

# NHS LOTHIAN EMERGENCY ALARM SYSTEM & RESPONSE POLICY

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# NHS Lothian Emergency Alarm System and Response Policy

# **Executive Summary**

# **Key Messages** This policy aims to ensure that all wards and departments have a system in place to summon assistance in the event of an emergency. • Where alarm systems are deemed a reasonable control measure they will be implemented according to a clear local procedure. • All staff must be aware of the requirement within this policy and local procedures. Staff must comply fully to ensure that safety is maximised for all involved in the event of an emergency situation. **Standards Required** Risk assessment will be conducted in relation to response to emergency situations and appropriate systems implemented. • Where alarm systems are operational a robust procedure will be implemented to ensure safe and effective use of the system. • All staff will be fully cognisant of and competent in the implementation of the alarm system and emergency response procedure. Implementation and effectiveness of the procedures will be monitored, reviewed on an on going basis.

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# 1. Aim of the Policy

1.1 Due to the nature of services provide in some wards and departments across NHS Lothian there may be a need to summon rapid staff assistance via activation of an alarm device or alternative emergency response strategy.

1.2 Alarm systems aim to minimise the potential risk of injury or harm to staff, patients or visitors by allowing timely response to emergency situations.

1.3 This policy aims to set out best practice in relation to all aspects of alarm system implementation and summoning assistance in an emergency.

# 2. Objectives of the Policy

2.1 All wards and departments will assess the risks of potential harm or injury occurring in relation to emergency events (see 4.3.) Processes will be implemented for summoning assistance in the event of an emergency situation.

2.2 Where alarms systems are indicated as being a reasonably practicable risk reduction strategy, alarm systems will be implemented.

2.3 Where alarms systems are not deemed necessary, based on risk assessment alternative emergency response strategies will be implemented.

2.4 All areas implementing an alarm system will have robust procedures in place for issuing of, testing, activation, repair of and response to alarms.

2.5 All staff working within an area that implements an alarm system will be fully cognisant of the procedure for use and will comply with the procedure at all times.

2.6 To communicate the requirement for full reporting and recording of all incidents and near misses using the Datix system, in line with the NHS Lothian Adverse Event Management Policy and Operational Procedure.

# 3. Scope of the Policy

3.1 This policy applies to all NHS Lothian staff, and to all individual's providing services on behalf of NHS Lothian. It applies to staff working on NHS property and non NHS property. This policy should be read in conjunction with the NHS Lothian Management of Violence and Aggression Policy and the NHS Lothian Lone Worker Policy, which details the strategy for protection of staff working alone.

# 4. Definitions

4.1 For the purposes of this policy the following definitions will apply:

4.2 **Alarm system** is a technology based method for summoning rapid assistance in the event of an emergency.

4.3 **Emergency events** include: violent or aggressive incidents, incidents of deliberate self harm, the sudden onset of illness, an accident or injury.

4.4 **Emergency response** refers to the processes in place to allow staff to seek assistance in the event of an emergency.

4.5 **Personal device alarm system** – this system requires staff to carry an individual device which can be activated in the event of an emergency. The system is linked to sensors in the environment which locates the incident for staff responding (i.e. Pinpoint or Guardian systems). The main personal alarm system utilised in mobile lone working activities is the identicom system. A full description of the system can be found in the **NHS Lothian Lone Worker Policy** (Section 8 and appendix G).

4.6 **Fixed alarm system** – this system operates on a fixed point alarm button; the person activating the alarm must be able to access the alarm point in order to effect activation (**i.e. panic button**). These types of alarms are located in specific areas in departments, mainly on the wall or underneath desks. This system is usually linked to a display unit which will indicate the incident location enabling a subsequent response. In community settings some of these systems are linked directly to the local police station. Requires a general statement around types of Fixed Alarms

4.7 **Two way radios system** - two way radios can be used to maintain communication between staff and to summon assistance in the event of an emergency. Verbal communication is required for this system to be effective as there is no other method of locating the individual requiring assistance.

4.8 **Personal attack alarms** – or screech alarms are primarily a deterrent in the event of a violent or aggressive incident. This type of alarm does not incorporate an effective method for enabling rapid assistance, unless a local response procedure is implemented.

# 5. Responsibilities

5.1 The legislative frameworks that underpin NHS Lothian's obligation to NHS workers are contained within:

- Health and Safety at Work Act 1974
- Management of Health and Safety at Work Regulations 2002
- NHS Reform (Scotland) Act 2004

5.2 The Health and Safety at Work Act requires employers to provide a safe place of work, a safe working environment, safe equipment, safe systems of work, and sufficient information, instructions and training.

5.3 The Management of Health and Safety at Work Regulations require employers to carry out risk assessments, make arrangements to implement necessary measures, appoint competent people and arrange for appropriate information and education.

5.4 The NHS Reform (Scotland) Act establishes the Staff Governance legislation and requires NHS employers to ensure that their staff are well informed, appropriately educated, involved in decisions which affect them, treated fairly and consistently, and provided with an improved and safe working environment.

#### 5.5 Chief Executive

As a Health and Safety related policy, responsibility for the implementation and operation of this policy lies with the Chief Executive.

5.6 Director of Human Resources and Organisational Development The Director Human Resources and Organisational Development has delegated responsibility for the implementation of this policy.

5.7 Site Directors, General Managers and Chief Nurse or equivalent Site Directors, General Managers, Chief Nurses, including Clinical Directors are responsible for the full implementation of the policy.

<b>Responsible Person</b>	Action
CNM or Equivalent	Ensuring that all Service/Departmental Managers are aware of this policy and the requirements within it.
	Supporting the completion risk assessments to assess the risks of potential harm or injury occurring and processes in place for summoning assistance in the event of an emergency.
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	Facilitating the training of staff in the use of alarm systems and any associated training required for staff responding to emergencies
	Promoting the implementation of alarm systems where appropriate, and ensuring that emergency response strategies are implemented.
	Ensuring that all aspects of NHS Lothian's Adverse Event Management Policy are implemented in relation to emergency events.
	Ensuring that Service/Departmental Managers are implementing robust post adverse event support strategies.

5.8 Clinical Nurse Managers (CNM) or equivalent

5.9 Ward and Departmental managers

Responsible Person	Action
Ward and Departmental Managers	Ensuring that all staff are aware of this policy and the requirements within it. This may require giving consideration to communication needs of staff whose first language is not English or who have a sensory impairment.
	Completing risk assessments to assess the risks of potential harm or injury occurring and processes in place for summoning assistance in the event of an emergency.
	Development, implementation and review of alarm system and emergency response procedures.
	Ensuring that staff are suitably educated to implement the alarm system procedure and have completed any training required to support alarm response.
	Ensure that the local emergency alarm procedures are incorporated into local induction for all staff.
	Implementing all aspects of NHS Lothian's Adverse Event Management Policy and ensuring that all adverse events are reported using the Datix System and investigated in accordance with the policy.
	Facilitating post adverse events support strategies including investigation, review, de-brief and support for staff and others affected by adverse events.

# 5.10 All Staff

<b>Responsible Person</b>	Action
All Staff	Taking reasonable care of themselves, and any other people whom may be affected by their actions
	Following all policies and procedures for the use of alarm systems and emergency management
	Contributing to the risk assessment and risk reduction process and undertaking any education identified in relation to the use of alarm systems and responding to emergencies.
	Reporting all incidents involving abuse, threats or assault, including near misses to their line manager using the Datix system
	Reporting to their line manager any risks they identify or concerns regarding potential harm or injury and processes in place for summoning assistance in the event of an emergency.

5.5 Where NHS Lothian operate a service accommodated in property not owned by NHS Lothian the Landlord will be responsible for:

- Ensuring an adequate facility is available to summon assistance in the event of an emergency and liaising with the relevant service manager to ensure that the provision is adequate.
- Clearly communicating to service managers and staff using the property how the system should be operated.
- Maintaining the system and monitoring its effectiveness
- Implementing a strategy to manage any potential systems failure or down time in the system.
- Communicating with the service manager and staff relying on the system as soon as possible in the event of a systems failure and implementing the systems failure strategy in order to minimise risks.

Failure to comply with this will result in a full risk assessment review completed by the departmental manager or equivalent with a view to employing alternative strategies or arrangements (e.g. the utilisation of the identicom system etc...) If no alternative arrangements can be made NHS Lothian may be required to seek alternative accommodation.

# 6. Local and Service Wide Procedures

6.1 All alarm systems must be used in accordance with the manufacturer's and supplier's instructions for use. Where alarms systems are in operation all areas must have a procedure in place for the use of the system. The local or service wide procedure must detail:

# 6.2 Distribution of alarms

How many alarms does each ward or department require?

6.3 Allocation and testing of alarms

- Alarms will be handed out on a shift by shift basis by the nurse in charge and will be signed in and out by staff. Staff will record the identification number of the alarm that they have been allocated, sign to record that they have tested the alarm and that it is functioning, and sign the alarm back in at the end of the shift.
- Staff will not remove alarms from the ward or department due to the risks of damage/ loss and to ensure that all wards and departments have access to sufficient alarms.
- It will be the responsibility of the nurse in charge or equivalent to ensure that all staff are issued with an alarm, that the alarm has been tested and that alarms are returned at the end of the shift.
- The nurse in charge or equivalent will also be responsible for ensuring that all staff visiting the ward such as medical staff, domestics, AHP's, students etc, are equipped with an alarm that is functioning and that

they fully understand how to operate the alarm. Local procedures should document how alarms will be allocated to staff visiting wards.

#### 6.4 Activation and response

Local procedures will document how the alarm will be activated and what the expected response will be.

#### 6.5 Responding to alarm activation

Local procedures will detail the process for ward or department staff responding to alarm activation from other areas.

#### 6.6 Resetting the alarm

Local procedures will document how the system will be reset following activation.

#### 6.7 Maintenance and system testing

The local procedure will detail the procedure for maintenance of the alarm system and how to report faults or damage. The procedure will also explain how the system can be checked for functionality. The alarm system manufacturer's and supplier's instructions for system maintenance and testing should be adhered to.

6.8 Procedures for the use of fixed point alarm systems and the use of two way radios should follow the above format.

6.9 In relation to emergency alarm procedures in community or lone working settings, reference should made to **Appendix A**, in this Policy and Section 8 and **Appendix G** in the NHS Lothian Lone Working Policy.

# 7. Emergency Response Procedure

7.1 For areas that do not have an alarm system a procedure should in place that describes how staff and patient safety is monitored and how assistance should be summoned in an emergency (2222/9999 or other procedure).

# 8. Education

8.1 The local or service wide procedure should be included in new staff induction and communicated to all existing staff.

8.2 Staff who are expected to respond to alarm activation both within their own clinical area or in other clinical areas should be appropriately educated for the role.

8.3 Local or service wide procedures should detail what level of training is required by staff expected to respond to alarms, with particular consideration being given to management of violence and aggression. Staff members who undertake lone working activities that require specific education in relation to the identicom system should refer to **Section 9 Education** in the NHS Lothian Lone Working Policy

# 9. Compliance

9.1 Where NHS Lothian has provided equipment with the aim of maintaining staff, patient and visitor safety such equipment must be used as described in local or service wide procedures. Failure to fully implement alarm system or emergency response procedures could compromise safety and may lead to disciplinary action.

9.2 Alarm devices must be worn as intended (clipped on to clothing in an accessible area) and not carried in pockets or attached to keys.

9.3 Staff have the right to remove themselves from an unsafe working environment, and therefore no staff member should be expected to work in an area without an alarm if it is ward or department procedure for staff to carry alarms.

9.4 Any issues which may lead to local procedures being compromised such as: lack of alarms, broken or damaged equipment, staff non compliance, inadequate response to alarm activation, insufficient training to respond to alarm activation etc must be reported to the nurse in charge for action and where appropriate recorded on Datix.

# 10. Reactive Monitoring

10.1 All adverse events (including near misses must be recorded using the Datix system in line with the NHS Lothian Adverse Event Management Policy and Operational Procedure

10.2 Line managers must ensure that review and investigation of adverse events is carried out and recorded. Those identified as causing major harm will be reviewed as a significant adverse event as per policy.

10.3 In order to ensure the implementation and effectiveness of this policy and associated local procedures, local statistics and incident reports should be reviewed regularly by relevant management groups and the local Health and Safety Committees.

10.4 Line managers must monitor awareness and compliance with all aspects of this policy. This includes identification of lone workers and attendance at identified education. Compliance should be reported via local Health and Safety Committees.

10.5 Adverse event trends will also be monitored by the NHS Lothian Health and Safety Committee to determine what interventions may be required to assist with preventing recurrence.

# **11. Active Monitoring**

11.1 Service/departmental managers should evaluate the effectiveness of local safety procedures on an ongoing basis, in collaboration with the staff. Evaluation should be undertaken with the aim of continuous improvement and responding to emerging risks.

11.2 Service/departmental managers will use regular workplace inspections, safety tours, the health and safety management system quarterly review process and the review of departmental and service Risk assessment & risk reduction system (purple pack) to further determine the effectiveness on the implementation of the policy.

11.3 The implementation of the policy will be monitored for compliance through use of the NHS Lothian Health and Safety Management System quarterly review process. This information will then be provided to the appropriate management team and also the Local Health and Safety Committee. The NHS Lothian Health and Safety Committee will also receive on a regular basis an update from the various Local Health and Safety Committees on the status of the risk and compliance around the issues.

# **12.0 Measuring Performance**

14.1 This policy will be subject to a Corporate Compliance check. The risk level along with the frequency and who will undertake the compliance check will be determined by the NHS Lothian Health and Safety Committee and the NHS Lothian Risk Management Steering Group. The policy will be reviewed and revised every 2 years or as a result of any changes in legislation

# Appendix A – Examples local emergency alarm system procedures

#### 1. Introduction

1.1 Some in-patient areas within NHS Lothian operate a personal alarm system (**Pinpoint**) to enable staff to summon rapid assistance in the event of an emergency event,

1.2 Emergency events include:Violent or aggressive incidentsIncidents of deliberate self-harmPatients abscondingSudden onset of illness, accident or injury

1.3 This system is infrared based and is linked to sensors in the ward environment.

#### 2. Distribution of alarms

2.1 This in-patient area maintains a stock of 20 alarm devices plus 2 domestic only devices. This is the minimum requirement to cover the potential for 12 staff on shift during handover period, and 8 alarms for visitors to the ward (Medical staff, students etc).

2.2 The Domestic alarms will be clearly marked - for domestic staff use only and will be stored separately to the ward stock. Ward or department alarms will all be clearly marked with an identification number.

#### 3. Allocation and testing of alarms

3.1 All staff working in the ward must wear an alarm at all times or be accompanied, at all times by a member of nursing staff wearing an alarm.

3.2 The shift co-ordinator will ensure that all alarms are tested and functioning at the commencement of shift.

3.3 The shift co-ordinator will then distribute an alarm to all staff on shift. Upon receipt of an alarm each member of staff should then test the alarm is functioning, record the identification number of the alarm and sign the alarm out.

3.4 If staff arrive on the ward after the commencement of shift (medical staff, domestics etc.) reception staff will direct them to the shift co-ordinator who will allocate an alarm to the staff member, ensure that they are familiar with its operation and ensure that the member of staff tests and signs the alarm out.

3.5 At the end of shift or when staff finish duties on the ward they must return the alarm and sign to confirm that it has been returned.

3.6 The shift co-ordinator is responsible for checking that alarms are issued to all staff, that they are tested and that they are signed back in. In the event that

an alarm is not returned at the end of a shift the shift co-ordinator must report this to the Charge Nurse as soon as possible for follow up.

3.7 In the event that an alarm is taken off the ward it must be returned within 24 hours, if an alarm is not returned within this period, the Clinical Nurse Manager will be informed. The Clinical Nurse Manager will investigate and take appropriate action. Appropriate action may include charging the member of staff for the cost of a replacement alarm.

3.8 The ward has a transmitter testing box in the duty room. The alarm is tested by placing the device in the box and pulling the top and the bottom of the alarm to separate the unit. When the alarm is activated a sharp continuous tone should be heard. The pin must be replaced into the alarm before removing it from the test box to avoid false activation.

3.9 If no sound is heard the staff should ensure the test box is correctly connected and plugged into the mains. If the test box is appropriately set up and the alarm is still not functioning, staff should report the alarm as faulty to the ward administrator and inform the shift co-ordinator who will allocate another alarm.

# 4. Activation and response

4.1 The black Pinpoint alarms are activated by the removal of the pin by pulling the bottom of the unit which separates the unit and activates the alarm. In an emergency event staff should activate their alarm, take appropriate action and wait for assistance.

4.2 The member of staff activating the alarm should be ready to inform staff arriving of the nature of the emergency and type of assistance required.

# 5. Responding to alarm activation

5.1 Activation in ward 1 - If the alarm is activated in ward 1 a loud two tone klaxon will sound.

5.2 When activated staff should determine where the incident is by viewing the nearest Attack Display Unit (ADU) which will indicate the location. Staff will report immediately to the location indicated on the ADU.

5.3 The location of the incident will also be indicated by a coloured light illuminating above the door of the room where the incident is occurring

5.4 Staff involved in other essential activities such as constant or special observations will continue with these activities when the alarm is activated.

5.6 Staff from link areas will send at least one member of appropriately trained staff to assist.

5.7 One member of staff should direct and give relevant information as to the type of assistance required to the staff coming from the link areas.

5.8 Staff not directly required for the incident should control the environment and give reassurance and support to patients, relatives and others.

5.9 All staff will remain in the vicinity of the incident until the shift co-ordinator determines the incident has been successfully dealt with.

5.10 In some areas the system is linked to other wards or departments. If the alarm is activated in any of these areas, the shift co-ordinator will determine how many staff can be sent to the ward for assistance. If available, 2 staff will respond to the link area requiring assistance. A minimum of one member of staff must respond.

5.11 Staff responding to alarm activation in link areas in the event of an aggressive incident, must have the appropriate level of education in the management of violence and aggression.

5.12 One member of staff from the area of the incident should direct and give relevant information as to the type of assistance required to the staff coming from the link areas.

5.13 All staff will remain in the vicinity of the incident until the Nurse in Charge determines the incident has been successfully dealt with.

# 6. Resetting the alarm

6.1 The alarms should only be reset when the appropriate response has been achieved.

6.2 In order for the system to be reset the pin of the alarm(s) activated must be replaced back in to the device.

6.3 The alarm system can only be reset in the ward/department that initiated the alarm activation.

# 7. Maintenance and system testing

7.1 The pinpoint alarm devices operate on batteries. If an alarm device is found to be faulty by the shift co-ordinator at the commencement of shift, they should replace the batteries and test again.

7.2 If the alarm is still not functioning it should be handed to the ward administrator who will complete the maintenance log and send the device to maintenance who will arrange for repair.

7.3 If the ward is left with an insufficient number of alarms to implement this procedure and comply with the NHS Lothian Emergency Alarm System and

Response Policy this should be reported to the Clinical Nurse Manager for action.

7.4 The alarm system's infrared receiver units will be tested regularly (times identified in the written local procedure) by the shift co-ordinator using the receiver unit tester and recorded as complete in the maintenance log book.

7.5 Any system faults identified, for example: functioning alarms not activating in certain locations, should be documented in the maintenance log and reported to maintenance for investigation as a priority.

# 8. Review

This procedure will be reviewed to monitor its effectiveness on both an annual and ongoing basis by the charge nurse or equivalent of the ward/department.



# Alarm System Procedure Summary:

# On entering the ward/dept <u>all staff</u> must:

- Be allocated with an alarm by the shift co-ordinator
- Ensure that they know how to use the alarm and what to do in the event of activation.
- Test that the alarm is functioning by testing it in the alarm test box.
- Sign the daily alarm recording sheet to record the identifying number of the alarm that they have been allocated and that the alarm has been tested.
- Attach the alarm to the clothing in an accessible place (do not carry it in pockets or attach it to keys).
- Ensure that all staff entering the ward/dept are referred to the shift co-ordinator for allocation of an alarm before commencing duties.
- When leaving the ward/dept all alarms must be signed back in and left in the ward.
- Please ensure that you read the local alarm system procedure for more information. The local procedure meets the requirements of the:

# NHS Lothian Safety Alarm Systems and Emergency Response Policy (2015)

# **Community Example**

In some clinical areas in the community, GP clinics etc... may have access to Fixed Alarm systems. One such system is the **Little Green Button**.

This is a PC based panic alarm linked to other computers in area

If you feel under threat, require urgent assistance or there is a medical emergency **double click** on your Little Green Button.

There will be no audible alert from this computer.

The button will turn red (a successful activation) and it will send a message (a **red** screen) to all the computers on the network (with the little green button running). The message will display the location of the problem and the number of people able to respond.

It will stay red until somebody responds to your request for assistance.

It will appear above all programs and will remain there until someone clicks on the **Click to respond** 

(When someone responds, your button will change to display a smiley face for a few seconds before it returns to being a green button.)

Once someone has responded all the other user alert messages will turn **green** and will show the number of users. Their location and time of response will be added to the timeline at the bottom left

# Accidental Activation

The alert can be cancelled by double clicking on the icon again. All users who received the alert will be informed and the screen will turn **yellow**. They can cancel this off their screen by clicking on **Dismiss**. Someone should be nominated check the location to ensure that an actual accidental activation has taken place.

#### Testing the System

Local testing procedures should be identified and recorded as advocated in the NHS Lothian Alarm System and Emergency Response Policy (2015)