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## **BRIEFING NOTE - PUBLIC ACCESS DEFIBRILLATION**

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### **Public Access Defibrillation (PAD) in Toronto – Background:**

- This program provides Automated External Defibrillators (AEDs) to City of Toronto workplaces and facilities to ensure rapid treatment of those who suffer a cardiac arrest at the site. On-site AED's can increase chances of survival from less than 5% to over 50%. Provision of these devices is becoming the standard of care for out-of-hospital cardiac arrest care in concert with appropriate staff training and Cardio-Pulmonary Resuscitation (CPR).
- The City of Toronto PAD program has saved at least five lives so far in 2005.
- a PAD Program has been endorsed in Toronto since 1998 as part of the City's Cardiac Safe City Program, which is co-supported by the City, Toronto EMS and the Sunnybrook & Women's College Base Hospital
- currently there are 55 AEDs in use on City property, sponsored by Corporate Services, EDCT, EMS, Toronto Water/Waste Water, Toronto Works, Toronto Police Service, the Toronto Zoo, and Exhibition Place,. Locations of use include both City and Metro Hall and all Civic Centres. A total of 756 City responders have been trained in their use.
- present plans are for the expansion of the Program to 200 AED's in high-risk City-owned sites by the end of 2007. It is estimated that a broadly based PAD program, including its private sector components, might save more 150 lives every year in the City.

### **PAD Program Administration:**

- Toronto EMS administers the PAD Program on a strict revenue-neutral cost-recovery basis.
- AED's each cost \$3,112 plus taxes EMS had \$450,000 in its 2005 Capital Budget for AED purchases, of which \$439,000 is being carried forward into 2006
- Divisional Program users receive the AEDs for free, but are responsible for associated annual operating costs. For each AED issued, a charge of approximately \$1,250 is levied to the user-Division per year. This charge covers the cost of third-party instructor wages, manuals and other training resources, maintenance and parts replacement, and medical oversight costs. In addition, included in this amount is \$463 for recapitalization. The AEDs have a 10 year life-cycle, and the recapitalization portion of the operating cost is placed in an EMS Equipment Replacement Reserve Fund.
- the user-Division costs of operating the PAD Program are recovered through IDCs

### **Present Program Expansion Challenges:**

- while a number of Divisions and ABCs have expressed interest in participating in the PAD Program, they are unable or reluctant to commit to the annual operating cost requirements. As a result,

expansion of the PAD program has been much slower than expected.

- EMS has an on-hand inventory of 156 AED's which were expected to be issued to additional City sites, including community centres, pools, recreation complexes, libraries, and work yards. These AEDs are not being used, and depreciate in value each year.
- Because of PAD Program expansion delays, the capital funds being requested by EMS for the PAD program are being left unspent, which also affects Capital project completion rates

#### **PAD Program Delivery Alternative:**

- If the current financial framework for delivery of the PAD Program across the City remains status quo, then EMS will continue to maintain unused defibrillator inventory. More important, the potentially life-saving purposes of the equipment and the City-endorsed Program will remain significantly underutilized
- One possible alternative delivery option is to designate Toronto EMS as the primary administrator of both the Capital and Operating budgets associated with the Program and its expansion. The implications of this decision would/might include:
  - the Program would be expanded across the City consistent with Council's support and decision to do so cardiac high-risk City sites, and their workers and community members, would be protected by a PAD device
  - current AED inventory could be deployed
  - the IDC component of administering the Program would be eliminated
  - Toronto EMS, in consultation with Divisional and ABC Program areas, could determine the priority of AED placement
  - Toronto EMS would require an increase in its Operating Budget to cover the cost of administering the Program. For each AED, \$1,250 per annum is required to maintain, repair and provide for device eventual replacement. This figure also includes staff training as necessary for the user-Division
  - Based on 2005 figures, the cost of administering the Program would be \$68,750 (55 AEDs presently in use across the City, with the operating costs being borne by the user-Divisions)
  - If 200 AEDs were in use the annual operating cost would be approximately \$250,000. Any increases to the number of deployed AEDs would result in proportionate increases to the operating costs, which would be a recurring annual cost, and which might increase year-over-year depending on user participation. A determination would have to be made as to whether this should represent new funding, or reallocated funding from user-Divisions
  - if the IDC transactions are eliminated for current AED Division users, then these operating costs could be transferred from user-Division budgets to the EMS PAD Program Operating budget

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