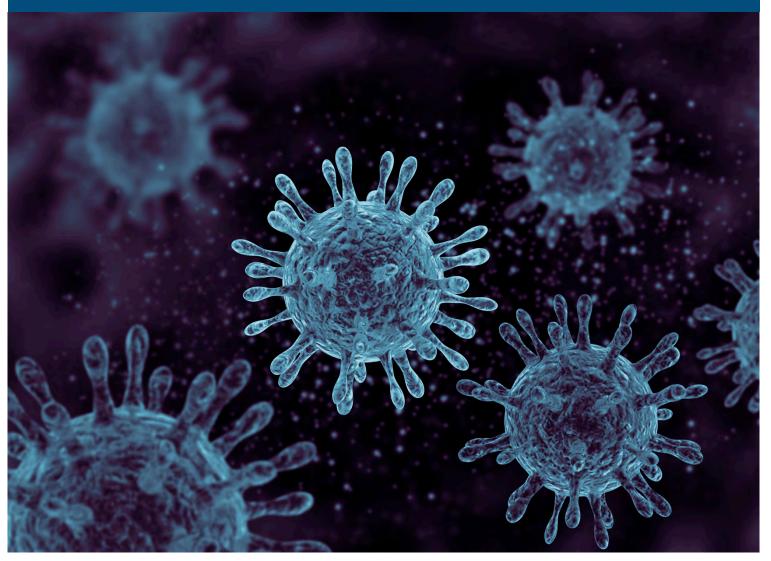


Impact of COVID-19 on Actuarial Careers: Full Report



July 2021

Impact of COVID-19 on Actuarial Careers Full Report

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Impact of COVID-19 on Actuarial Careers Full Report

Executive Summary

COVID-19 brought changes that disrupted virtually everyone's personal and professional lives. In April 2021, the Society of Actuaries (SOA) surveyed 26,101 members and candidates to understand the pandemic's impact on actuarial careers. Approximately 7% (1,912) responded and included demographic information, 77% of whom were from the U.S., 14% from Canada and 9% from other countries.¹ The SOA also analyzed actuarial exam progress at an aggregate level. Here are highlights of the findings.

Employment Status Changes

- Since January 2020, 8% of respondents have changed employment status. Employment status changes include returning to the workforce, changing jobs, retiring, formally reducing or increasing one's working hours, voluntarily leaving employment, being laid off or terminated.
- In the U.S. and Canada, the proportion of actuaries who changed employment status is essentially the same for women and men, between 6% and 8%. But in all other countries, 16% of women compared to 11% of men changed employment status since the start of the pandemic.
- More than one-third (37%) of reported employment status changes occurred for reasons related to COVID-19, with women being much more likely to have changed employment status for pandemic-related reasons: 49% of women compared to 33% of men. And COVID-19 was the reason behind employment status change for 55% of actuaries who changed employment status and live with pre-school children.
- In the U.S., 7% of women living with pre-school children or children in grades K–8 changed employment status, compared to 21% and 14%, respectively, of women outside the U.S.

Working From Home

- Working from home was a significant change for most actuaries. While some are looking forward to
 returning to work in the office, few would like to return to working in the office most or all of the time.
 After COVID-19 restrictions are fully lifted, approximately 65% of full-time respondents would like to work
 from home at least 3 days per week, although the preferred frequency of working from home differs
 somewhat by country.
 - o In the U.S., 27% would prefer to work from home every day, 25% would prefer 3 days per week, and 14% would prefer 4 days per week.
 - o 37% of Canadians would like to work from home 3 days per week, while 16% and 15% would prefer to work from home 4 and 5 days per week, respectively.
 - o In all other countries combined, the percent of full-time respondents who would like to work from home 3, 4, and 5 days per week was 29%, 10%, and 17%, respectively.
- Women in the U.S. would like to work from home slightly more frequently than would men, but in other countries, women would prefer to work from home slightly less frequently than would men.

¹ The number of respondents who provided demographic information includes respondents who selected "prefer not to answer" in response to one or more demographic questions.

Professional Effectiveness

- For most working conditions during the pandemic, more respondents reported a neutral impact on their professional effectiveness than either a beneficial or detrimental impact, although results varied somewhat by country.
- Nearly three-quarters (74%) of respondents found the flexibility associated with working remotely to be beneficial to their professional effectiveness, and another 23% found it to be neutral.
- Networking and social interactions at work have generally been less effective during the pandemic.

Actuarial Exams

- During 2020, significantly fewer candidates wrote SOA actuarial exams than in recent previous years, but they seemed to be better prepared because a greater percentage of candidates passed.
- The total number of passing candidates in 2020 was 14% lower than in 2019, but it exceeded the number of candidates who passed in each year 2015 through 2017.



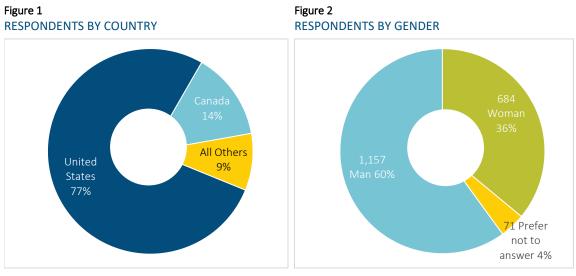
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Introduction and Summary of Respondents

COVID-19 and the accompanying restrictions have disrupted the personal and professional lives of virtually everyone. To understand the impact on the professional lives of actuaries and aspiring actuaries, the Society of Actuaries (SOA) surveyed 26,101 members and candidates in April 2021, and 2,128 people (8%) submitted the survey. Only 1,192 respondents (90% of all respondents) provided demographic information. Unless indicated otherwise, this study refers to "all" respondents as the 1,192 respondents who shared demographic information, including those who checked the boxes marked "Prefer not to answer."

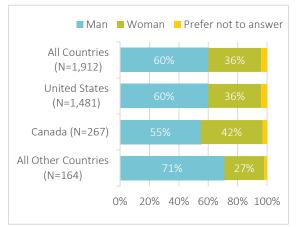
Most respondents live in North America: 77% in the U.S. and 14% in Canada (Figure 1). Overall, 60% of respondents identified as men, 36% identified as women, 4% preferred not to identify gender, while no respondents chose to identify as non-binary or other (Figure 2).



N=1,912

N=1,912

Figure 3 RESPONDENTS BY GENDER AND COUNTRY



Worldwide as of January 2020, 92% of respondents were employed as actuaries full time and 5% of respondents worked as actuaries part time, while 2% worked in a non-traditional arrangement and 1% were retired. Respondents who identified as women were slightly more likely than those who identified as men to have been employed as actuaries part time—5% of women compared to 4% of men.

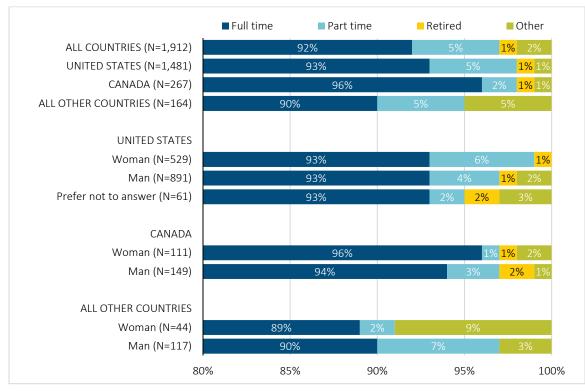
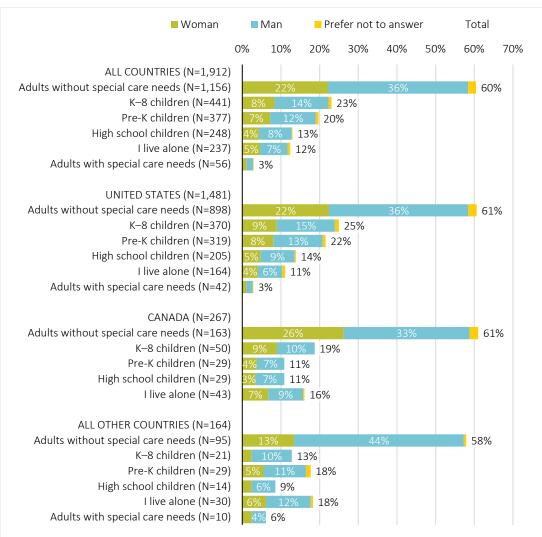


Figure 4 EMPLOYMENT STATUS, JANUARY 2020 BY COUNTRY AND GENDER

Gender categories with N<10 are not shown, but they are included in the country totals.

Household composition plays a role in how the working conditions of the pandemic are experienced. Figure 5 summarizes household characteristics of all respondents for reference against subsequent analyses.





Multiple household characteristics may apply to a single respondent. Some percentages may not add to the total because of rounding.

Employment Status Changes

As explored in the 2020 SOA series of briefs on the impact of COVID-19, public policy and consumer reactions to the COVID-19 pandemic led to significant job loss.² Numerous sources have reported that labor force participation of parents with younger children, especially women, has suffered more than that

² Hall, R. Dale, et al. 2020 various dates March 20 through June 12. "Society of Actuaries Research Brief: Impact of COVID-19." Society of Actuaries. *https://www.soa.org/resources/research-reports/2020/impact-coronavirus/*. Schilling, Lisa A. 2020, July 31 and September 30. "COVID-19 Economic and asset Impact Update." Society of Actuaries. *https://www.soa.org/resources/research-reports/2020/impact-coronavirus/*.

of other people in the U.S. and Canada.³ However, the proportion of actuaries in the U.S. and Canada who changed employment status since January 2020 is essentially the same for women and men, between 6% and 8% (Figure 6). However, women in other countries were more likely than men to have changed employment status: 16% of women compared to 11% of men.

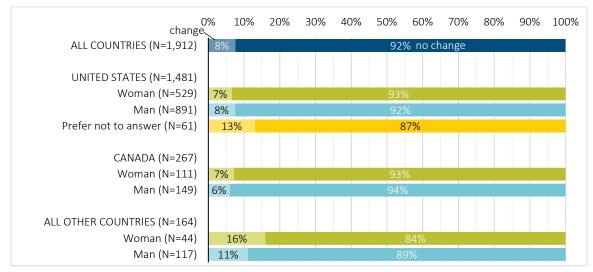


Figure 6

PROPORTIONS OF EMPLOYMENT STATUS CHANGES SINCE JANUARY 2020 BY GENDER AND COUNTRY

Includes voluntary and involuntary employment status changes. Categories with N<10 are not shown, but they are included in the country totals.

When considering the household characteristics of actuaries who did or did not change employment status since the start of the COVID-19 crisis (Figure 7**Error! Reference source not found.**), one household characteristic stands out. While 8% of all respondents changed employment status, 18% of those whose household includes adults with special care needs changed employment status: 23% of women and 13% of men.

In countries other than the U.S., even greater percentages of respondents who live adults with special care needs changed employment status since January 2020. In addition, women outside the U.S. who live with younger children were more likely to have changed employment status than women in the U.S, while the percentage of men living with younger children who changed employment status was approximately the same across countries. In the U.S., 7% of women living with pre-school children or children in grades K–8 changed employment status, compared to 21% and 14%, respectively, of women outside the U.S.

³ Riley, Katherine and Stephanie Stamm. April 27, 2021. "Nearly 1.5 Million Mothers Are Still Missing From the Workforce." *The Wall Street Journal.* https://www.wsj.com/articles/nearly-1-5-million-mothers-are-still-missing-from-the-workforce-11619472229. Leonhardt, David. May 3, 2021. "The Morning Newsletter." New York Times. https://www.nytimes.com/2021/05/03/briefing/schools-reopening-working-mothers.html. Bauer, Lauren. May 6, 2021. "Mothers Are Being Left Behind in the Economic Recovery from COVID-19." Brookings.

https://www.brookings.edu/blog/up-front/2021/05/06/mothers-are-being-left-behind-in-the-economic-recovery-from-covid-19/. Higginbotham, Eve and Maria Lund Dahlberg. 2021. "The Impact of COVID-19 on the Careers of Women in Academic, Sciences, Engineering and Medicine. The National Academy of Sciences, Engineering and Medicine. The Impact of COVID-19 on the Careers of Women in Academic Sciences, Engineering, and Medicine | The National Academies Press (nap.edu). Wheatly, Gillian. 2021, March 4. "Pandemic Job Losses Threaten to Leave Women Behind Permanently, RBC Warns." CBC News. https://www.cbc.ca/news/business/longterm-female-unemployment-1.5935882. Desjardins, Dawn and Carrie Freestone. 2020, November 19. "Canadian Women Continue to Exit the Labour Force." RBC Thought Leadership. Royal Bank of Canada. https://thoughtleadership.rbc.com/canadian-women-continue-to-exit-the-labour-force/.

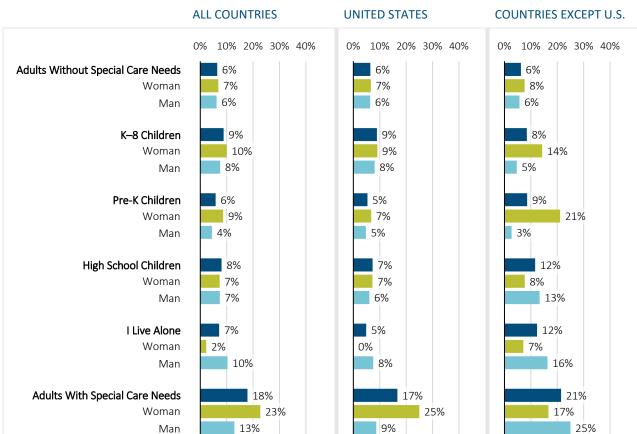
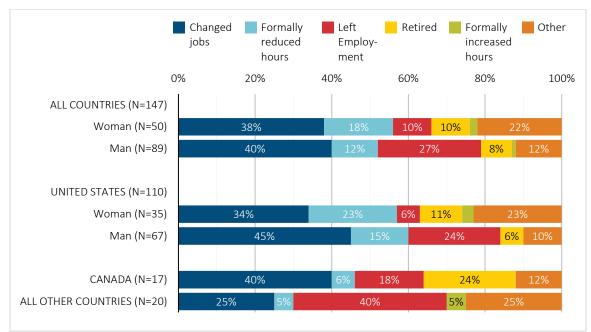


Figure 7 PERCENT OF ACTUARIES IN EACH HOUSEHOLD CHARACTERISTIC WHO CHANGED EMPLOYMENT STATUS BY GENDER AND COUNTRY

Gender and household composition combinations for Canada and "all other countries" are not shown because N<10 for all combinations.

While the total proportions of respondents who changed employment status since January 2020 generally did not vary much by gender, how their employment status changed did vary by gender (Figure 8). Men were much more likely than women to have left employment or retired (27% to 10%, respectively). And women were more likely than men to formally reduce their hours (18% compared to 12%) and much more likely to change their employment in ways other than the choices offered (22% compared to 13%).

Figure 8 TYPES OF EMPLOYMENT STATUS CHANGES BY COUNTRY AND GENDER

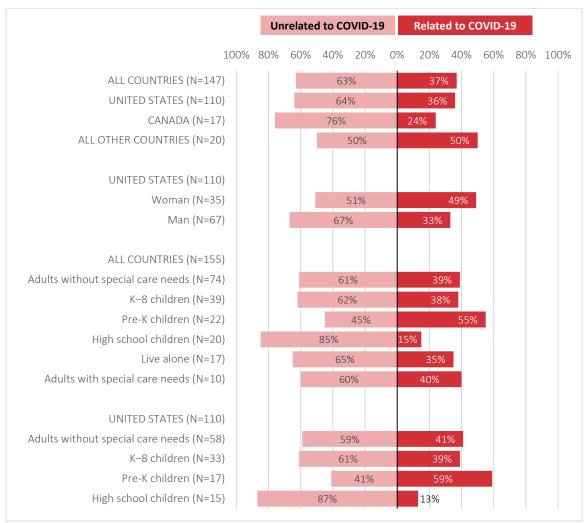


Genders with N<10 are not shown but are included in the country totals.

Since January 2020, more than one-third (37%) of reported employment status changes occurred for reasons related to COVID-19 (Figure 9). Women were more likely to have changed employment status for reasons related to COVID-19 (49%) than were men (33%).

Household composition also appears to have played a significant role in whether COVID-19 prompted employment status changes. While 37%% of all employment status changes were for pandemic-related reasons, the percentages varied significantly by household composition, ranging from 55% of those who live with pre-school-aged children to 15% of those living with high-school-aged children.

Figure 9 PROPORTION OF EMPLOYMENT STATUS CHANGES RELATED TO COVID-19



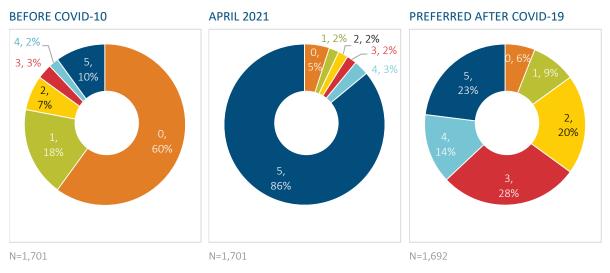
Gender or household categories with N<10 are not shown, but they are included in the country and household totals.

Working From Home

Before the pandemic, 60% of respondents who were working full time as actuaries typically worked in the office every day (Figure 10). About 20% worked from home one day a week before the pandemic, and roughly 10% typically worked from home every day.

Figure 10





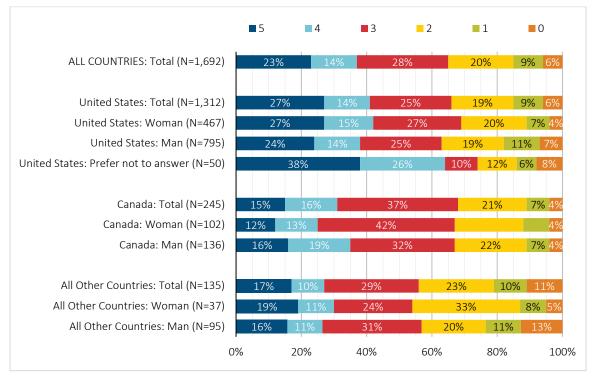
Policies in response to the COVID-19 pandemic dramatically changed where actuaries work, with 86% of actuaries working from home every day. A few actuaries are eager to return to the office every day, but most actuaries would prefer to work from home some—if not all—of the time once offices are ready to be fully open to workers. After COVID-19 restrictions have been fully lifted, 65% of full-time respondents would prefer to work from home at least 3 days per week, although percentages of preferred frequency of working from home shift slightly by country:

- In the U.S., 27% would prefer to work from home every day, 25% would prefer 3 days per week, and 14% would prefer 4 days per week.
- 37% of Canadians would like to work from home 3 days per week, while 16% and 15% would prefer to work from home 4 and 5 days per week, respectively.
- In all other countries combined, the percent of full-time respondents who would prefer to work from home 3, 4, and 5 days per week was 29%, 10%, and 17%, respectively.

When considered by gender, women in the U.S. prefer to work from home slightly more frequently than do men. In other countries, however, women prefer to work from home slightly less frequently than do men (Figure 11).

Figure 11

FULL-TIME ACTUARIES BY COUNTRY AND GENDER: PREFERRED NUMBER OF DAYS WORKING FROM HOME AFTER COVID-19 RESTRICTIONS ARE FULLY LIFTED



Genders for which N<10 are not shown but are included in country totals.

Household composition has a slightly greater, but still limited impact on the preferred frequency of working at home after COVID-19 is contained, and the household characteristics with the greatest preferences for working from home vary by country (Figure 12).

Figure 12

FULL-TIME ACTUARIES BY HOUSEHOLD: PREFERRED NUMBER OF DAYS WORKING FROM HOME AFTER COVID-19 RESTRICTIONS HAVE BEEN FULLY LIFTED

		5	3	2	1 0
ALL COUNTRIES (N=1,669)	23%	14%	26%	19%	9% 6%
Adults without special care needs (N=1,034)	24%	15%	25%	21%	9% 6%
K–8 children (N=390)	19%	17%	32%	17%	<mark>6 9% 6% </mark>
Pre-K children (N=347)	21%	18%	26%	22%	<mark>6 8% 4%</mark>
High school children (N=215)	19%	13%	31%	20%	12% 6%
l live alone (N=209)	25%	9%	31%	17%	10% 9%
Adults with special care needs (N=43)	28%	6 21	.% 16%	26	% 7%
UNITED STATES (N=1,783)	24%	15%	26%	20%	9% 6%
Adults without special care needs (N=799)	26%	14%	23%	21%	10% 6%
K–8 children (N=326)	21%	18%	30%	16	<mark>%</mark> 9% 5%
Pre-K children (N=296)	22%	19%	25%	219	<mark>%</mark> 8% 4%
High school children (N=180)	21%	12%	31%	19%	11% 6%
l live alone (N=149)	28%	. 11%	30%	13%	9% 9%
Adults with special care needs (N=33)	33	%	24%	9% 24	1% 6%
CANADA (N=292)	13%		38%	21	1% 7%
, Adults without special care needs (N=151)		23%	38%		18% 5%
K–8 children (N=47)			49%	23	
Pre-K children (N=25)	8% 2	0%	36%	3	2% 4%
High school children (N=25)	12%	16%	28%	24%	20%
I live alone (N=40)	23%	3	5%	23%	13% 8%
Adults with special care needs (N<10)					
ALL OTHER COUNTRIES (N=163)	17%	12% 2	26%	25%	10% 12%
Adults without special care needs (N=84)	19%	14%	26%	23%	10% 8%
K–8 children (N=17)	12%	18% 18	% 18%	12%	24%
Pre-K children (N=26)	23%	<mark>4%</mark> 23	%	31%	8% 12%
High school children (N=10)	20%	30%	10%	20%	20%
l live alone (N=20)	10% 5%	30%	3	35%	10% 10%

Multiple household characteristics may apply to a single respondent.

Work Load

In addition to changing where actuaries work, the pandemic brought challenges that affected the amount of time that actuaries spend working. Roughly half of respondents (48%) indicated that the amount of time spent working, including time spent commuting, has been about the same during the pandemic as it was before the pandemic (Figure 13), suggesting that their time that had been spent commuting was replaced by time spent working.

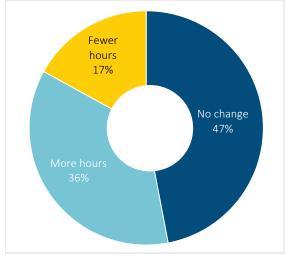
For many actuaries, additional work accompanied the pandemic—35% percent of respondents reported that they were working more during COVID-19 than before the pandemic. Nearly three-quarters of these

respondents indicated their work hours had increased because they had more work to do, and about onequarter of them indicated that tasks take longer to complete than they did before the pandemic.

On the flip side, nearly 1 out of 6 respondents reported that they spend less time working during the pandemic than before it, primarily because of the reduced amount of commuting time.

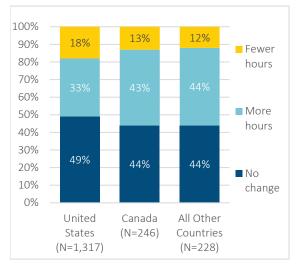
Figure 13

CHANGE IN NUMBER OF WORK HOURS, INCLUDING COMMUTE: ALL RESPONDENTS



N=1,791

CHANGE IN NUMBER OF WORK HOURS, INCLUDING COMMUTE BY COUNTRY



REASONS FOR INCREASED HOURS: ALL COUNTRIES

More work responsibilities	73%
Work responsibilities take longer to	
complete than they did before	27%
More distractions	22%
Find it difficult to concentrate for a	
long amount of time at home	16%
Technical issues (e.g., internet	
connectivity issues, etc.)	15%
Blurred or no boundaries between	
work and home	10%
Other	9%
No dedicated workspace	8%

Because respondents may have selected more than one reason, percentages add to greater than 100%.

REASONS FOR DECREASED HOURS: ALL COUNTRIES

Less time commuting	83%
More personal responsibilities	15%
Fewer work responsibilities or projects	10%
My work responsibilities take less time	
than they did before COVID-19	8%
Other	6%

Because respondents may have selected more than one reason, percentages add to greater than 100%.

Professional Effectiveness

Overall, actuaries have found some aspects of COVID-19 working conditions to be beneficial to their professional effectiveness and other aspects to be detrimental. However, for most conditions, the most common response was that the condition had neither a positive nor a negative impact on their professional effectiveness (Table 1). **Flexibility in working hours** was reported to be the most beneficial condition, with

74% of respondents choosing somewhat more or much more effective. The aspects of COVID-19 working conditions that suffered the most were **social interactions at work and networking**, for which 81% and 74%, respectively, of respondents ranked as somewhat less or much less effective.

Table 1

RESPONSES TO IMPACT OF COVID-19 WORKING CONDITIONS ON PROFESSIONAL EFFECTIVENESS: ALL COUNTRIES

Condition	Much less effective	Some- what less effective	Neither more nor less effective	Some- what more effective	Much more effective
Flexibility for hours working professionally	1%	2%	23%	49%	25%
Amount of time available to work professionally	1%	12%	41%	34%	12%
Demands on personal responsibilities	4%	20%	51%	17%	8%
Time available to think	4%	17%	44%	26%	9%
Collaboration	6%	40%	40%	12%	2%
Professional development	6%	29%	50%	11%	3%
Being mentored	10%	34%	52%	4%	1%
Innovation	4%	20%	59%	15%	3%
Mental health and well-being	12%	35%	36%	11%	6%
Remote interactions with others	10%	27%	23%	26%	14%
Networking	30%	44%	20%	5%	1%
Social interactions at work	38%	43%	16%	2%	1%

N=1,811

The impact of most aspects of COVID-19 working conditions varies little by respondents who indicated a gender identity, with a few exceptions. Figure 14 shows the average reported impact on professional effectiveness. When considering demands on personal responsibilities, women reported their professional effectiveness as slightly hampered, on average, while men reported it as slightly improved, on average. Both men and women have found, on average, **collaboration** and **mental health and well-being** to be slightly less effective during COVID-19 working conditions. But men indicated a more significant detrimental effect on **collaboration** than did women, while women indicated that **mental health and well-being** had a more significant detrimental effect on their professional effectiveness than did men. Concerning **social interactions at work**, men also experienced a more detrimental effect than did women.

In addition, some differences stand out between persons who indicated a gender identity and those who preferred not to answer a gender identity. Overall, actuaries have found **remote interactions** to very slightly improve their professional effectiveness, although almost as many found remote interactions to be somewhat detrimental as beneficial or neutral. Actuaries who preferred not to answer their gender identity indicated remote interactions were more beneficial to their professional effectiveness than did those who identified as a man or a woman.

Actuaries found **networking** to be overall significantly less effective during COVID-19 working conditions, but persons who preferred not to answer their gender identity experienced less detrimental impact on average than persons who provided their gender identity.

Responses varied somewhat across countries; refer to the appendix for results by country.

Figure 14

AVERAGE IMPACT OF COVID-19 CONDITIONS ON PROFESSIONAL EFFECTIVENESS: ALL COUNTRIES

How has your professional effectiveness changed as a result of each of the following	less	Somewhat less effective	Neither more nor less effective	Somewhat more effective	Much more effective
FLEXIBILITY FOR HOURS WORKING PROFESSIONALLY Woman Man Prefer not to answer				4	
AMOUNT OF TIME AVAILABLE TO WORK Woman Man Prefer not to answer			•		
TIME AVAILABLE TO THINK Woman Man Prefer not to answer					
REMOTE INTERACTIONS WITH OTHERS Woman Man Prefer not to answer			1		
DEMANDS ON PERSONAL RESPONSIBILITIES Woman Man Prefer not to answer			•		
INNOVATION Woman Man Prefer not to answer			۱.		
COLLABORATION Woman Man Prefer not to answer			۰.		
PROFESSIONAL DEVELOPMENT Woman Man Prefer not to answer					
MENTAL HEALTH AND WELL-BEING Woman Man Prefer not to answer			١.		
BEING MENTORED Woman Man Prefer not to answer			ł. –		
NETWORKING Woman Man Prefer not to answer		4			
SOCIAL INTERACTIONS AT WORK Woman Man Prefer not to answer		۷,			

N=1,101; Woman N=643; Prefer not to answer N=67; Non-binary/other N=0.

Man

Exam Progress and Effectiveness

Summary of Respondents Pursuing Credentials

Of the 1,912 total respondents, 478 were pursuing actuarial credentials before the pandemic began (Figure 15). Compared to all respondents, proportionally more respondents pursuing credentials were outside of North America. 77% and 14% of all respondents were located in the U.S. and Canada, respectively, and 9% of all respondents were located outside of North America. But of respondents pursuing credentials, 68% and 15% were located in North America, and 17% were located in other countries.

Worldwide, 58% of the 478 identified as men, 38% identified as women, and 4% preferred not to answer a gender identity, and the gender proportions of respondents (Figure 16).

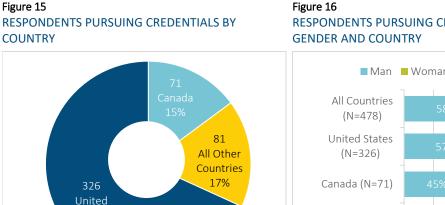
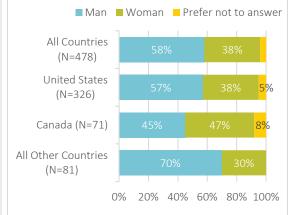


Figure 16 **RESPONDENTS PURSUING CREDENTIALS BY**

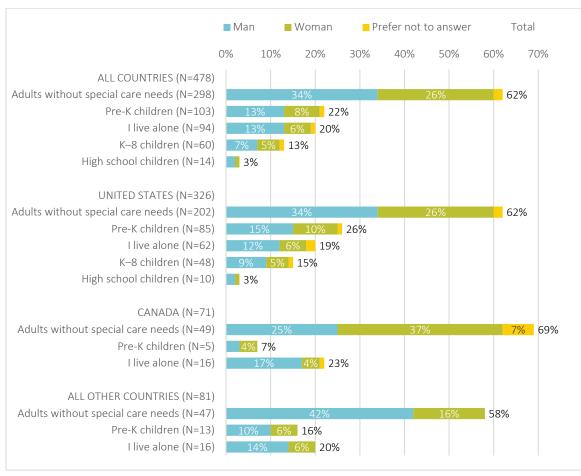


N=478

States 68%

Household composition of respondents pursuing credentials also differed from overall proportions. Candidates were more likely to live alone (20% compared to 12% of all respondents), slightly more likely to live with an adult without special care needs (62% compared to 60%), slightly more likely to live with preschool children (22% compared to 20%), and less likely to live with school-aged children (13% compared to 23% for children in grades K–8, and 3% compared to 13% for high school children). Refer to Figure 17 for a comparison of candidates' household composition by country.

Figure 17 PERCENT OF CANDIDATES IN IN GIVEN HOUSEHOLD CHARACTERISTICS BY GENDER AND COUNTRY



More than one household composition may apply to a single respondent. Household compositions with N<10 are not shown but are included in country totals.

Exam Progress

In the years leading up to the COVID-19 pandemic, the number of candidates writing exams had been steadily increasing from approximately 41,300 in 2015 to approximately 49,600 in 2019 (Figure 18). Because of policies and restrictions related to COVID-19, the SOA postponed spring 2020 exams until July and allowed registered candidates to cancel their registration with a full refund up to the day of their exam. In 2020, approximately 38,600 candidates wrote exams—22% fewer than in 2019 and 7% fewer than in 2015.

While the number of candidates who wrote SOA exams was down in 2020, those who wrote the exams appear to have been better prepared, on average. The percentage of writing candidates who passed in 2020—53%—was greater than in any recent previous years. From 2015 through 2019, the greatest percentage of passing candidates in any year was 48%.

Nonetheless, the total number of passing candidates in 2020 was 14% lower than in 2019: approximately 20,500 in 2020 compared to approximately 23,900 in 2019. However, the 2020 figure exceeded the number of passing candidates in each year 2015 through 2017.

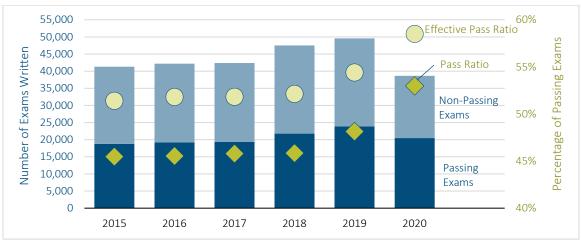


Figure 18 NUMBER OF CANDIDATES WRITING AND PASSING SOA ACTUARIAL EXAMS

Exam Effectiveness

Overall, many more exam candidates found COVID-19 conditions to be detrimental, rather than beneficial, to exam effectiveness (Table 2). Frequency of social interactions and availability of exams were cited as having the most determinantal impacts, on average, followed by mental health and well-being, remote interactions with others, demands on work responsibilities and demands on personal responsibilities.

While the average results for all conditions indicated a detrimental effect on exam effectiveness, the largest proportion of respondents found most conditions to be neutral as far as their effectiveness at actuarial exams. Further, responses varied little by gender.

Responses varied somewhat across countries; refer to the appendix for results by country

Table 2

IMPACT OF COVID-19 CONDITIONS ON CANDIDATES' ACTUARIAL EXAM EFFECTIVENESS: ALL COUNTRIES

Condition	Much less effective	Somewhat less effective	Neither more nor less effective	Somewhat more effective	Much more effective	Not Appli- cable
Frequency of social interactions	26%	34%	29%	6%	2%	3%
Availability of exams	23%	27%	36%	2%	2%	10%
Mental health and well-being	19%	30%	35%	9%	5%	2%
Remote interactions with others	13%	24%	47%	3%	1%	12%
Demands on work responsibilities or time	13%	26%	43%	11%	4%	3%
Demands on personal responsibilities	13%	19%	51%	11%	3%	3%
Amount of time available to study	16%	23%	27%	24%	7%	3%
Amount of time available to work professionally	7%	18%	50%	18%	4%	3%

N=409

Figure 19

AVERAGE IMPACT OF COVID-19 CONDITIONS ON ACTUARIAL EXAM EFFECTIVENESS: ALL COUNTRIES

How has your exam effectiveness changed as a result of each of the following	Much less effective	Somewhat less effective	Neither more nor less effective	Somewhat more effective	Much more effective
FREQUENCY OF SOCIAL INTERACTIONS Woman Man Prefer not to answer		4			
AVAILABILITY OF EXAMS Woman Man Prefer not to answer		. •			
MENTAL HEALTH AND WELL-BEING Woman Man Prefer not to answer		•			
REMOTE INTERACTIONS WITH OTHERS Woman Man Prefer not to answer					
DEMANDS ON WORK RESPONSIBILITIES OR TIME Woman Man Prefer not to answer					
DEMANDS ON PERSONAL RESPONSIBILITIES Woman Man Prefer not to answer			۱.		
TIME AVAILABLE TO STUDY Woman Man Prefer not to answer			1		
TIME AVAILABLE TO WORK PROFESSIONALLY Woman Man Prefer not to answer			•		

Man N=236; Woman N=152; Prefer not to answer N=21; Non-binary/other N=0

Conclusion

The COVID-19 pandemic and accompanying policy changes have disrupted nearly everyone's personal and professional lives. Despite the challenges, actuaries and candidates have generally adapted. While many survey respondents find working remotely to be challenging, many respondents find working remotely to be a more effective way to work. And nearly three-quarters find that the flexibility that working remotely provides enhances their ability to work effectively. Consequently, it's not surprising that 65% of respondents would prefer to work from home at least 3 days per week once COVID-19 is contained, and almost one-quarter of respondents would prefer to work from home every day in a typical work week.

At the same time, most respondents found that networking and social interactions with co-workers during the pandemic have suffered, resulting in a detrimental impact on their professional effectiveness. In addition, many respondents have found collaboration to be less effective during COVID-19 working conditions.

More women than men who changed employment did so for pandemic-related reasons. But the reasons that actuaries formally cut back their hours or left the workforce because of the pandemic had less to do with gender and more to do with their family situation. Only about one-third of all respondents who made employment changes since January 2020 did so for reasons relating to COVID-19. However, over half of the respondents who made employment changes.

COVID-19 slowed actuarial exam progress during 2020. Fewer candidates wrote exams during 2020 than in recent years, although a significantly greater proportion of writing candidates passed. However, the total number of candidates who passed exams during 2020 fell short of the number who passed in each of 2018 and 2019.

It is too early to know the longer-term impact that COVID-19 and the accompanying conditions will have on actuarial careers.

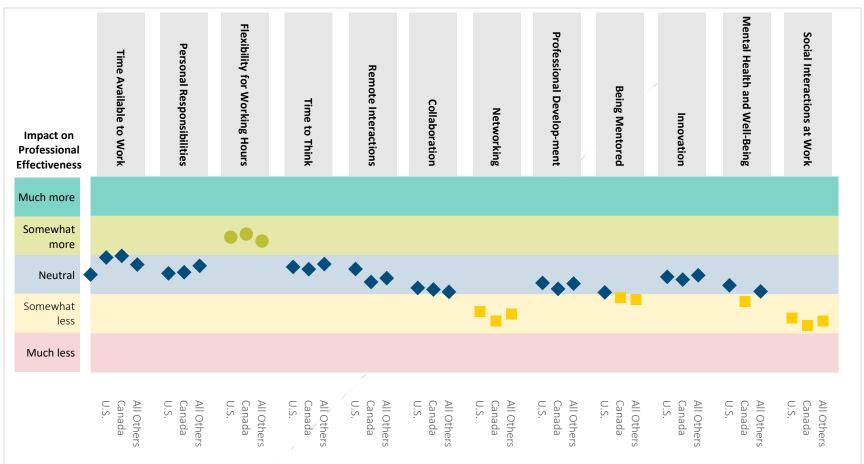


Appendix

Professional Effectiveness by Country

RESPONSES TO IMPACT OF COVID-19 WORKING CONDITIONS ON PROFESSIONAL EFFECTIVENESS BY COUNTRY

		United	States (N	=1,437)			Car	nada (N=2	.56)		All Other Countries (N=156)				
Condition	Much less	Some- what less	Neither more nor less	Some- what more	Much more	Much less	Some- what less	Neither more nor less	Some- what more	Much more	Much less	Some- what less	Neither more nor less	Some- what more	Much more
Flexibility for hours working professionally	0%	2%	24%	49%	25%	0%	2%	19%	51%	27%	3%	5%	21%	44%	26%
Remote interactions with others	8%	26%	25%	26%	15%	15%	31%	21%	24%	9%	17%	28%	18%	24%	14%
Amount of time available to work professionally	1%	11%	42%	34%	11%	0%	16%	35%	36%	14%	2%	18%	44%	26%	11%
Demands on personal responsibilities	4%	20%	52%	17%	7%	4%	18%	54%	17%	7%	4%	15%	45%	24%	12%
Time available to think	3%	16%	46%	26%	8%	5%	19%	41%	28%	7%	5%	17%	37%	29%	12%
Professional development	6%	28%	52%	11%	3%	8%	32%	50%	9%	2%	8%	34%	37%	16%	5%
Innovation	3%	19%	61%	15%	3%	3%	26%	53%	17%	1%	6%	21%	48%	19%	6%
Being mentored	9%	32%	55%	3%	1%	9%	46%	41%	5%	0%	17%	35%	42%	6%	0%
Collaboration	6%	39%	41%	12%	3%	6%	41%	40%	11%	2%	10%	43%	30%	14%	
Mental health and well-being	10%	33%	38%	12%	7%	19%	42%	30%	6%	3%	17%	37%	27%	10%	9%
Networking	29%	44%	21%	5%	1%	38%	45%	14%	2%	0%	32%	43%	19%	5%	1%
Social interactions at work	37%	43%	17%	2%	1%	46%	42%	9%	3%	0%	40%	41%	16%	2%	1%



AVERAGE RESPONSE TO IMPACT OF COVID-19 WORKING CONDITIONS ON PROFESSIONAL EFFECTIVENESS BY COUNTRY

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Exam Effectiveness by Country

RESPONSES TO IMPACT OF COVID-19 CONDITIONS ON EXAM EFFECTIVENESS BY COUNTRY

	United States (N=296)							Canada (N=54)							All Other Countries (N=63)					
Condition	Much less	Some -what less	Neith -er more nor less	Some -what more	Much more	Not Appli- cable	Much less	Some -what less	Neith -er more nor less	Some -what more	Much more	Not Appli- cable	Much less	Some -what less	Neith -er more nor less	Some -what more	Much more	Not Appli- cable		
Availability of exams	20%	27%	39%	2%	2%	9%	35%	19%	28%	0%	0%	19%	26%	34%	30%	3%	2%	5%		
Frequency of social interactions	27%	32%	31%	6%	2%	3%	30%	31%	28%	6%	0%	6%	20%	43%	23%	8%	5%	2%		
Demands on work responsibilities or time	12%	25%	47%	12%	3%	2%	11%	41%	31%	7%	4%	6%	20%	21%	34%	11%	8%	5%		
Mental health and well-being	19%	29%	36%	9%	4%	2%	20%	44%	26%	4%	4%	2%	20%	21%	34%	13%	8%	3%		
Remote interactions with others	12%	22%	49%	3%	1%	12%	19%	24%	39%	0%	0%	19%	13%	30%	46%	3%	3%	5%		
Amount of time available to work professionally	7%	15%	55%	17%	4%	2%	2%	28%	44%	19%	2%	6%	10%	25%	33%	23%	7%	3%		
Demands on personal responsibilities	15%	18%	50%	13%	2%	3%	4%	22%	65%	2%	2%	6%	10%	20%	46%	10%	10%	5%		
Amount of time available to study	15%	23%	29%	23%	7%	2%	15%	24%	24%	28%	4%	6%	21%	26%	16%	28%	5%	3%		

Mental Health and Well-Being **Personal Responsibilities Time Available to Study** Time Available to Work Work Responsibilities Availability of Exams **Remote Interactions** Frequency of Social Interactions Impact on Exam Effectiveness Much more Somewhat more • ٠ Neutral • • • $\bullet \bullet \bullet$ • Somewhat less Much less U.S. Canada U.S. Canada All Others U.S. Canada U.S. Canada U.S. Canada U.S. Canada All Others U.S. Canada All Others U.S. Canada All Others All Others All Others All Others All Others

AVERAGE RESPONSE TO IMPACT OF COVID-19 CONDITIONS ON EXAM EFFECTIVENESS BY COUNTRY

About The Society of Actuaries

With roots dating back to 1889, the *Society of Actuaries* (SOA) is the world's largest actuarial professional organization with more than 31,000 members. Through research and education, the SOA's mission is to advance actuarial knowledge and to enhance the ability of actuaries to provide expert advice and relevant solutions for financial, business and societal challenges. The SOA's vision is for actuaries to be the leading professionals in the measurement and management of risk.

The SOA supports actuaries and advances knowledge through research and education. As part of its work, the SOA seeks to inform public policy development and public understanding through research. The SOA aspires to be a trusted source of objective, data-driven research and analysis with an actuarial perspective for its members, industry, policymakers and the public. This distinct perspective comes from the SOA as an association of actuaries, who have a rigorous formal education and direct experience as practitioners as they perform applied research. The SOA also welcomes the opportunity to partner with other organizations in our work where appropriate.

The SOA has a history of working with public policymakers and regulators in developing historical experience studies and projection techniques as well as individual reports on health care, retirement and other topics. The SOA's research is intended to aid the work of policymakers and regulators and follow certain core principles:

Objectivity: The SOA's research informs and provides analysis that can be relied upon by other individuals or organizations involved in public policy discussions. The SOA does not take advocacy positions or lobby specific policy proposals.

Quality: The SOA aspires to the highest ethical and quality standards in all of its research and analysis. Our research process is overseen by experienced actuaries and nonactuaries from a range of industry sectors and organizations. A rigorous peer-review process ensures the quality and integrity of our work.

Relevance: The SOA provides timely research on public policy issues. Our research advances actuarial knowledge while providing critical insights on key policy issues, and thereby provides value to stakeholders and decision makers.

Quantification: The SOA leverages the diverse skill sets of actuaries to provide research and findings that are driven by the best available data and methods. Actuaries use detailed modeling to analyze financial risk and provide distinct insight and quantification. Further, actuarial standards require transparency and the disclosure of the assumptions and analytic approach underlying the work.

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