

Freedom of information responses indicate significant challenges around implementation of NPSA/NHSE alerts on nasogastric tube (NGT) safety, and post insertion displacement.

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Introduction

- ◀ Never events (NE) continue to occur despite NHSE/I Alerts, HSIB report and BAPEN's Position paper on NGT safety.
- ◀ Failure to order, report and act upon x-rays for NGT position checks is a persistent finding following NEs.
- ◀ Failure to apply and comply with these alerts, particularly 4 point x-ray reporting system appears to be a major cause of NEs.

Methods

A Freedom of Information (FOI) request was made to 122 English hospital Trusts for March 2021 to April 2022 asking:

1. Compliance with NHSE/I alerts?
2. The number of x-ray requests for 1st placement of NGT?
3. NGTs displaced or dislodged after initial placement?
4. Site reported in the Radiology System (RIS) records for the NGT?

A literature search informed a search strategy for the trusts using the National Interim Clinical Imaging Procedure (NCIP) codes for "Plain Film Chest X-ray" (XCHES) where an NGT specified as free text in the clinical indication field or as "XR Nasogastric tube position" (XNASG). An additional SNOMED code for Migration of Nasogastric Tube (Disorder) 473160008 was also identified.

Results

Total FOI requests = 122 with 112 (92%) acknowledgements. Of these, **80 responded** to the FOI but only **14** (13%) were able to provide a full data set.

Majority of Trusts acknowledged failure to record such data or retrieve it.

Full compliance with NHSE/I Alerts in 11/14 with full data sets (79%)

Total number of NGTs placed = 12,075 with 7,429 (62%) having an associated x-ray report. HES data for trusts using the OPCS code G47.5 (Insertion of nasogastric tube), highlighting the significant potential for error.

Summary of Events	Stated Reason For X-Ray Request	"Safe to Feed"	"Do not feed -in lung"	"Do not feed -in oesophagus"	"Not reported/ Unspecified"	Total
	1st Placement	2,328 (69%)	89 (3%)	311 (9%)	629 (19%)	3,357 (45%)
	Post Insertion	583 (67%)	53 (6%)	81 (9%)	158 (18%)	875 (12%)
	Not Stated	2,086 (65%)	97 (3%)	250 (8%)	764 (24%)	3,197 (43%)
	Total	4,997 (67%)	239 (3%)	642 (9%)	1,551 (21%)	7,429 (100%)

Conclusion

1st placement check x-ray	NGT in lung	3%	Post insertion check x-ray	NGT in lung	6%
	NGT in oesophagus	9%		NGT in oesophagus	9%
	Total misplacements	12%		Total displacements	15%

- ◀ Still incomplete compliance with NHSE/I alerts 8 years on.
- ◀ Coding still inadequate for purpose.
- ◀ No information obtained on compliance with 4 point reporting system, never events or failed aspirate pH testing.
- ◀ Demand for x-rays and risk of error is too great and demands alternative techniques to detect misplaced NGTs and reduce the demand for x-rays.

References

https://www.england.nhs.uk/wp-content/uploads/2019/12/Patient_Safety_Alert_Stage_2_-_NG_tube_resource_set.pdf
<https://www.hsib.org.uk/investigations-and-reports/placement-of-nasogastric-tubes/>
<https://www.bapen.org.uk/pdfs/ngsig/a-position-paper-on-nasogastric-tube-safety-v2pdf>