

# 1

## What is the likelihood that the staff (or carer) will fail to observe an actual or potential VND for this patient?

The likelihood of the staff (or carer) failing to detect VND, or conditions that could lead to VND if not corrected, will be **very low/low** if staff can observe the patient and access easily. The likelihood will increase to **medium** or **high** if there are too few staff to make regular checks of the needles and if the staff are unable to see the access clearly due to the patient's location, covers, poor lighting etc. Using a device that alarms when a VND occurs reduces this score to 0.

POINTS

0 POINT VERY LOW or LOW

1 POINT MEDIUM

2 POINTS HIGH

# 2

## What is the likelihood that the patient will fail to raise the alarm if they experience VND?

The likelihood of the patient failing to raise the alarm is **very low/low** if the patient understands the implications of VND and is sufficiently alert to take action if a VND, or a problem that could lead to VND, occurs. The likelihood will increase to **medium** or **high** if the patient sleeps during dialysis, especially if they are hard to wake up. It will also increase if the patient has impairments that could affect their ability to notice VND (such as lowered skin sensitivity or poor eyesight) or has communication difficulties. Using a device that alarms when a VND occurs reduces this score to 0.

POINTS

0 POINT VERY LOW or LOW

1 POINT MEDIUM

2 POINTS HIGH

# 3

## What is the likelihood of the patient behaving in a way that could lead to VND?

(Note: Do not consider the security of taping here, that is covered in question 4.)

Ideally, the likelihood that a patient's actions during dialysis will lead to VND will be **very low**. The likelihood will increase to **low** or **medium/high** if the patient suffers side effects (e.g. hypotension, hypoglycaemia, cramps, itching) that could lead to unpredictable movement, if they are restless, not fully aware of being on dialysis or known to tamper with the tapes, needles and/or lines. Patients who have had more than one unexplained needle dislodgement should score 2.

POINTS

0 POINT VERY LOW

1 POINT LOW

2 POINTS MEDIUM

2 POINTS HIGH

# 4

## What is the likelihood of the taping failing to ensure that the needle is secure throughout dialysis?

(Note: Do not consider tampering by the patient here, that is covered in question 3.)

The likelihood of the taping failing to secure the needle will be **very low** if a standard taping protocol designed to prevent VND is used. The likelihood will increase to **low** or **medium/high** if the taping technique does not include measures to resist tugging on the needle tubing or has to be modified in a way that makes it less secure (due to allergy, steep needle angle etc), or if there are problems with excessive body hair, sweating or oozing from the needle site.

POINTS

0 POINT VERY LOW

1 POINT LOW

2 POINTS MEDIUM

2 POINTS HIGH

## Overall risk for a serious Venous Needle Dislodgement incident

Add up the scores for questions 1 to 4 to obtain the overall risk.

SCORE  
**0-2**

means that the patient is at **Low Risk** for a serious VND incident.

- Continue with secure taping and maintain awareness of VND.
- No further action is needed unless there is a change in the patient's condition or the management of the unit.

SCORE  
**3-4**

means that the patient is at **Medium Risk** for a serious VND incident.

Apply the EDTNA/ERCA recommendations to minimize the risks

- Ensure that taping technique is secure and consider adding a documented check of taping security after starting dialysis.
- If patient is not fully aware of the risk of VND, provide or reinforce education if possible.
- Make it as easy as possible to observe the patient and their access.
- If appropriate, increase the frequency at which staff check the security of the needles.
- If appropriate, consider use of a protective device approved for detecting VND.

SCORE  
**5-8**

means that the patient is at **High Risk** for a serious VND incident.

Apply the EDTNA/ERCA recommendations to minimize the risks as described for medium risk

- Consider use of a protective device approved for detecting VND even if more frequent checks can be carried out.



Recommendations for Renal Nurses

## Assessment of the risk for a serious Venous Needle Dislodgement incident

The risk for a serious venous needle dislodgement (VND) incident depends on the likelihood of the needle becoming dislodged and the likelihood that the action necessary to stop the blood loss will not be taken in time to prevent serious harm.

The likelihood could be:

VERY LOW

**The event is very unlikely, it will probably never happen**

LOW

**The event is unlikely, but it could happen**

MEDIUM

**The event is likely to occur**

HIGH

**The event is very likely, it is almost certain to occur**

This mini-tool shows you how to use 4 simple questions to calculate the overall risk. A more detailed version of the tool and example cases for training can be found at [www.edtnerca.org](http://www.edtnerca.org).