

# Disconnecting patients from their hemodialysis machine during an evacuation

Code green is the standard used by healthcare in BC for evacuation. There are two types of evacuations:

1. **Precautionary evacuation:** Precipitated by an impending threat with time to prepare for evacuation but insufficient time to follow routine care protocols. A precautionary evacuation could change to a crisis evacuation at any time.
2. **Crisis evacuation.** Precipitated by a clear and imminent threat and immediate evacuation of staff and patients is necessary, every millisecond counts.




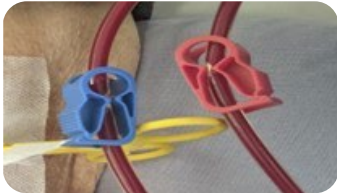




Steps for disconnecting patients from HD during a (1) precautionary or (2) crisis evacuation are similar except, due to time, a few steps can be deferred during a crisis evacuation if insufficient time (e.g., flushing the access). Table 1 describes the differences.

**Table 1: Disconnecting patients from HD machines: Precautionary vs crisis evacuation**

Precautionary Evacuation	Crisis Evacuation
Rinse back blood, as per unit protocol.	Do not rinse back blood.
Take blood pressure during blood rinse back; if unable to obtain, may defer, along with other vital signs.	Defer blood pressure and other vital signs.
Modify routine infection control precautions. Avoid touching key parts. Complete scrub the hub, if time permits.	Modify routine infection control precautions. Avoid touching key parts. Defer hub scrub if no time.
Flush and cap HD accesses/lines, if time permits (prioritize CVCs over AVFs/AVGs).	Ensure lines are clamped (angiocaths require caps). Defer flushing accesses if no time.
May defer locking and all other post-dialysis care, including documentation, until in a safe location.	Defer locking and all other post-dialysis care, including documentation, until in a safe location.
Leave HD circuit closed.	May leave HD circuit open.
Secure needle lines with tape if time permits.	Securing needle lines with tapes is not required for as long as access has intact adhesives.

[Table 2](#) outlines the detailed steps taken to remove patients from their HD machines during an evacuation. Steps which may be deferred if insufficient time (i.e., crisis evacuation) are noted in red.

**Table 2: Disconnecting patients from HD machines during an evacuation**

Steps	
1	Stop the HD pump.
2	Rinse back blood while measuring BP. <b>If crisis evacuation, do not rinse back blood or take BP.</b>
3	<b>Modify routine infection control precautions.</b> Avoid touching key parts. Defer hub scrub if no time. <div> <div>Clamped Angio </div> <div>Clamped Steels </div> <div>Clamped HD CVC </div> </div>
4	<b>Clamp blood (circuit) lines.</b> 
5	<b>Disconnect blood lines from dialysis access lines.</b> <div> <div>AVF/AVG </div> <div>HD CVC </div> </div>
6	<b>Attend to vascular access:</b> <ol style="list-style-type: none"> <li>Flush access lines. Prioritize flushing CVCs over AVFs/AVGs if time is limited. <b>For crisis evacuation, flushing is not required.</b></li> <li>AVF/AVG: Cap both access lines. Secure lines with tape if time permits. <b>DO NOT remove needles. For crisis evacuation, securing lines with tape is not required as long as access has intact adhesives.</b></li> <li>HD CVC: Ensure both lumens/ports are capped.</li> </ol> <div> <div>Clamped and capped AVF/AVG </div> <div>Clamped and capped HD CVC </div> </div>
7	If time is limited, defer locking and all other post dialysis care, including documentation, until in a safe location.
8	HD circuit to be closed by attaching already clamped bloodlines to HD machine. <b>For crisis evacuation, circuit may be left open.</b>
9	Evacuate patient.
10	Once evacuation complete, perform post-dialysis access care.

<sup>1</sup>Source: BC Renal Website, [Regional Renal Emergency Management Plan](#)

<sup>2</sup>Cap in an emergency may include a syringe, needle-less connector (e.g., Tego®) or dead-end or circuit cap.