in the loans, some of these bottlers go out of business, and more are expected to. The industry has produced figures which emphasize the loss of Canadian jobs, and the minister of state for small businesses has told the industry that he is prepared to be their advocate in government on the issue.

There are always conflicting interests to be reconciled in this kind of decision, but surely the minister has had time since May to collect and evaluate information and do just that. There are questions which must have been asked and answered in his department. For example, is there a difference in safety between new bottles and bottles which have been re-used? If so, has the department been able to arrive at a safe number of times a bottle may be reused? Does the design of the bottle matter? Was there a substantial difference in wide necked and narrow-necked bottles? Would a different method of tempering glass affect shattering one way or the other? Could a safety valve or tap of some kind be used on existing bottles so that the contents would pour out on impact and prevent an explosion? Is the volume of liquid and of gas in the bottle a factor? Would changing this alter the safety factor? With a change in the carbonation process, could safety be increased?

The minister surely must have answers to some of these questions in his department unless, of course, he thinks that all glass containers should be withdrawn in favour of, for example, thermoplastic polyester.

In all these choices there are environmental factors and there are cost factors. There is the possibility that in reducing the risk of injury from glass one may be increasing other health risks if the choice is an increased use of plastic. The minister's choice is not easy but his mandate to protect the safety of Canadians is, of course, the overwhelming consideration. Surely consumers are entitled to expect that the minister will indeed make a choice and we will have the reasons for that choice.

The minister has been seized with the problem for five months. He initially began by saying that he would regulate all containers. On November 13 he said in committee that the 750 millilitre container was not dangerous, but this is not what the minister said some months ago, nor has he yet said it publicly. While consumers remain concerned about safety, the industry is concerned about jobs. After six months of inaction the minister can say nothing more but that the ball is in the industry's court.

Since the minister appears to be paralysed by criticisms from the provinces and industry, I would suggest that he make all the background studies available to the House that his department has done. With two former ministers of consumer affairs on this side as well as other interested people, we will be delighted after examining the evidence to help him make his decision.

Mr. G. M. Gurbin (Parliamentary Secretary to Minister of Consumer and Corporate Affairs): Mr. Speaker, I would like to assure the hon. member opposite that the minister is not paralysed but has in fact been working very steadily toward an eventual resolution of this problem, one that I hope will satisfy both the best interests of the consumers and the bottlers in this country.

I am pleased to have this opportunity to speak about the problems that have been encountered with 1.5 litre carbonated soft drink bottles and to detail the government's course of action in this area.

There are three distinct breakage problems that exist with respect to these bottles. First are the spontaneous explosions. These are associated with bottles fatigued by 20 to 25 trips back and forth from the consumer to the bottler. Second, breakage from being knocked over from the vertical position on to a concrete floor. Third, breakage from being dropped from a height such as might occur on slippage through the hands or falling from a shelf.

The problem is that the flying glass resulting from explosion or breakage can cause serious physical injury. In fact, an analysis prepared by the U.S. government consumer product safety commission in April, 1975, reported that more than 32,000 persons were treated in hospital emergency rooms for injuries related to carbonated soft drink bottles. Long glass fragments and the distances they were propelled were cited as major factors in causing these injuries. In Tel Aviv a shopper reportedly died from injuries received when a 1.5 litre carbonated soft drink bottle spontaneously exploded on a supermarket shelf. And in this country, Mr. Speaker, there have been numerous reports of injuries sustained when such bottles broke or exploded.

Further, in May of this year Professor David Barham of the University of Toronto notified the product safety branch of consumer and corporate affairs of the results of studies he carried out on carbonated soft drink bottles. Professor Barham concluded that the narrow-neck bottles on the market at the time broke and exploded in a violent manner on the first tip when tilted. Because of this alarming evidence of injury, technical assistance was sought from other departments to thoroughly investigate the safety hazard associated with the bottles. I was shocked to learn from our laboratory studies that the bottles dispersed large shards of glass over distances of 20 feet when exploded under the tip test.

The government reviewed 263 complaints received by the Department of Consumer and Corporate Affairs and determined that the majority referred to spontaneous explosion and indicated injuries to the eyes, face and arms. In addition, Ontario workmen's compensation board records indicate the bottles were often the cause of injuries from flying glass.

At this point, the product safety branch began putting 1.5 litre bottles through a tip test for regulatory development purposes. The test, very similar to that used by Professor Barham, involved tipping the bottles over on to a vinyl-covered concrete surface. The test revealed that all of the bottles with a torpedo-shaped, narrow-neck design consistently broke on the first impact and projected flying glass with enough force to penetrate the flesh of a chicken carcass suspended in the test area. I would like to assure hon. members that they were not imported chickens. I shudder to think of the effect if a small child rather than a chicken carcass had been the victim.