# GERIATRIC AND LONG-TERM CARE DEATH REVIEW COMMITTEE

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**Date of Birth:** April 17, 1934
**Date of Death:** February 2, 2021
**Age:** 86 years
**OCC file:** 2021-2029 (GLTCRC 2023-16)

**Reason for Review:**
The committee was asked to review this case of an 86-year-old man who had unsteadiness and falls documented prior to his death. The decedent died in the early hours of February 2, 2021, from an external neck compression, as his neck was wedged between a support pole and his bed. A postmortem examination was completed which provided a cause of death as positional asphyxia.

**Documents for Review:**
1) Coroner's Investigation Statement
2) Retirement Homes Regulatory Association (RHRA) incident report February 2, 2021
3) Postmortem Examination Report
4) Home and Community Care Records
5) Photographs from the scene
6) Retirement Home records

**History**:
The decedent was an 86-year-old male who moved into a retirement residence with his wife on August 20, 2020. They were previously living in a different retirement home but moved due to his

wife's dementia and wandering. The decedent's wife lived on the "enriched care" ward and the decedent lived in an independent suite. The plan was to have them share a room when available.

**Past Medical History:**
The decedent's past medical history includes a stroke in 2002, prostate cancer with transurethral resection of the prostate (TURP) in 1999, depression, glaucoma, bilateral cataract extractions, hearing impairment with bilateral hearing aids that he did not wear, atrial fibrillation, hypertension, dementia (Cognitive Performance Scale 2 score of 6/8), osteoarthritis of knees, sleep apnea not using continuous positive airway pressure (CPAP), hyperlipidemia, osteoporosis and degenerative disc disease of spine.

The decedent required assistance with dressing, bathing and toileting. The decedent was incontinent of bowel and bladder. He was able to feed himself with set up and used a walker for mobility. His medications were administered by staff. The decedent tended to be apathetic and withdrawn.

On August 28, 2020, the Home and Community Care Support Services (HCCSS) therapy assessment reported one fall on August 21, 2020, where the decedent slid to the floor from a chair. The therapist noted the decedent "struggles with transfers from bed, chair or toilet". They recommended a transfer pole by the bed and chair, and a Versa frame on toilet. The occupational therapist (OT) described him as withdrawn and angry. At the time of assessment, the decedent was refusing showers.

The OT reassessment on November 27, 2020, noted: "Staff pushed him in his wheelchair (WC) for longer distances. He used a walker in his room. He could hand/foot propel the WC himself for short distances."

In November 2020 Resident Assessment Instrument-Home Care (RAI-HC) indicated memory was severely impaired. The decedent was resistant to care at times. At the time of the assessment, the decedent was being taken to the dining room in the enriched care area to have meals with his spouse but "always wants to go back to bed". Described as speaking very little with extreme apathy. "Personal Support Workers (PSW) have attempted BID care (twice daily) for some time, but the decedent was refusing ++ (often). Therefore, service was reduced to three times per week for bathing, hygiene, and dressing. The decedent lacked the ability to do more for himself, he just lacks motivation."

The equipment required for the decedent included a transfer pole, Versa frame, step in shower, two grab bars, two wheeled walker (2WW), four wheeled walker (4WW), wheelchair and a call bell (not able to use). By September 2020, the decedent was able to walk short distances but was very weak and he was mainly using a wheelchair. The decedent would not engage in physiotherapy.

The decedent had four children, two sons in Lindsay, and two daughters in Toronto. He was also on the waiting list for Long-Term Care (LTC).

**Medications at the time of death:**

- Calcium 500mg po daily
- Paroxetine 20 mg po daily
- Perindopril 2 mg po daily
- Pravastatin 20 mg po daily
- Vitamin D3 1 tab daily
- Xalacom eye drops given at 20:00 hours daily
- Apixaban 2.5mg po BID
- Simbrinza eye drops BID
- Tylenol prn

On review of the scene photos, it appears the decedent's dinner was delivered to the room and placed on his walker. It is untouched in the photos. According to the Medication Administration Record (MAR), the decedent received his 20:00 hours eye drops. Night checks were done at 01:00, 03:00 and 05:00 hours. (Although the night check sheet says 1:00, 3:00, 5:00 it is presumed this is "am").

On the morning of February 2, 2021 at 09:00 hours, the decedent's breakfast was delivered to his room. The decedent was found dead, on the floor, wedged between the bed and the transfer pole. The decedent was wearing his street clothes. 911 was called and emergency medical services (EMS) and fire department arrived. The decedent had a do not resuscitate (DNR) directive and resuscitation was not initiated. EMS remained on scene until the police arrived. The coroner was notified and arrived at 16:00 hours. A postmortem examination was requested.

**Postmortem Examination Report**:
The postmortem examination showed focal bruising of the left sternocleidomastoid muscle. Toxicology revealed a non-fatal concentration of paroxetine. The decedent died of positional asphyxia.

**Medical Cause of Death:** Positional asphyxia
**Due to/as a consequence of**: External neck compression. Fall from bed with neck compressed between bed and support pole.
**Contributing factors:** Recurrent falls and unsteadiness.

A RHRA inspection report was provided to the coroner, but this inspection was not related to this death or even this individual. The RHRA reported that while they were notified, no investigation was undertaken with regards to this death.

**Discussion:**

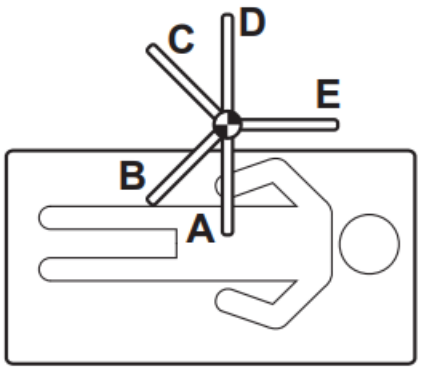
The decedent was an 86-year-old male with moderate-severe dementia (global deterioration scale (GDS) 6/7). He was cared for in a retirement home. The decedent mobilized with a walker for short distances and a wheelchair for longer distances. He was withdrawn and liked to stay in his bed. He was resistant to personal care assistance. The decedent had a home care safety assessment by an occupational therapist in November 2020 and a transfer pole was installed next to his bed to assist with transfers. The manufacturer's installation instructions are as follows:

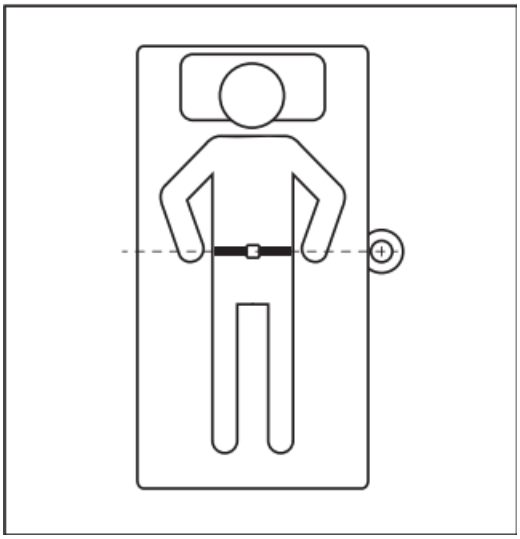
**Installation instructions from Healthcraft Super Pole System. (www.healthcraft.com)**

GETTING STARTED... We strongly recommend that you give thought as to the optimal location of your SuperPole™ System before installation. The following questions may help you to decide upon a location: a. What motions will you be going through? (pulling up to standing, lowering to sitting, transferring from chair to toilet, etc.). b. Where will you need the most support? (while walking, while lifting, etc.) c. What is your strongest side/hand? d. What is your complete transfer path? Will the location allow for full support over most of your path of motion? e. Will the pole be far enough away to allow you to stand comfortably?

SUPERPOLE PLACEMENT FIGURE E. 1. BEDROOM - **Locate pole adjacent to waistline, and as close to bed as possible while allowing clearance for bed coverings**. 2. BATHTUB ONLY - Locate pole base against tub, approximately half way along its length 3. SEATING (TOILET or CHAIR) - To provide clearance when standing, locate pole 3-10" / 76mm-254mm forward of the knees, and 2-6" / 51mm-154mm to the side of knees when sitting.

Bedroom installation:





Photos from plumbing supply website on installation.

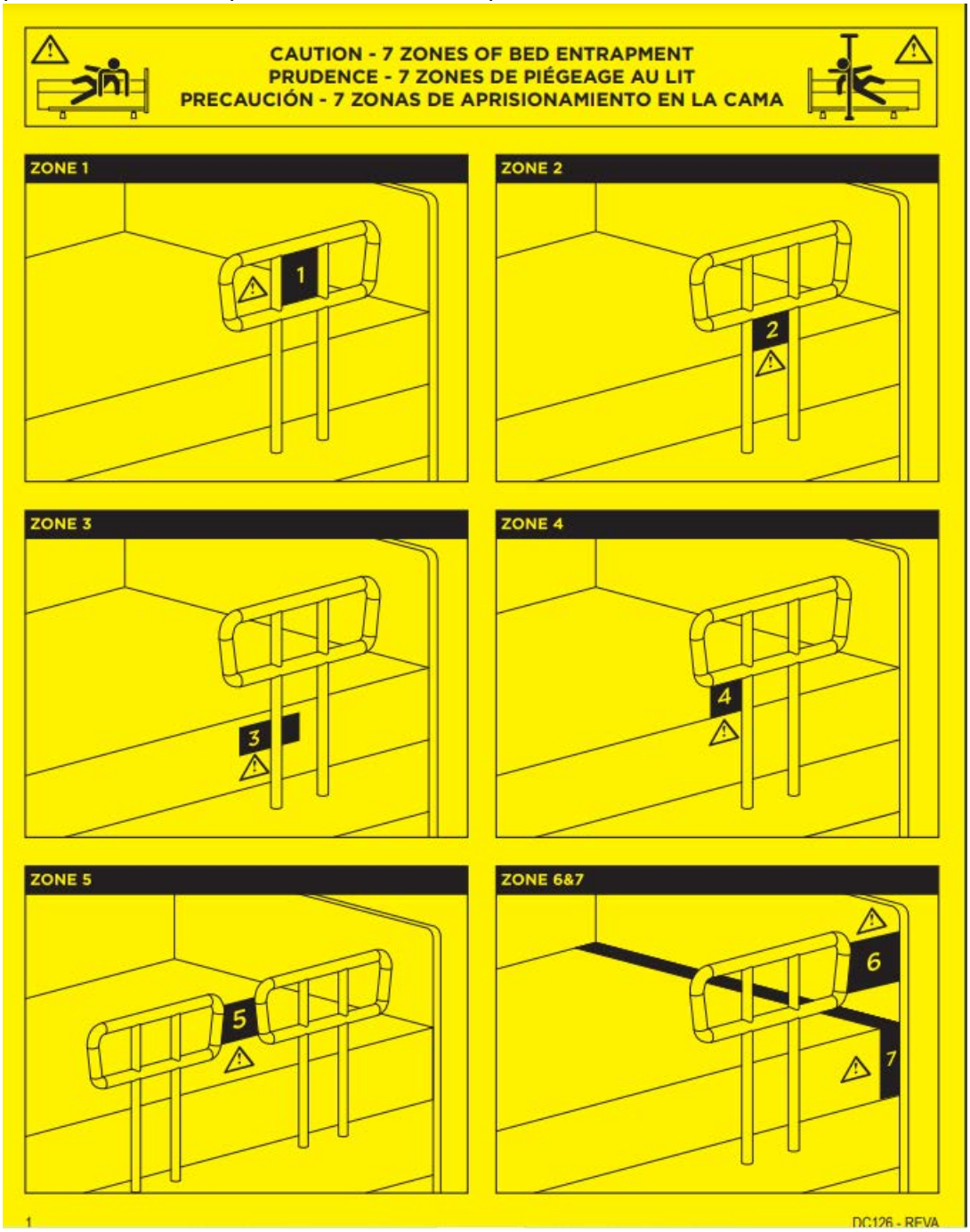
The manufacturers installation instructions do provide warning for potential bed entrapment:

> "WARNING - PATIENT ENTRAPMENT (see additional guidelines) The potential risk of entrapment (limb, neck, head, torso) between the pole and adjacent item (i.e. bed, toilet, etc.) can be reduced or avoided by the following strategies: 1. Situate the pole at a distance that is considerably smaller or larger than that which could result in entrapment. 2. Consider situations that could change with time or usage such as mattress compression, patient movement, bed position changes due to electrically powered beds, etc. 3. Realize that this product is not intended as a physical constraint or barrier to exiting the bed."

The manufacturers website provides more detail on potential entrapment:

> "ZONE 3 - BETWEEN THE RAIL AND THE MATTRESS This area is the space between the inside surface of the bed rail and the mattress. If too large of a space it can cause a risk of head entrapment. FDA recommended space: less than 4.75" / 120mm. All HealthCraft bed rails include a safety strap that holds the bed rail tight against the side of the mattress. The safety strap must always be used to reduce the risk of injury or death. **Note that this gap may also be created by a fixed structure alongside a bed such as an I.V. pole or a floor to ceiling support pole. If a support pole is being used beside the bed, we recommend a pole gap of less than 2.375" / 60mm, or greater than 12" / 305mm.** (From Hospital Bed Safety Workgroup (HBSW) and the U.S.Food and Drug Administration (FDA))

Health Canada Bed Entrapment Guidelines recommend a less than 4 3/4” gap between the mattress and bed rail. This represents head width. Unable to find prescribed distance for prevention of entrapment with a transfer pole.




https://healthcraftproducts.com/wp-content/uploads/2023/03/DC126-Bed-Entrapment-Prevention.pdf

Despite the risk of entrapment with the pole close to the bed, the installation instructions do not provide a specific distance that the pole should be placed from the bed. This distance is only specified on the company website. The distance provided in the installation instructions is: "allowing clearance for bed coverings". The more detailed entrapment instructions on the manufacturer's website indicate: "a pole gap of less than 2.375" / 60mm, or greater than 12" / 305mm." In 2013, the GLTCRC reviewed a similar case of positional asphyxia from a transfer pole where the decedent was trapped at chest level. The distance of 12 inches may not be sufficient to prevent entrapment at chest level for larger persons. There is no specific reference to entrapment by transfer poles on the Health Canada website.

The committee questioned the appropriateness of a transfer pole in a resident with moderate to severe dementia and a known history of falls. The level of care provided in a retirement home setting did not seem to meet his needs.

**Recommendations:**

**To the Regional Supervising Coroner:**

1. This incident of entrapment and positional asphyxia related to a device, must be reported to Health Canada if not done so already under the mandatory reporting criteria.

**To Health Canada:**

2. The committee feels there is a lack of research into the safe use of assist poles in long term care, RHRA and private dwellings. Research into the use of assist poles is essential in determining overall safety profile of these devices. Health Canada should make recommendations for specific distances when installing transfer poles similar to recommendations for prevention of bed entrapment.

3. Manufacturers of transfer pole devices should provide specific measurements for installation in the instruction guide that accompanies the pole. The committee suggests that the pole be placed at a distance further than the width of the person using it and not close to the bed. Beds or furniture should be fixed or against a wall to prevent movement which might create an entrapment gap.

4. Instructions should include warnings of potential entrapment for devices used by persons with dementia and/or risk of falls.

**To the College of Occupational Therapists:**

5. This case should be forwarded to the College of Occupational Therapists to be included in education regarding safety of equipment used by persons with a risk of falls with or without dementia.

**To the Retirement Homes Regulatory Authority (RHRA):**

6. The RHRA should expand their mandate such that an incident review addresses the preventable causes of the incident and not just compliance with the regulations. The inspection system should be tied to legislation, safe environments and systems quality improvement.

7. The RHRA should consider a policy of investigating all non-natural deaths.

**References:**

1. https://healthcraftproducts.com/wp-content/uploads/2023/03/DC126-Bed-Entrapment-Prevention.pdf

2. Health Canada: Incident reporting for medical devices: Guidance Document.