or young person, NSW Health staff are required to use the online MRG[3]. The MRG[3] supports risk stratification and advises whether a ROSH report to the Child Protection Helpline is required.[24]

For staff who wish to use the MRG[3] as part of an established reporting process, NFS should be entered into the MRG[3] as child physical abuse.

All children who report an inflicted strangulation or if there is reason to suspect they may have been strangled, should be assessed by a paediatrician, or with paediatric consultation through the NSW Child Abuse and Sexual Assault Clinical Advice Line (CASACAL).

Further advice can be sought from the NSW Health Child Wellbeing Unit – 1300 480 420 (8.30am to 4.30pm Monday – Friday).

Psychosocial support

Experiencing NFS can induce post-traumatic stress disorder, depression, anxiety, nightmares and suicidal ideation. The mental and physical health impacts of NFS are cumulative and providing support may assist to ameliorate the impacts of trauma.

Referral to a social worker, or other psychosocial support worker, should be made for psychosocial assessment, crisis intervention, safety assessment and planning, counselling, information and referral.

If there is no social worker or other psychosocial support worker available, the patient should be offered resources and/or referral. These are listed in Appendix 2: Additional resources for consumers.

Arranging of appropriate follow-up is essential

Note, that providing resources is not a substitute for appropriate care. It is essential to arrange appropriate follow-up. Also note that in some cases provision of physical resources may increase risk to the patient, and verbal information may be safer, preferred and/or more appropriate.

If the patient presents with new signs and symptoms of a mental health condition, they should be referred for specialist service consultation.

Most patients should be referred to their general practitioner for follow-up care, including wound checks if needed.

Reporting and psychosocial referral guidance

	Context	Who to contact
Adult referral	Domestic and family violence	Social work or violence, abuse and neglect service
	Sexual assault	Sexual assault service
	Common assault	Social work
	Deliberate self-harm	Mental health
Paediatric reporting	All forms of child abuse and neglect (including physical abuse, sexual abuse and experiences of domestic and family violence)	Complete the online Mandatory Reporter Guide (MRG)[3]. Consult the NSW Health Child Wellbeing Unit for advice or support **1300 480 420** (8.30am to 4.30pm Monday-Friday). Report suspected risk of significant harm (ROSH) to the Child Protection Helpline on 132 111 (available 24/7) or eReport. In an emergency, where there are urgent concerns for the child's health or life, call the police on triple zero (000).
Paediatric referral (following reporting advice)	Child abuse and neglect	Violence, abuse and neglect service
	Sexual assault	Sexual assault service
	Deliberate self-harm	Mental health

Documentation

The history in the patient's own words should be recorded in quotation marks and all injuries should be documented. The treating physician may be called upon later to provide an expert opinion.

Disposition

Admission is warranted if there is significant pathology found on assessment and for anybody that is not considered safe to be discharged. Most children with NFS presenting to primary care services should be transferred or referred to a centre with paediatric services for further assessment, management and psychosocial support.

Ideally, a patient and their dependents should be discharged to a safe environment, but this may not always be possible. In the absence of trained psychosocial support worker involvement, who can assist with discharge planning, clinicians should seek support in assessing risk, producing safety plans and providing discharge advice.

In some circumstances (notably domestic and family violence, sexual assault), discharge advice may have to be given verbally without a written discharge plan, to maintain confidentiality and safety of the patient.

Admission

Consider observation in the ED, or as an admitted patient, if the arrival of the patient to ED was very soon after the incident. This is particularly important if the patient will be discharged to a home environment without access to support and reliable monitoring by family for delayed sequelae (e.g. oedema). Visible bruising to the neck may not be apparent immediately and may become visible hours or days after the incident.

Patients with normal investigations but who have ongoing symptoms or a significant blunt force trauma mechanism, should be admitted for observation. Late onset oedema of the airways has been reported following blunt force trauma to the neck.[30, 31]

Local specialist referral pathways may require admission.

Consider local referral guidelines for advice regarding requirements for observation and/or cardiotocography in pregnant women suffering NFS.

Discharge

Ideally, a patient and their dependents should be discharged to a safe environment, but this may not always be possible.

In the context of domestic and family violence, the risk to patient safety may continue whether the patient is still living with, or in contact with, the perpetrator, or not. Separation (actual or pending) is a high risk and lethality indicator for intimate partner violence.

Where a referral to psychosocial support is not available prior to discharge, the treating healthcare worker will undertake initial risk assessment (see previous section) and safety planning (see Appendix 5: Domestic and family violence risk assessment and safety screening), including actively supporting the patient to access crisis services, such as local referral pathways. In addition, the NSW Domestic Violence Line (1800 65 64 63) may be able to provide some additional resources to support further safety planning and action to reduce risk prior to discharge.

Healthcare workers should avoid pressuring the patient to leave the relationship, instead asking about their fears and seeking to build upon current strategies for maintaining safety for themselves (and their children).

In some circumstances (notably domestic and family violence), discharge advice may have to be given verbally without a written discharge plan to maintain confidentiality and safety of the patient. Resources which can be used with patients can be found in Appendix 2: Additional resources for consumers.

Patients should also be given discharge management advice as to when to return for further investigation and management.

This should include instructions on what to do if they develop high risk signs of shortness of breath, altered consciousness and/or mental state, worsening neck pain or new neurological signs that may develop in the hours, days and weeks following NFS.

The Symptoms of strangulation (SOS) medical alert card developed by the Western NSW LHD's PARVAN team provides discharge advice regarding when to seek further medical attention that the patient can take with them discretely. It is available in a range of languages.

Information on ordering the SOS card, and communication when providing this card can be found in Appendix 4: Western Sydney LHD Symptoms of strangulation card.

Advice regarding seeking brain injury assessment should be provided if there is history of prolonged and/or repeated strangulations and/or deficits suggestive of hypoxic brain injury that persist in the months following the incident.

Caring for the healthcare worker

If you or any of your colleagues are affected by the presentation of the patient involved in domestic and family violence it may help to talk about this with a trusted colleague and/or to take part in a structured debrief or supervision session.

Counselling and support can also be sought through your Employee Assistance Program.

The paediatric population

The physiology of strangulation in children appears to follow the injury patterns in adults. Note that strangulation via a cord is a common presentation. The biggest difference in the paediatric population is the low threshold for investigations, imaging and admission, and requirement for long term psychometric testing for hypoxic brain injury.

These injuries may not always have serious clinical consequences but have significant forensic and legal implications.

All children who report an inflicted strangulation or if there is reason to suspect they may have been strangled, should be assessed by a paediatrician, or with paediatric consultation through the NSW Child Abuse Sexual Assault Clinical Advice Line (CASACAL) on **1800 244 531 (1800 CHILD1)**.

CASACAL is a 24/7 consultation line available to advise NSW Health staff on medical and forensic examinations and medical care (and documentation) for children and young people (up to their 16th birthday) who are suspected victims of sexual assault, physical abuse and neglect.

When determining specific medical investigations and imaging, a lower threshold exists for children.

The outcomes of the investigations and imaging may indicate severity of injury which, therefore, has clinical and legal implications (for example, the type of charges the police may lay or safety intervention from the Department of Communities and Justice).

When reporting NFS for a child:

- Common assault, which includes physical abuse such as NFS, may be reported to the Child Protection Helpline as 'physical abuse'.
- Deliberate self-harm may be reportable to the Child Protection Helpline as 'Child/Young Person is a Danger to Self and/or Others'.

All paediatric (<16yrs) patients who present with any matters involving suspected risk of significant harm (ROSH) must be reported to the Child Protection Helpline - phone 132 111 (available 24/7) or eReport through the Mandatory Reporter Guide (MRG).[3]

They should be assessed using the NSW Health Suspected child abuse and neglect (SCAN) medical protocol.[4]

The online MRG[3] can help workers determine whether a report to the Child Protection Helpline is needed.

- The NSW Health Child Wellbeing Unit can be contacted for advice about child protection risk assessment, reporting and referral options - 1300 480 420 (8.30am to 4.30pm Monday – Friday).
- Health workers may also make a report about patients aged 16 and 17 years where they have concerns about their safety, welfare or wellbeing.

In addition to making a report to the Child Protection Helpline, a discussion with a local violence, abuse and neglect worker, social worker or to access local response pathways for child abuse and neglect such as the LHD Child Wellbeing Coordinator and/or the Child Protection Counselling Services is advisable.

If no local support mechanisms are available, contact the NSW Health Child Wellbeing Unit on 1300 480 420 for further advice.

Appendix 1: Additional resources for staff

Australasian College for Emergency Medicine, Family and domestic violence and abuse policy (P39)[34] November 2016 – relates to the identification, screening, treatment and support of patients who present to the emergency department and are experiencing family and domestic violence and abuse.

1800RESPECT[35] (1800 737 732) – 24/7 national sexual assault, domestic and family violence counselling service. For people experiencing or at risk of sexual assault, domestic and family violence, and their family, friends and professionals providing support and assistance in safety planning.

Safer Pathway[36] – the NSW whole-of-government response designed to provide accessible and effective domestic violence support services to victims.

Child Protection Helpline (132 111) – reports of suspected risk of significant harm (ROSH) to unborn children, children and young people.

NSW Health Child Wellbeing Unit[37] (1300 480 420) – for advice on what action to take in response to concerns about a child or young person's safety, welfare or wellbeing, for relevant information on prior child protection concerns, or to report suspected ROSH.

NSW Child Abuse and Sexual Assault Advice Line 1800 244 531 (1800 CHILD1) – advises NSW Health staff on medical and forensic examinations, medical care (and documentation) for children and young people (up to their 16th birthday) who are suspected victims of sexual assault, physical abuse and neglect.

NSW Health Sexual Assault Services[38] – anyone who discloses sexual assault, regardless of their relationship to the perpetrator or their gender, should be offered a referral to a NSW Health Sexual Assault Service.

NSW Health Worker's Guide to Identifying and Responding to Domestic and Family Violence Flip Chart[24] (NSW Health VPN connection required) – further guidance on identifying and responding to domestic and family violence can be found in your LHD's flip chart.

For domestic and family violence safety planning:

- **NSW Government Domestic and Family Violence resources**[39] includes safety planning tips
- **1800RESPECT**[35] includes a checklist of things woman may consider for their safety plan and using technology safety.

Appendix 2: Additional resources for consumers

1800RESPECT[35] (1800 737 732) – 24/7 national sexual assault, domestic and family violence counselling service. For people experiencing or at risk of sexual assault, domestic and family violence, and their family, friends and professionals providing support.

Domestic Violence Line[40] (1800 65 64 63) – free service that operates 24 hours. Statewide crisis counselling and referral for women experiencing domestic violence.

Mensline (1300 78 99 78) – telephone and online counselling service for men experiencing family or relationship concerns (including male victims of domestic violence).

NSW Rape Crisis line (1800 424 017) – free 24 hour counselling service that provides support for anyone who has experienced or is at risk of sexual assault, and their non-offending supporters.

Victims Services (1800 633 063) or **Aboriginal Contact Line** (1800 019 123) – access to counselling, financial support (including for immediate needs) and recognition payments.

Women's Domestic Violence Court Advocacy Services (also local domestic violence coordination points for Safer Pathway) (1800 938 227) – court support, advocacy, referral and case coordination.

Appendix 3: Identification of domestic and family violence

The NSW Health Domestic violence – identifying and responding policy[19] has suggested questions to support the identification of domestic and family violence.

Ask about any injuries

- Was anybody angry with you at the time you were hurt?
- Many women who have injuries like this have been deliberately hurt. Did someone hurt you?
- Your injuries do not seem to fit the explanation you've given...did something else cause them? Did someone do this to you?

Ask about relationships

- A lot of women we see are sometimes frightened of their partner – Have you ever been frightened of your partner?
- Are you having problems in your relationship at the moment?

Ask about safety

- Do you feel safe at home?
- Is it safe for you to go home today?

Screening tools

Some health services have implemented domestic violence routine screening within their services. Information on local process can be sought via the local violence, abuse and neglect service.

Where routine screening has been implemented health workers should use established screening tools in accordance with relevant protocols and procedures.

Appendix 4: Western NSW LHD symptoms of strangulation (SOS) card

The SOS medical alert card developed by Western NSW LHD PARVAN team provides discharge advice regarding when to seek further medical attention, that the patient can take with them discretely. It has been used extensively by multiple LHDs and services across NSW.

Consider providing the SOS medical alert card to all people you assist that have experienced a neck injury or pressure to their neck, or if you are suspicious that they have sustained this type of injury.

Suggested communication when offering the SOS card:

"I am really worried about you because this can be life threatening. Have you had any pressure to your neck?"

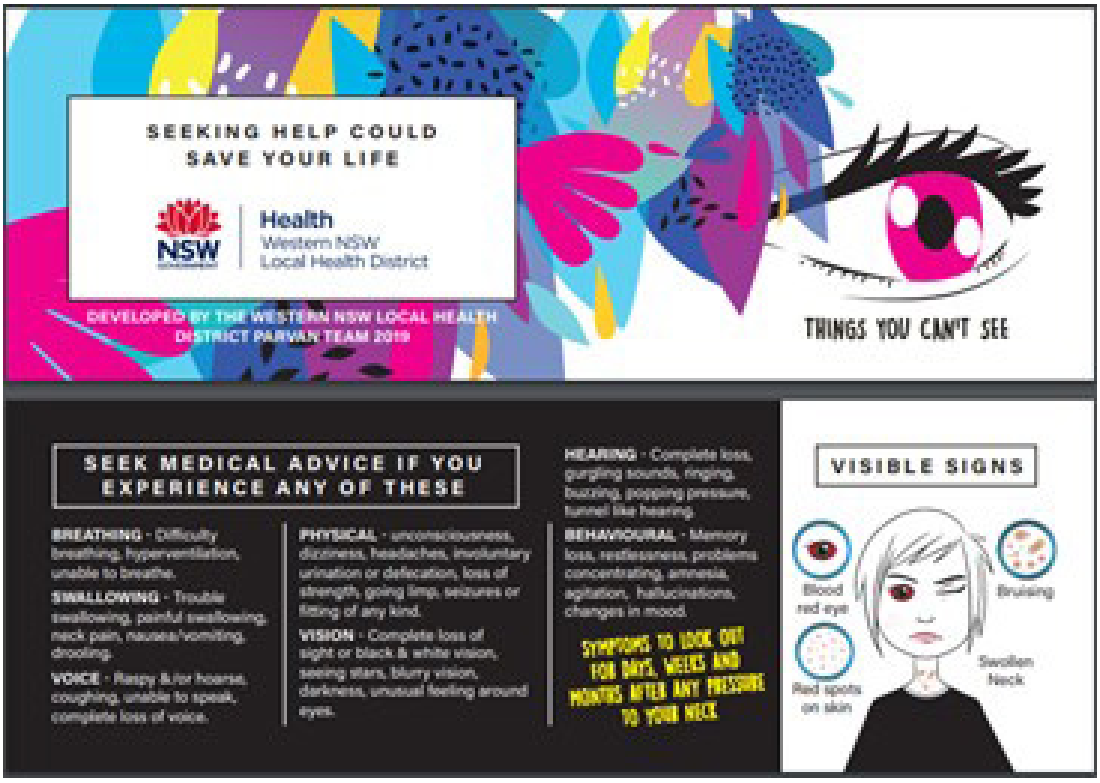
This is a list of signs and symptoms that are serious and can happen days, weeks or months after the pressure to your neck.

You should see your local doctor or come back to the emergency department if you have any of these signs and symptoms."

The SOS card were developed as part of the Clinical Leadership project supported by the Clinical Excellence Commission in Orange emergency department. Over 50,000 copies have been ordered across NSW LHDs, and by domestic violence services in Victoria and the ACT. It has been translated into the following community languages: Arabic, Bengali, Dari, Farsi, Greek, Hindi, Karen, Khmer, Myanmar, Nepali, Samoan, Serbian, Simplified Chinese, Somali, Spanish, Tamil, Thai, Turkish, Urdu and Vietnamese.

Translations were funded by the South Eastern Sydney Primary Health Network.

Organisations can order the cards with their own logo on the back, by contacting Digital Services directly. For enquiries and requests for quotations please email: digitalservices@customerservice.nsw.gov.au



Appendix 5: Domestic and family violence risk assessment and safety planning

Risk assessment and safety planning must be undertaken whenever domestic and family violence is identified.

A structured professional judgement approach to risk assessment should be used wherever possible by health workers who have received appropriate training (e.g. social workers or specialist violence, abuse and neglect workers). A structured professional judgement approach combines the use of a structured risk assessment tool, professional judgement and the victim's own assessment of risk.

Sometimes a structured professional judgement approach is not possible (e.g. if the victim does not consent to speak with health workers). In these circumstances health workers will use available information to apply a professional judgment approach to assessing risk, in particular information gathered from the victim and the victim's own assessment of risk.

Where a victim is identified as being at serious threat, health workers should advise the victim (where it is safe to do so) that they have serious concerns for their safety, and work with the victim to reduce serious threat. Some actions may include:

- referral to health violence, abuse and neglect or specialist domestic and family violence service outside health
- referral to Safer Pathway Safety Action Meeting[36]
- reporting to NSW Police.

Further information is available in the Information sharing and reporting to police section of this guide.

Appendix 6: Further guidance on information sharing, child protection reporting and reporting to police

- On reporting to NSW Police refer to Domestic violence - identifying and responding: Policy directive[19] and explained in section 11.3.4 of the NSW Health Privacy manual for health information[31] on reporting 'serious criminal offences'.
- On reporting to police where sexual assault has been disclosed, see NSW Health's Responding to sexual assault (adult and child) policy and procedures[22].
- On information sharing under Part 13A Crimes (Domestic and Personal Violence) Act 2007[41] refer to the NSW Government's Domestic violence information sharing protocol[42] (section 13 deals with sharing information where serious threat is identified).
- For NSW Health based guidance refer to the Use of Exchange of Information Part 13A Crimes (Domestic and Personal Violence) Act 2007 Form: Information Bulletin (IB2016_056)[43].
- On responding to the risk of harm to children and young people, reporting responsibilities and information exchange under Chapter 16A of the Children and Young Persons (Care and Protection) Act 1998[44] refer to Child wellbeing and child protection policies and procedures for NSW Health[25].

Acknowledgements

The Agency for Clinical Innovation would like to thank those clinicians and services whose work in this area was generously shared as the basis for delivering this content.

This includes:

- Forensic Medical Unit, Blacktown Hospital, Western Sydney LHD
- The PARVAN team from Western NSW LHD, whose SOS card has been referenced throughout this document in addition to other input.
- The Ministry of Health PARVAN and Mental Health teams

Glossary

Term	Definitions
Asphyxia	Impaired breathing that results in lack of oxygen to the body.
CASACAL	Child Abuse and Sexual Assault Clinical Advice Line
CT	Computed tomography
CTA	Computed tomography angiography
Choking	Asphyxia resulting from obstruction of the airways. Mechanisms include ligature, smothering, mechanical and positional asphyxia.
Deliberate self-harm	The act of deliberately causing of pain or injury to oneself without wanting to die. Including, but not limited to, behaviours such as cutting, burning or hitting oneself, self-strangulation and deliberate self-poisoning.
Domestic and family violence	This document adopts the NSW Government's shared policy definition:[45] Domestic and family violence is defined to include any behaviour in an intimate or family relationship that is violent, threatening, coercive or controlling, causing a person to live in fear. It is usually manifested as part of a pattern of controlling or coercive behaviour. An intimate relationship refers to people who are (or have been) in an intimate partnership, whether or not the relationship involves or has involved a sexual relationship — i.e. married or engaged to be married, separated, divorced, de facto partners (whether of the same or different sex), couples promised to each other under cultural or religious tradition, or who are dating. A family relationship has a broader definition and includes people who are related to one another through blood, marriage or de facto partnerships, adoption and fostering relationships, or sibling and extended family relationships. It includes the full range of kinship ties in Aboriginal and Torres Strait Islander communities, extended family relationships, and of family within communities of people with diverse sexualities, gender identities or intersex variations. People living in the same house, people living in the same residential care facility and people reliant on care may also be in a domestic relationship if their relationship exhibits dynamics that may foster coercive and abusive behaviours.

Term	Definitions
ED	Emergency department
ENT	Ear, nose and throat
Ligature strangulation	Compression of the neck by an object that can be used for tying, such as a rope, cord, belt, shoelace, wire or electrical cable.
LGBTIQ+	Lesbian, gay, bisexual, transgender, intersex, queer/questioning and related identities
MH	Mental health
Mechanical asphyxia	Restriction of chest wall caused by positioning, compression, or trauma to the chest that prevents normal ventilation.
MRG	Mandatory Reporter Guide[3]
MRI	Magnetic resonance imaging
MRA	Magnetic resonance angiography
NFS	Non-fatal strangulation
PARVAN	Prevention and response to violence, abuse and neglect
Petechiae	Small (1 – 2 mm) red or purple spots on the skin or conjunctiva caused by a bleeding from broken capillary blood vessels.
Positional asphyxia	Asphyxia caused by position or posture that prevents respiration.
Psychosocial support worker	Health workers who provide clinical psychosocial support, including but not limited to social worker, violence, abuse and neglect worker, sexual assault service support worker, Aboriginal health worker, multicultural health worker, refugee health worker.

Term	Definitions
ROSH	Risk of significant harm
Smothering	Asphyxia caused by blockage to the mouth and nose to prevent ventilation.
Sexual assault	When a person is forced, coerced or tricked into sexual acts against their will or without their consent, or if a child or young person is exposed to sexual activities.
SAS	Sexual assault service
Strangulation	External pressure applied to the neck sufficient to obstruct blood vessels and/or airflow.
SOS	Symptoms of strangulation
Suicide	The act of intentionally causing one's own death.
VAN	Violence, abuse and neglect

References

1. Australian College for Emergency Medicine. Triage. Melbourne, VIC: ACEM; 2018 [cited 30 Aug 2022]. Available from: https://acem.org.au/Content-Sources/Advancing-Emergency-Medicine/Better-Outcomes-for-Patients/Triage
2. Crimes Act 1900 No 40. Sect. 37.
3. NSW Department of Communities and Justice. Welcome to the NSW Mandatory Reporter Guide. Sydney, NSW: NSW Department of Communities and Justice [cited 30 Aug 2022]. Available from: https://reporter.childstory.nsw.gov.au/s/mrg
4. NSW Ministry of Health. Suspected child abuse and neglect (SCAN) medical protocol. Sydney, NSW: NSW Ministry of Health; 2014 [cited 17 August 2022]. Available from: https://www1.health.nsw.gov.au/pds/ActivePDSDocuments/GL2014_012.pdf
5. Schrag B, Vaucher P, Bollmann MD, et al. Death caused by cardioinhibitory reflex cardiac arrest—a systematic review of cases. Forensic Sci Int. 2011;207(1-3):77-83. DOI: 10.1016/j.forsciint.2010.09.010
6. The Royal College of Pathologists of Australia. Clinical Forensic Assessment and Management of Non-Fatal Strangulation. Surry Hills, NSW: The Royal College of Pathologists of Australia; 2018 [cited 22 Aug 2022]. Available from: https://www.rcpa.edu.au/getattachment/59a67b0e-ca6b-4686-a81f-14a1a15e70fe/Clinical-Forensic-Assessment-and-Management-of-Non.aspx
7. Sauvageau A, Laharpe R, King D, et al. Agonal sequences in 14 filmed hangings with comments on the role of the type of suspension, ischemic habituation, and ethanol intoxication on the timing of agonal responses. Am J Forensic Med Pathol. 2011;32(2):104-7. DOI: 10.1097/PAF.0b013e3181efba3a
8. Zuberi OS, Dixon T, Richardson A, et al. CT angiograms of the neck in strangulation victims: incidence of positive findings at a level one trauma center over a 7-year period. Emerg Radiol. 2019;26(5):485-92. DOI: 10.1007/s10140-019-01690-3
9. De Boos J. Non-fatal strangulation: Hidden injuries, hidden risks. Emerg Med Australas. 2019;31(3):302-8. DOI: 10.1111/1742-6723.13243
10. Bichard H, Byrne C, Saville CW, et al. The neuropsychological outcomes of non-fatal strangulation in domestic and sexual violence: A systematic review. Neuropsychol Rehabil. 2021:1-29. DOI: 10.1080/09602011.2020.1868537
11. Costello M, Backhouse C. Avoiding the 3 'M's: accurate use of violence, abuse and neglect statistics and research to avoid myths, mistakes and misinformation. Sydney, NSW: The NSW Health Education Centre Against Violence and PARVAN Unit, Ministry of Health; 2019 [cited 30 Aug 2022]. Available from: https://apo.org.au/node/258076
12. White C, Martin G, Schofield AM, et al. 'I thought he was going to kill me': Analysis of 204 case files of adults reporting non-fatal strangulation as part of a sexual assault over a 3 year period. J Forensic Leg Med. 2021;79:102128. DOI: 10.1016/j.jflm.2021.102128
13. Douglas H, Fitzgerald R. Strangulation, domestic violence and the legal response. Syd Law Rev. 2014;36:231.
14. Glass N, Laughon K, Campbell J, et al. Non-fatal strangulation is an important risk factor for homicide of women. J Emerg Med. 2008;35(3):329-35. DOI: 10.1016/j.jemermed.2007.02.065

15. Shields LB, Corey TS, Weakley-Jones B, et al. Living victims of strangulation: A 10-year review of cases in a metropolitan community. Am J Forensic Med Pathol. 2010;31(4):320-5. DOI: 10.1097/paf.0b013e3181d3dc02

16. Toivonen C, Backhouse C. National risk assessment principles for domestic and family violence. Sydney, NSW: Australia's National Research Organisation for Women's Safety Limited (ANROWS); 2018.

17. Australian Institute of Health and Welfare. Family and domestic violence in Australia. Canberra, ACT: AIHW; 2018 [cited 5 Sept 2022]. Available from: https://www.aihw.gov.au/reports/domestic-violence/family-domestic-sexual-violence-in-australia-2018/summary

18. Royal Commission Into Institutional Responses to Child Sexual Abuse. Our Inquiry. 2017 [cited 5 Sept]. Available from: https://www.childabuseroyalcommission.gov.au/our-inquiry

19. NSW Ministry of Health. Domestic violence - identifying and responding: Policy directive (PD2022_043). Sydney, NSW; NSW Ministry of Health; 2006 [cited Jun 2021]. Available from: https://www1.health.nsw.gov.au/PDS/pages/doc.aspx?dn=PD2006_084

20. NSW Ministry of Health. Clinical care of people who may be suicidal: Policy directive (PD2022_043). Sydney, NSW; NSW Ministry of Health. 2016 [cited Sep 2022]. Available from: https://www1.health.nsw.gov.au/pds/Pages/doc.aspx?dn=PD2022_043

21. Mental Health and Drug and Alcohol Office. Mental Health for Emergency Departments – A Reference Guide. North Sydney, NSW: NSW Ministry of Health; 2015 [cited 30 August 2022]. Available from: https://www.health.nsw.gov.au/mentalhealth/resources/Publications/mental-health-ed-guide.pdf

22. NSW Ministry of Health. Responding to sexual assault (adult and child) policy and procedures (PD2020_006). Sydney, NSW; NSW Ministry of Health; 2020 [cited Jun 2021]. Available from: https://www1.health.nsw.gov.au/PDS/pages/doc.aspx?dn=PD2020_006

23. Monahan K, Purushotham A, Biegon A. Neurological implications of nonfatal strangulation and intimate partner violence. Future Neurol. 2019;14(3). DOI: 10.2217/fnl-2018-0031

24. NSW Ministry of Health. The NSW health worker's guide to identifying and responding to domestic and family violence [Unpublished]. Sydney, NSW: NSW Ministry of Health [cited 17 August 2022].

25. NSW Ministry of Health. Child wellbeing and child protection policies and procedures for NSW Health (PD2013_007). Sydney, NSW: NSW Ministry of Health; 2013 [cited Jun 2021]. Available from: https://www1.health.nsw.gov.au/PDS/pages/doc.aspx?dn=PD2013_007

26. Strack GB, McClane GE, Hawley D. A review of 300 attempted strangulation cases part i: criminal legal issues. J Emerg Med. 2001;21(3):303-9. DOI: 10.1016/S0736-4679(01)00399-7

27. Beckmann NM, West OC, Nunez Jr D, et al. ACR appropriateness criteria® suspected spine trauma. J Am Coll Radiol. 2019;16(5):S264-S85. DOI: 10.1016/j.jacr.2019.02.002

28. Biffl WL, Cothren CC, Moore EE, et al. Western Trauma Association critical decisions in trauma: screening for and treatment of blunt cerebrovascular injuries. J Trauma Acute Care Surg. 2009;67(6):1150-3. DOI: 10.1097/TA.0b013e3181c1c1d6

29. Robertson JJ, Koyfman A. Cervical artery dissections: a review. J Emerg Med. 2016;51(5):508-18. DOI: 10.1016/j.jemermed.2015.10.044

30. Health Records and Information Privacy Act 2002 No 71 (NSW). Schedule 1 Health Privacy Principles.

31. NSW Ministry of Health. Privacy manual for health information. North Sydney, NSW: NSW Ministry of Health; 2015 [cited 30 Aug 2022]. Available from: https://www.health.nsw.gov.au/policies/manuals/Documents/privacy-manual-for-health-information.pdf

32. Holt R, Joseph B. Resident manual of trauma to the face, head, and neck. Otolaryngol Head Neck Surg. 2012:978-0

33. Kuriloff DB, Pincus RL. Delayed airway obstruction and neck abscess following manual strangulation injury. Ann Otol Rhinol Laryngol. 1989;98(10):824-7. DOI: 10.1177/000348948909801014

34. Australasian College for Emergency Medicine. Family and domestic violence and abuse policy P39. ACEM; 2020 [cited 5 Sept 2022]. Available from: https://acem.org.au/getmedia/69e7db91-5dcd-4875-a6e0-ce5760684678/Policy_on_Domestic_and_Family_Violence_Nov16.aspx

35. 1800RESPECT National Domestic Family and Sexual Violence Counselling Service. Confidential information, counselling and supporting service [Internet]. [cited 5 Sep 2022]. Available from: https://www.1800respect.org.au/

36. NSW Government. Safer Action Meeting Manual. Sydney, NSW: NSW Government; 2020 [cited 5 Sept 2022]. Available from: https://facs-web.squiz.cloud/__data/assets/file/0004/592951/SAM-Manual-2020-FNL.pdf

37. NSW Ministry of Health. Child Wellbeing Unit and Child Wellbeing Coordinators. Sydney, NSW: NSW Ministry of Health; 22 Aug 2018 [cited 5 Sep 2022]. Available from: https://www.health.nsw.gov.au/parvan/childprotect/Pages/cwu.aspxaspxaspx

38. NSW Ministry of Health. NSW Health Sexual Assault Services. Sydney: Ministry of Health; 26 Aug 2022 [cited 5 Sep 2022]. Available from: https://www.health.nsw.gov.au/parvan/sexualassault/Pages/health-sas-services.aspx?

39. NSW Department of Communities and Justice. You have a right to be safe. Sydney: Department of Communities and Justice; 24 Jul 2020 [cited 5 Sept 2022]. Available from: https://www.facs.nsw.gov.au/domestic-violence

40. NSW Department of Communities and Justice. Crisis numbers and helplines. Sydney: Department of Communities and Justice; 23 May 2022 [cited 5 Sept 2022]. Available from: https://www.dcj.nsw.gov.au/contact-us/helplines.html

41. Crimes (Domestic and Personal Violence) Act 2007 No 80 (NSW). Sect. 13A.

42. NSW Department of Justice. Domestic Violence Information Sharing Protocol. Parramatta, NSW: NSW Government; 2014 [cited 30 Aug 2022]. Available from: https://www.crimeprevention.nsw.gov.au/domesticviolence/Documents/It%20stop/DV-info-Sharing-Protocol.pdf

43. NSW Ministry of Health. Use of Exchange of Information Part 13A Crimes (Domestic and Family Violence) Act 2007 Form: Information Bulletin (IB2016_056). Sydney, NSW: NSW Ministry of Health; 2016 [cited 22 Aug 2022]. Available from: https://www1.health.nsw.gov.au/pds/Pages/doc.aspx?dn=IB2016_056

44. Children and Young Persons (Care and Protection) Act 1998 No 157 (NSW). Chapter 16A.

45. NSW Ministry of Health. NSW Health strategy for preventing and responding to domestic family violence 2021-2026. Sydney, NSW: NSW Ministry of Health; 2021 [cited 5 Sep 2022]. Available from: https://www.health.nsw.gov.au/parvan/DV/Publications/dfv-stratgy-2021-2026.PDF

The Agency for Clinical Innovation (ACI) is the lead agency for innovation in clinical care.

We bring consumers, clinicians and healthcare managers together to support the design, assessment and implementation of clinical innovations across the NSW public health system to change the way that care is delivered.

The ACI's clinical networks, institutes and taskforces are chaired by senior clinicians and consumers who have a keen interest and track record in innovative clinical care.

We also work closely with the Ministry of Health and the four other pillars of NSW Health to pilot, scale and spread solutions to healthcare system-wide challenges. We seek to improve the care and outcomes for patients by re-designing and transforming the NSW public health system.

Our innovations are:

- person-centred
- clinically-led
- evidence-based
- value-driven.

aci.health.nsw.gov.au

NSW GOVERNMENT

AGENCY FOR CLINICAL INNOVATION

Our vision is to create the future of healthcare, and healthier futures for the people of NSW.