## "A completely preventable death"

During his 10 years as a ward of the Children's Aid Society of Ontario, Joshua Durnford lived in 16 residential facilities. On Feb. 15, 2000 — aged 18 years but with a mental age physicians placed at 12 years — he died in an adult detention centre. He had complained of feeling unwell for 4 days but received no treatment. His death from neuroleptic malignant syndrome (NMS, see box), was "completely preventable," a physician testified at the subsequent inquest. Most of the inquest's 45 recommendations were aimed at improving correctional and children's services, but there is no law requiring their implementation.

Durnford was the third Ontario teen with complex physical, developmental and psychiatric needs to die while in care in the past 5 years, says the Office of Child and Family Service Advocacy, an arm's-length agency that watches out for children in government care. Chief Advocate Judy Finlay says these were the province's first deaths of this type.

And the number of these complex cases is growing. Three years ago, Finlay's office was handling 200 of them, many in-

volving children with neurologic disorders; today it handles 400. The problem, says Finlay, is that "there's no place for them."

Two of the 3 deaths involved the misuse of physical restraints. In 1999, 13-year-old William Edgar was asphyxiated while being restrained at a residence near Peter-

borough, Ont. The inquest ruled that he died by homicide, but no criminal charges were laid.

Stephanie Jobin, an autistic 13-year-old girl, suffocated while being physically restrained at Digs for Kids in Brampton, Ont., in 1998. She'd had 30 different workers in only 6 weeks. "If a parent had straddled a kid with a beanbag chair on her back, we'd all hear about it," says Finlay. "If the state does it, we turn a blind eye." (An inquest was finally called in her death

in February 2002.) Since those deaths, Finlay says more "chemical restraints" are being used. Durnford's death points to the potential danger of this approach.

Durnford became a state ward at age 8 because of "extreme behavioural and interpersonal disturbances." At age 9, he was sexually assaulted; at 15 he sexually assaulted another boy and was sentenced to 180 days in a detention centre. Two years later he assaulted a staff member at a group home and again wound up in detention.

In November 1999, following an episode of suspected hallucinations, he was admitted to a psychiatric unit, where he was prescribed 5 drugs: methylphenidate (Ritalin), clomipramine (a tricyclic antidepressant), 2 neuroleptics (methotrimeprazine and fluphenazine) and benztropine (an anticholinergic). After his father's death in January 2000, Durnford was prescribed alprazolam (an anxiolytic) and carbamazepine (an anticonvulsant with antimanic properties.)

But Durnford's violent behaviour continued to escalate. He was sent to an adult facility, the Maplehurst Correctional

Centre in Milton, Ont., pending a court appearance. Finlay says the placement was "absolutely inappropriate."

At the detention centre, all the drugs except methotrimeprazine were stopped, pending an explanation from the prescribing physician. Durnford started experiencing symptoms of NMS on Feb. 11.

Dr. Stuart MacLeod, who testified at the inquest, says Durnford's

death was "completely preventable." MacLeod, a professor of clinical pharmacology at McMaster University, says the young man's NMS was likely caused by the long-lasting injectable form of methotrimeprazine, "a somewhat old-fashioned drug [that is] not commonly used, especially with patients this age."

MacLeod says the Durnford case carries important lessons about the need for a "therapeutic plan" — he says there was none — and "the fact you have to be

## Neuroleptic malignant syndrome

Neuroleptic malignant syndrome is an uncommon but potentially fatal complication of antipsychotic and neuroleptic drug treatment. Although the cause is not understood, it may be the result of the dopamine blockade induced by neuroleptics. This may lead to autonomic instability and disruption of the normal mechanisms of temperature control. A genetic component to the syndrome has also been proposed. The syndrome develops in 0.2% to 1% of patients taking neuroleptic drugs. In over 80% of cases, rigidity or changes in mental status herald the onset of the syndrome. Later, druginduced hyperthermia sets in, with potential complications that include irreversible brain damage. Death may result from sudden cardiopulmonary arrest, aspiration pneumonia, pulmonary emboli, myoglobinuric renal failure or disseminated intravascular coagulation.

careful about giving multiple drugs without a clear rationale."

But the real failure, says MacLeod, occurred at the detention centre. During Durnford's last 4 days, various correctional officers and nurses noted that he was shaky and sweaty, his speech was slurred and his muscle tone "rigid." It was assumed he was going through withdrawal. On the day he died he was unable to stand and was unresponsive and moaning. A nurse doing medication rounds looked through the door hatch but never opened the door. (A complaint has been filed with the nursing college.)

No charges were laid following the death, and many of the 45 inquest recommendations are already supposed to be policy. Sixteen aimed at corrections officials call for ongoing training in emergency situations and education about NMS. The jury also said the province should assign a case manager for each child in care. The coroner will follow up on these recommendations in a year. — *Barbara Sibbald*, CMAJ



Joshua Durnford: a death in care