# REGULATION 28: REPORT TO PREVENT FUTURE DEATHS (1)

	REGULATION 28 REPORT TO PREVENT FUTURE DEATHS
	THIS REPORT IS BEING SENT TO:
	1. Chief Executive, OUH NHS Foundation Trust
1	CORONER
	I am Mr D M Salter, Senior Coroner, for the coroner area of Oxfordshire.
2	CORONER'S LEGAL POWERS
	I make this report under paragraph 7, Schedule 5, of the Coroners and Justice Act 2009 and Regulations 28 and 29 of the Coroners (Investigations) Regulations 2013.
3	INVESTIGATION and INQUEST
	On 21 May 2020 I commenced an investigation into the death of Don Maximus Del Rocco Fernandes. The investigation concluded with an inquest on 11 November 2020. Don Maximus was born on 19 May 2019 and was 3 months old when he died at the John Radcliffe Hospital on 26 August 2019. He was the son of and who both attended the inquest.
	There was a Narrative conclusion as follows:
	Don Maximus Fernandes was a 3-month-old baby fed by nasogastric tube on the Paediatric Critical Care Unit at the John Radcliffe Hospital. At approximately 12.30 on 25 August 2019 the NG tube became dislodged and was replaced promptly by the nurse caring for him. The NG tube was then flushed with about 2 mls of water. Within a few minutes Don Maximus began to deteriorate and an x-ray which was reported at approximately 14.10 hours identified the NG tube had been inserted into the left main bronchus in error. He continued to deteriorate despite treatment and died the following morning. The cause of death following post mortem is acute bronchopneumonia in an infant with VACTERL association. It is possible that an evolving yet undetected bronchopneumonia existed prior to insertion of the misplaced NG tube as evidenced at post mortem by the presence of acute bronchopneumonia in the right lung in addition to the left lung. There was also a clinical suspicion of sepsis later in the afternoon of 25 August 2019. Given the temporal relationship however, it is likely that the misplaced NG tube and its subsequent use significantly contributed to Don Maximus Fernandes death.

nasogastric tube and it's use significantly contributed to Don Maximus' death at that time.

The Trust were legally represented at inquest. Paediatric Intensive Care Unit (PICU) Consultant, gave evidence. The nurse who misplaced the tube had separate legal representation and also gave evidence. There was also oral evidence from the Consultant Paediatric Pathologist, The three witnesses who gave oral evidence did so remotely by video.

#### 4 CIRCUMSTANCES OF THE DEATH

Don Maximus was born in May with a condition called VACTERL Association which is a sequence of congenital abnormalities. He underwent surgery including at Great Ormond Street Hospital and he returned from there to the PICU at the John Radcliffe Hospital on 28 July 2019. From about 7 August he was fed through his naso gastric tube (NGT) but unfortunately there were multiple episodes of the NGT being displaced.

As will be seen from the Narrative Conclusion, at approximately 12.30 hours on 25 August 2019 the NGT became dislodged and was replaced by the nurse and the tube was flushed. He promptly deteriorated and died the next morning despite treatment. The cause of death according to is:

1a Acute bronchopneumonia in an infant with VACTERL association.

The Trust completed a Root Cause Analysis Investigation Report which was approved by the Trust on 4 December 2019. The root cause was said to be the inadvertent passage of an NGT in the trachea and that this was due to patient factors, individual staff factors and task factors. A lesson learnt was that NGT guidance should be followed. There were a number of recommendations and an action plan in respect of these. I see from the Incident Summary in the RCA report that the incident fits the criteria for a 'never event' (misplacement of an NGT that is not detected before starting a feed, flush or medication administration).

## 5 CORONER'S CONCERNS

During the course of the inquest the evidence revealed matters giving rise to concern. In my opinion there is a risk that future deaths could occur unless action is taken. In the circumstances it is my statutory duty to report to you.

The MATTERS OF CONCERN are as follows. -

It is reassuring that the Trust carried an RCA investigation which identified issues and lessons. There are remaining concerns however:

(1) With reference to the RCA Report at appendix 1: Action Plan, there are a number of recommendations concerning the policy for the insertion and use of NG tubes in infants and a recommendation that the nurse involved be reassessed for NGT competence. It appears that the action points were due for completion at the end of 2019 and beginning of 2020. In particular, I have seen the more user friendly policy and the 'at a glance' appendix that now forms part of the policy.

I enquire however if there is an audit of similar incidents involving misplaced tubes in children and whether there have been any subsequent incidents resulting in harm. If there are, I enquire what if any further measures have been introduced?

There was a further issue concerning Don Maximus' case. It was noted from statement and oral evidence that the correct position of an NGT in PICU is normally confirmed by aspirating the gastric contents and confirming it is acidic or by performing an x-ray. Measuring the pH of stomach contents is problematic if the child is on antacid medication as it may not test as acidic. I note that Don Maximus required multiple x-rays to confirm placement of the NGT and in order to reduce the need for extra exposure on 20 August 2019 (PICU Consultant) documented that if there was no suspicion of migration or misplacement of the NGT (coughing, choking or vomiting) then it was not necessary to perform an x-ray of the NGT position. This would avoid excess radiation from repeated x-rays. The above would not apply however if the tube had been re-sited or was suspected to have migrated.

In this case an x-ray would be needed to confirm placement. It appears that the nurse in question was concerned about the number of x-rays and was made aware about the change to policy for Don Maximus but it appears that she misunderstood it and did not believe an x-ray was required in this case.

There are two points that arise, firstly, there is the dilemma in terms of the need to correctly confirm the NGT position but also the need to avoid excess radiation. I enquire if there is any other method of reliably confirming the place of the NGT? I assume not as otherwise it would be routine. I understood from information provided at inquest that there are no cameras small enough that can be used to confirm the position.

The second point is the fact that the change to normal policy in Don Maximus case, whilst understandable and perhaps necessary, introduced an element of uncertainty particularly with regard to a nurse caring for Don Maximus for the first time as was the case here. I enquire if there are any additional measures to reduce the prospect of a similar incident occurring in future.

### 6 ACTION SHOULD BE TAKEN

In my opinion action should be taken to prevent future deaths and I believe you and/or the Trust have the power to take such action.

#### 7 YOUR RESPONSE

You are under a duty to respond to this report within 56 days of the date of this report, namely by 9<sup>th</sup> February 2021. I, the coroner, may extend the period.

	Your response must contain details of action taken or proposed to be taken, setting out the timetable for action. Otherwise you must explain why no action is proposed.
8	COPIES and PUBLICATION
	I have sent a copy of my report to the family and Chief Coroner.  I am also under a duty to send a copy of your response to the family and Chief Coroner.
	I may also send a copy of your response to any other person who I believe may find it useful or of interest.
	The Chief Coroner may publish either or both in a complete or redacted or summary form. He may send a copy of this report to any person who he believes may find it useful or of interest.
	You may make representations to me, the coroner, at the time of your response, about the release or the publication of your response.
9	15 December 2020