



News Release

July 7, 2004

Health Quality Council of Alberta Releases Recommendations for Safe Handling of Potassium Chloride Containing Products and Preparation of Continuous Renal Replacement Therapy (CRRT) Dialysis Solutions in Hospitals

Calgary -- The Health Quality Council of Alberta today released recommendations related to potassium chloride containing products and the preparation of batch amounts of dialysis solutions used in continuous renal replacement therapy (CRRT) in Alberta's hospitals. The recommendations result from a review of national and international best practices for the management of such products conducted by the Council following the deaths of two patients in the Calgary Health Region earlier this year.

In releasing the recommendations Dr. John Cowell, chief executive officer of the Council, stated: "The recommendations released today result from an ongoing review of the best practices and safety guidelines for the handling of potassium chloride containing products from five of the leading countries in terms of patient safety initiatives. Our review also included an examination of good manufacturing practices for commercial pharmaceutical manufacturers endorsed by Health Canada. We believe the HQCA's recommendations, if implemented, will result in a safer health system for Alberta and will better protect Albertans from medical errors."

The Council's key recommendations fall into two areas – those specific to handling products that contain potassium chloride and those specific to the preparation of batch amounts of dialysis solutions used in continuous renal replacement therapy (CRRT).

Recommendations Specific to Handling Products that Contain Potassium Chloride

- Immediate adoption and early implementation by all Regional Health Authorities in Alberta of the Institute for Safe Medication Practices Canada (ISMP Canada) **Potassium Chloride Safety Recommendations**. The summary of these recommendations is available at www.hqca.ca
- The Health Quality Network supports, coordinates, and monitors progress in province-wide implementation of the ISMP Canada **Potassium Chloride Safety Recommendations** in Alberta. The Health Quality Network is a collaborative that includes the HQCA, the Regional Health Authorities, the Alberta Cancer Board, Alberta Health and Wellness and the health professions. The aim of the collaborative is to improve the quality and safety of healthcare in Alberta.

Recommendations Specific to the Preparation of Batch Amounts of CRRT Dialysis Solutions

- Whenever possible use currently available commercial pre-mixed dialysis solutions with certification that the solutions have been tested and meet finished product specifications.

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... page 2 pf 2

- If certain CRRT dialysis solutions (e.g. non-buffered calcium free low sodium dialysis solutions) cannot be obtained from commercial suppliers, the dialysis solutions must be prepared only in the hospital pharmacy under rigorous quality assurance conditions.
- These conditions must include testing of batch solutions to ensure finished product specifications are met. The approach taken should be in accord with the intent of Health Canada's Health Products and Food Branch Inspectorate **Good Manufacturing Practices Guidelines** (GMP), which are available at www.hqca.ca. While it is understood that hospitals are not required to follow these guidelines as do commercial pharmaceutical manufacturers, the GMP guidelines provide a superior quality assurance framework, which hospitals should follow when they compound batches of CRRT dialysis solutions.

The Council's recommendations are being provided to all health authorities in Alberta, the Alberta Minister of Health and Wellness, the Alberta Medical Association, the Alberta College of Physicians and Surgeons, the Alberta College of Pharmacists and the Alberta Association of Registered Nurses. At the same time they will be provided to the Canadian Patient Safety Institute for communication across Canada's health system.

Said Cowell, "Protecting patient safety and preventing medical errors is a high priority in Alberta's health system. Though literally millions of medical procedures are done each year without incident, even one error can be devastating. Every effort must be taken to learn from past mistakes and prevent similar occurrences in the future."

The Council's review of the handling of potassium-containing products was initiated at the request of Alberta Health and Wellness Minister Gary Mar following the death of two renal dialysis patients in March 2004 at Calgary's Foothills Medical

Centre after they were inadvertently given solutions during renal dialysis that contained potassium chloride instead of sodium chloride.

The Council's review of best practices included looking at guidelines and approaches across Canada as well as in Australia, New Zealand, the United Kingdom and the United States. The Council is also recommending that it work with health authorities, the health professions and Alberta Health and Wellness to coordinate and monitor the implementation of the recommendations.

Concluded Cowell, "I believe that implementing these recommendations is an important step in improving patient safety in Alberta. However more remains to be done, and the Council will be promoting the development of overall guidelines for the reporting, disclosure and review of any medication incident in Alberta's health system. We will also be participating in the development of processes to monitor and evaluate the implementation of these guidelines."

The HQCA will issue further recommendations and reports regarding best medication safety practices in Fall 2004.

The Health Quality Council of Alberta is an arm's length organization empowered and funded by the Government of Alberta to independently report to Albertans on the quality, safety and performance of the publicly funded health care system.

- 30 -

For more information:
Dr. John Cowell
Chief Executive Officer
Health Quality Council of Alberta
(403) 297-8162