

# CSMLS New Graduate Employment Survey—2003

The Canadian Society for Medical Laboratory Science has been tracking employment trends in the medical laboratory workforce for several years. One of the tools that CSMLS uses to gauge the health of the job market is the Graduate Employment Survey. Each year CSMLS surveys graduates of accredited medical laboratory training programs across Canada to ascertain their employment status one year after graduation.

The results of the survey provide a snapshot of the job market for medical laboratory technologists in Canada. When viewed collectively, survey data also identifies trends in the medical laboratory workforce and in the larger health care environment.

In October of 2003, surveys were sent to 399 CSMLS members who graduated in 2002 from accredited training programs in British Columbia, Alberta, Saskatchewan, Manitoba, Ontario, Quebec, New Brunswick and Newfoundland. Three survey respondents reported from Nova Scotia, where the provincial government has sponsored training positions in the NB program. (Prince Edward Island does not have a training program.) One hundred and ninety-six members responded for an overall response rate of 49.1%.

The respondents included:

- 170 general medical laboratory technologists

- 11 clinical genetics technologists
- 15 diagnostic cytology technologists

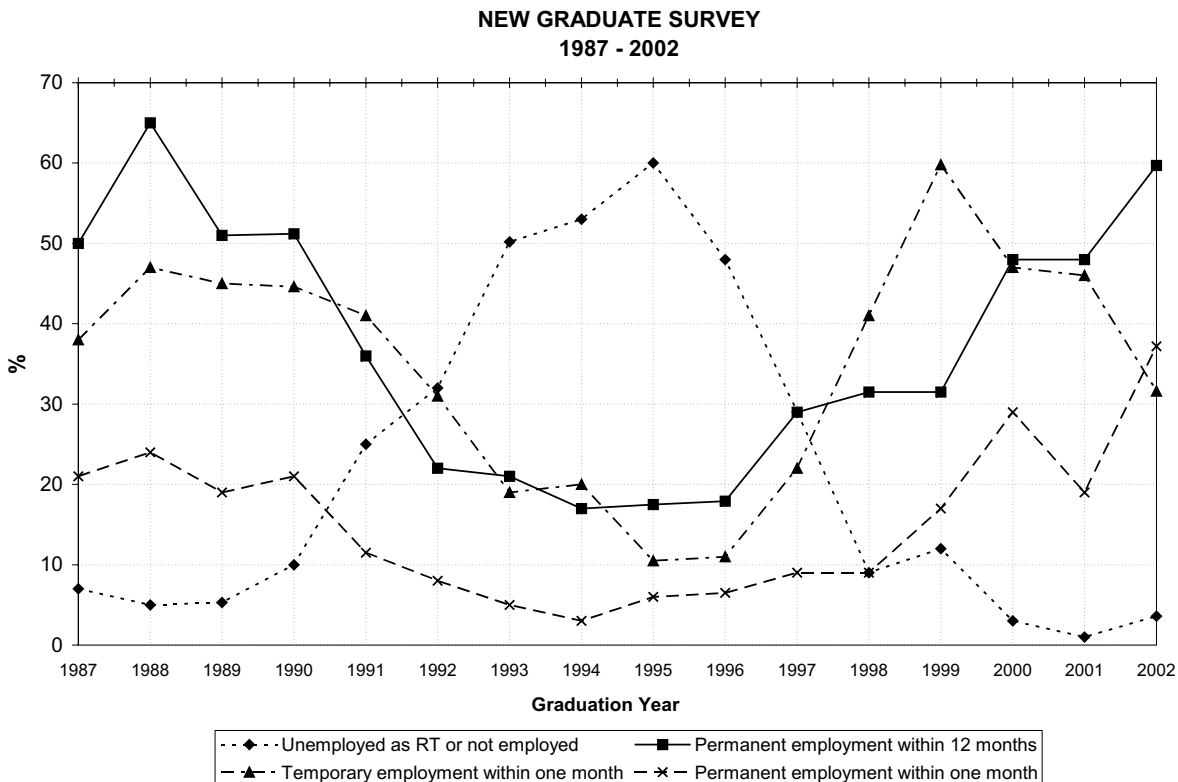
Respondents were asked to indicate their employment status 12 months after graduation. They were also asked about their academic credentials upon entering and exiting their training programs.

## The National Picture

### Where they work

Hospitals continue to be the predominant employer for new graduates. The vast majority (75.3%) of respondents reported finding work in a hospital. The remainder work in private laboratories

Figure 1 - National employment rate after one year



(14.7%), public health labs and other organizations. The 2003 survey showed a change in the type of employment new graduates are acquiring. Only 19.9% reported working in general duty positions - this is a significant decline from the 2002 survey in which 34.4% of respondents reported working in general duty. The top category for 2003 was clinical chemistry at 28.1%, followed by clinical microbiology at 11.2%.

### Employment after one year

The uptake of new graduates into the medical laboratory workforce in Canada declined significantly during the 1990s due to health care restructuring. The downward trend continued for eight years and was a key factor in provincial governments' decisions to cut back medical laboratory training programs.

The results of the 1998 survey were a harbinger of an impending human resource crisis in medical laboratory technology. The survey found that 91.9% of the respondents were employed as medical laboratory technologists one year after graduation—an increase of 17.8% over the previous year. While this was good news for graduates, it was a clear indication that the shortage of MLTs was approaching faster than anticipated.

The Class of 2002 experienced almost identical employment uptake to the previous year. Nationally, 95.9% of general medical laboratory technology new graduates were employed as medical laboratory technologists within one year. This appears to be a stabilization of employment trends for new grads. CSMLS human resource data points to a shortage of medical laboratory technologists. Job Futures, the federal government's comprehensive occupational database rates the job opportunities for MLTs as "good," through to 2007.

Data for clinical genetics and cytotechnology shows 100% uptake for these specialty certifications.

### Provincial employment after one year

Employment uptake was remarkably consistent throughout the country. All

of the new graduates in New Brunswick, Saskatchewan and Alberta succeeded in finding employment within a year. Graduates in British Columbia followed closely behind at 95.3%. The employment picture was not as bright in Quebec where only 92% of survey respondents were employed as medical laboratory technologists after one year.

### Full-time vs. part-time and casual

The lack of full-time permanent employment has been a growing concern in the health care community for more than a decade. Since the 1990s, entry-

level health care professionals such as nurses and medical laboratory technologists have been forced to accept part-time, casual or temporary positions.

The survey data shows that this situation is improving. On a national level, the percentage of graduates who were able to find full-time work increased to 49% from 32.4% the previous year. The provincial data paints a similar positive picture. The availability of full-time permanent positions was markedly better than the national average in Ontario (68.6%) Saskatchewan (85.7%), Manitoba (100%) and Alberta

**Figure 2 - National job category data**

### Employment Status - National

Percentage working as MLTs after 12 months – 95.9%

#### Employment Status at time of survey:

Type of Employment	%
Permanent Full time	49.0
Temporary Full Time	11.7
Permanent Part Time	15.8
Temporary Part Time	6.1
Casual	13.3
No Response	4.1

**Figure 3 - Provincial job category data**

Province	Permanent Full Time	Temporary Full Time	Permanent Part Time	Temporary Part Time	Casual
NF	22.2	11.1	33.3	–	22.2
NB	38.5	7.7	23.1	23.1	7.7
QC	20.6	20.6	15.9	12.7	22.2
ON	68.6	5.7	22.9	–	–
MB	100.0	–	–	–	–
SK	85.7	–	14.3	–	–
AB	68.4	15.8	10.5	–	5.3
BC	42.9	9.5	14.3	4.8	23.8

(68.4%). This is most likely due to the growing number of retirements and the limited supply of new graduates in those provinces. Only 42.9% of graduates in British Columbia were able to find full-time work – a significant decline from 63.3% in the previous year. This is probably due to the uncertainty over the impact of the laboratory reform process that is currently underway in that province. New Brunswick grads reported a drop from 55.6% to 38.5% in the current survey.

Newfoundland grads report 22.2% permanent employment uptake after one year. The most significant change in the current survey period was in Quebec, where 20.6% of new graduates in Quebec were able to find full-time permanent positions. This represents a significant jump from the previous survey in which only 6.3% reported full-time employment.

### Outmigration

CSMLS certification is accepted as the entry-level credential for medical laboratory technologists across the country. This is a significant benefit to new graduates who wish to relocate to another province. Only 28 (14.3%) respondents opted to move to another province. Thirteen relocated for personal reasons and 15 left to find work. The fact that Nova Scotia is the recipient of the great-

est number of “imports” reflects the severity of the shortage in that province.

### Education

This was the second time that the Graduate Employment Survey included questions about additional educational credentials before and after completion of the accredited training program.

We are seeing an increasing number of grads with university education. In 2003, 36.2% reported holding a degree before entering an accredited training program. This is a 10.7% increase over the 2002 survey in which 25.5% had a university degree before entering a training program. An additional 31.9% of respondents completed some university courses.

An examination of the provincial data reveals significant regional variation in the numbers of grads with university degrees, from a high of 75% in Manitoba to a low of 3.2% in the province of Quebec.

### Conclusions

The results of the Graduate Employment Survey indicate that the employment outlook for graduates of medical laboratory technology training programs continues to be very positive. The uptake of graduates into the job market has exceeded 95% since the year

2000. This, coupled with human resource data collected by CSMLS, serves as a warning to governments and health care planners that the number of medical laboratory training positions is insufficient to replace MLTs who will retire over the next 15 years.

The lack of full-time permanent employment continues to be an issue of concern. While there has been significant improvement, many new graduates are still forced into part-time, casual or temporary positions. The availability of full-time permanent employment is a significant factor in ensuring the stability of Canada’s health care workforce. Governments and employers must come to terms with this issue in order to avert serious human resource shortages and to strengthen the health care system’s capacity to cope with emerging diseases. The situation is particularly troubling in British Columbia where the percentage of new grads who were able to find full-time work actually decreased by 20.4%. CSMLS human resource data indicates that 65% of British Columbia’s MLTs will be eligible to retire over the next 15 years. The provincial government must take great care to ensure that the uncertainty created by the laboratory reform process does not adversely affect the supply of new graduates in the future.

The data on educational credentials reveals a growing trend toward university education at the entry to practice level. Nationally, over a third (36.2%) of the graduates surveyed had university degrees upon entering a medical laboratory training program. It is clear that students perceive value in a university-level education and are voting with their feet. It is highly unlikely that the decision made by CSMLS earlier this year to remove the requirement for university level education for future MLTs will reverse this trend.

Perhaps the most interesting piece of data from this year’s survey was the decrease in employment in the general duty employment category. There have been anecdotal reports of a move away from core laboratories to specialized labs. Whether or not this is truly a trend remains to be seen.

**Figure 4 - Provincial education data**

Province	Degree before MLT Program % responses	No degree but completed some university courses % responses
NF	44.4	55.6
NB	30.8	30.8
QC	3.2	9.5
ON	45.7	17.1
MB	75.0	–
SK	–	57.1
AB	31.6	31.6
BC	52.4	33.3

