THE STATUS OF THE NURSING WORKFORCE IN MONTANA

A Summary of the Results from the National Council State Board of Nursing 2020 Survey

Montana Department of LABOR & INDUSTRY

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November 2021

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Montana's healthcare system relies on a highly skilled nursing workforce. Increased retirements from an aging population combined with increased demand on the healthcare system from a global pandemic have made understanding the current and future nursing workforce essential. To help provide insight into these workers, the National Council State Board of Nursing (NCSBN) conducts a national nursing survey every two years, including questions related to educational attainment, employment, earnings, and other demographic information. With over 18,000 actively licensed registered nurses (RNs), and 2,900 actively licensed practical nurses (LPNs) in Montana, this survey provides information on the demographics of these workers and can be used to guide discussions on the status of the Montana's nursing workforce.

Highlights from the survey

- Tight labor markets and nursing worker shortages persist. Only 1.2% of Montana's RNs and 2.3% of Montana's LPNs report that they are unemployed and actively seeking work, slightly lower than 1.9% and 3.2% nationally.
- Multistate licensing can help overcome workforce shortages in nursing by allowing employers to hire from outside the state. 40% of Montana's licensed RNs and 26% of LPNs who are actively employed in the field report holding a multistate license.
- American Indian nurses are underrepresented in Montana, making up less than 2% of all nurses in the state compared to 6% of the total population.

Registered Nurses

- Approximately 85% of licensed RNs were working in the field in 2020, similar to employment patterns five years prior.
- The median age of RNs in Montana has fallen from 48.5 to 47.6 years old, suggesting older workers are retiring and being replaced by a younger generation.
- About 18.3% of RNs actively employed in nursing said they plan on retiring or otherwise leaving the field in the next five years, which is about 570 workers each year.
- Most actively licensed RNs in the state hold a bachelor's degree in nursing (60%). The Southwest and South Central regions, which include Bozeman, Helena, and Billings, have above average bachelor's degree RNs compared to the rest of the state.
- Of the RNs in Montana who began their career with an associate degree, an estimated 32% have since achieved a bachelor's degree or higher.
- Despite the prevalence of bachelor's trained RNs, the median wage for associate degree and bachelor's degree RNs is the same at $60,000.
- RNs holding a master's degree earn median wages of $90,000, which is 50% more than RNs holding an associate or bachelor's degree.
- Nursing faculty wages have grown over the last five years to surpass wages earned by staff nurses. Competitive wages for faculty are important for recruitment and retention of qualified instructors and for the future of the workforce.

Licensed Practical Nurses

- The number of licensed LPNs who are out of the labor force has increased over the last five years from 15% to 23%, primarily driven by an increase in retirements.

- The population of LPNs in Montana is aging along with the rest of the state, with the median age at 53.5 years compared with 50.9 in 2015.
- Nearly half (48.5%) of LPNs actively employed in the field say they plan on retiring or leaving nursing in the next five years, which is about 175 workers each year.
- LPN staff nurses work in a variety of different settings. The most common places for LPNs to work are in a nursing home/extended care (26%) or ambulatory care (16%). Only about 9% of LPNs report working in a hospital.

About the Survey

The National Nursing Workforce Survey, conducted by the National Council of State Boards of Nursing and the National Forum of State Nursing Workforce Centers, is a national-level survey that is focused on providing an overview of the nursing workforce. The survey is sent out to a random sample of individuals that hold either an active registered nurse (RN) license or an active licensed practical/vocational nurse (LPN/LVN) license. In Montana, 2,161 RN licensees were mailed a survey, and 843 responded. Of the 1,629 Montana LPN/LVN licensees that were mailed a survey, 595 responded. This analysis focuses on the responses of those Montana licensee respondents.

This analysis weighted the Montana data by Montana's age distribution to appropriately represent the state's nursing population. The national results are also weighted, with those calculations based on the U.S. age and gender distribution.

Responses for the 2020 survey were collected from Feb. 19, 2020 to June 30, 2020. For most survey questions, pre-pandemic responses did not differ from post-pandemic responses. The exception is that pre-pandemic respondents tended to be younger, fully employed, and working in hospitals while post-pandemic respondents were more likely to be older, retired, and working in home health.

The COVID-19 pandemic has highlighted the vital role nurses play in the state's healthcare system and economy. Ensuring the state's workforce is healthy and safe is critical to continued economic growth. For the better part of the last two decades, Montana has faced a workforce shortage with low unemployment rates and businesses across the state reported difficulty hiring. The COVID pandemic caused a brief spike in the unemployment rates, but unemployment quickly dropped back down to low levels. The healthcare sector has been acutely impacted by the workforce shortage due to the increased workload placed on healthcare workers during the pandemic, many of whom have grown mentally and physically weary from working on the frontlines. Even after the pandemic, a growing and aging population will increase the demand for healthcare services.

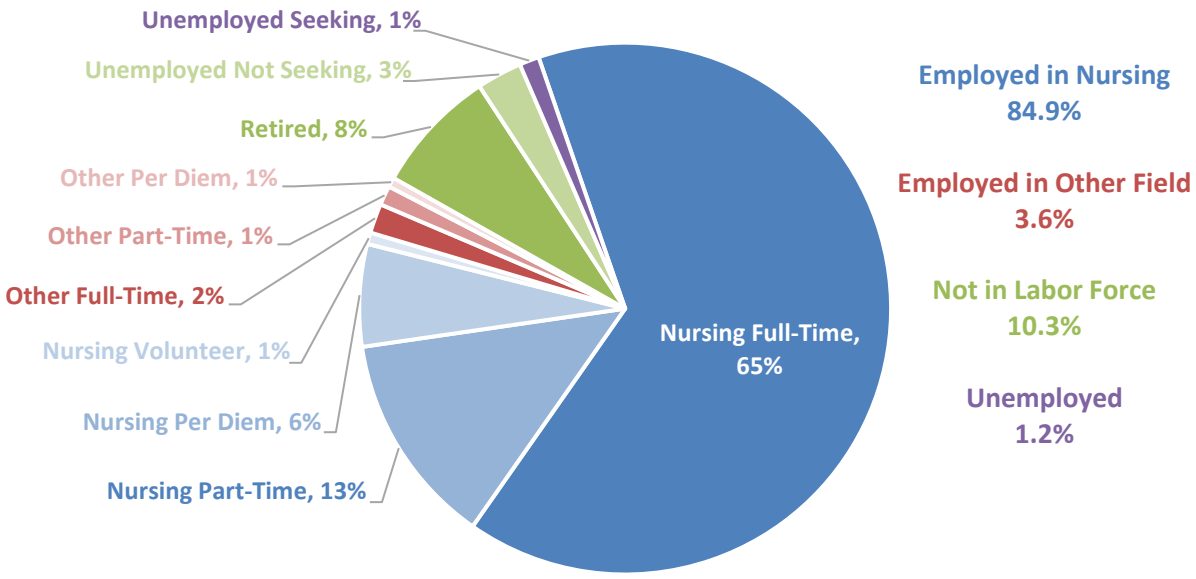
There are nearly 18,000 actively licensed RNs and 2,900 actively licensed LPNs providing critical care to Montanans around the state. The unemployment rate for nurses falls well below the average for all occupations, indicating more critical worker shortages. The following sections explore nursing employment for RNs and LPNs in the state, as well as educational attainment and demographic shifts over the last five years.

Registered Nurses

Employment Status

Most actively licensed RNs in Montana are working in nursing. The NCSBN survey indicates approximately 85% of RNs are working in the field, and 65% are working full-time. The share working full-time is the same as the national average (65%). Figure 1 shows the employment status of licensed RNs in Montana.

Figure 1. Employment Status of Actively Licensed RNs in Montana



Source: National Council State Board of Nursing (NCSBN) 2020 Survey compiled by MTDLI.

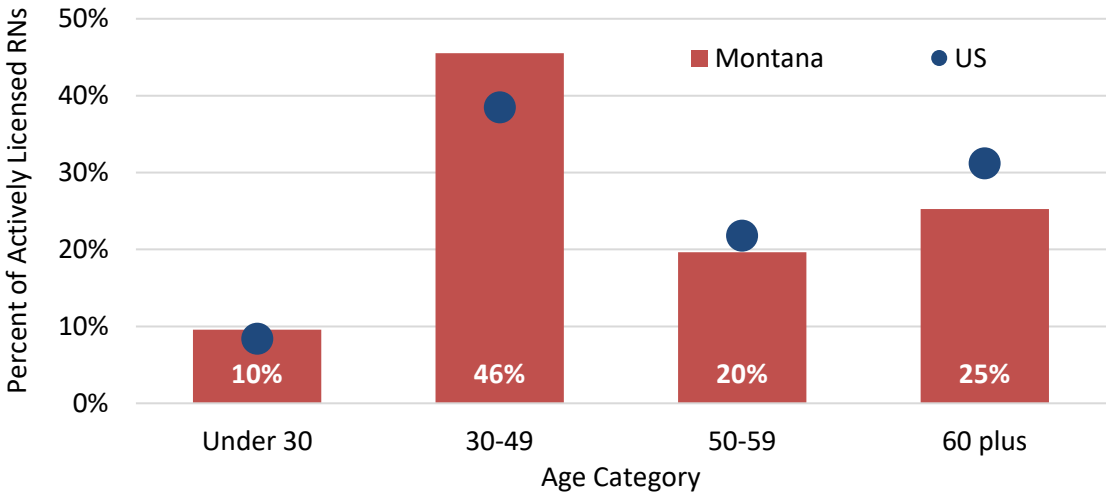
*Only **1.2%** of licensed RNs are unemployed and seeking work.*

Fourteen percent of licensed RNs are either working in other fields or are not participating in the labor force. There are many reasons an individual may choose not to participate in the labor force. They may be retired (8% of all actively licensed RNs), or they may have family or school commitments. Among those not retired, family commitments like caring for children or adults with illnesses or disabilities was the most common reason for not actively seeking work. Only 1.2% of licensed RNs indicated they are unemployed and actively seeking work, which is not statistically different than the national average of 1.9%.

Age Demographics

While the rest of the state has been getting older, the average age of RNs in Montana fell, suggesting retiring RNs are being replaced by a younger generation.[1] The median age of Montana's RNs is slightly younger than it was five years ago, at 47.6 years compared with 48.5 in 2015. Montana's RNs are also younger than the national cohort (Figure 2).[2] Compared to the U.S., Montana has a higher share of nurses age 30-49 and a lower share older than 60.

Figure 2. Age Distribution of Actively Licensed RNs in Montana and U.S.



Source: National Council State Board of Nursing (NCSBN) 2020 Survey. Montana estimates compiled by MTDLI using licensure data as of 12/31/2019.

An aging workforce and increased retirements are the primary drivers of workforce shortages across all occupations, including nursing. According to the NCSBN survey, 18.3% of RNs employed in the field said they plan on retiring or otherwise leaving the occupation in the next five years, which is about 570 workers each year. Similarly, the MTDLI projections estimate 550 nurses will leave their job each year over the next ten years, with 44% of those leaving for a career change and 56% dropping out of the labor force entirely.[3]

***18.3%** of **RNs** say they plan on retiring in the next 5 years, which is about **570** workers each year.*

[1] MTDLI licensure data.
[2] The 2020 National Nursing Workforce Survey indicates the median age reported by RNs across the U.S. was 52.
[3] MTDLI, 2020-2030 occupational employment projections.

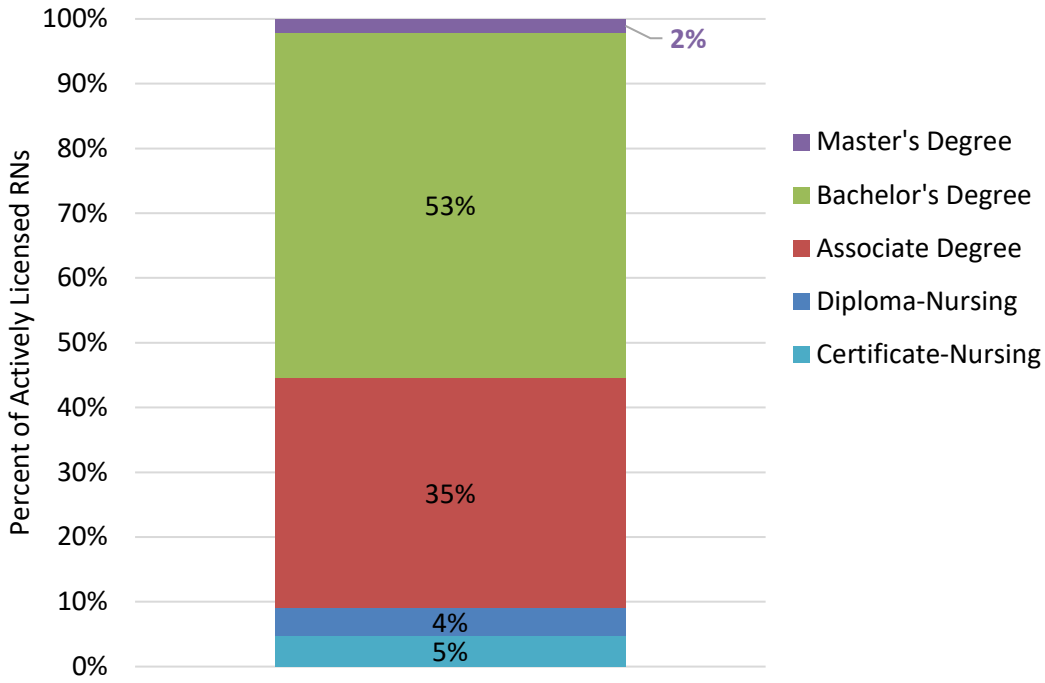
Educational Attainment

*Approximately **53%** of RNs in Montana entered the profession with a bachelor's degree.*

Over the last several years, there has been a national push towards bachelor's degree attainment among RNs. In 2011, the National Academy of Medicine recommended 80% of nurses should hold a bachelor's degree by 2020 due to the increasing complexity of modern medicine and improved patient outcomes among bachelor-trained RNs.[4] In 2016, the BLS began identifying a bachelor's degree as the typical degree needed for entry into an RN occupation.[5] Nationally, the percentage of RNs beginning their career with a bachelor's degree increased from 36.0% in 2013 to 41.8% in 2017. However, that trend stalled in recent years with the share remaining at 41.8% in 2020.

Most RNs (53%) in Montana enter the career with a bachelor's degree, higher than the national trend. About 35% began their career with an associate degree. Like the nation, the percentage entering their career with a bachelor's degree has not increased over the last five years. Figure 3 shows the breakdown of initial nursing degree earned by Montana licensed RNs.

Figure 3. First Degree Earned by RNs in Montana



Source: National Council State Board of Nursing (NCSBN) 2020 Survey compiled by MT DLI.

Tight labor markets and minimal wage gains from bachelor's degree attainment (as shown in Figure 6) likely contribute to stalled bachelor's degree attainment. However, bachelor's degrees remain the most

[4] The Future of Nursing: Leading Change, Advancing Health. National Academies Press, 2011.
[5] For a complete list of educational attainment by occupation used by the BLS to determine typical education for entry, please visit: https://www.bls.gov/emp/tables/education-and-training-by-occupation.htm

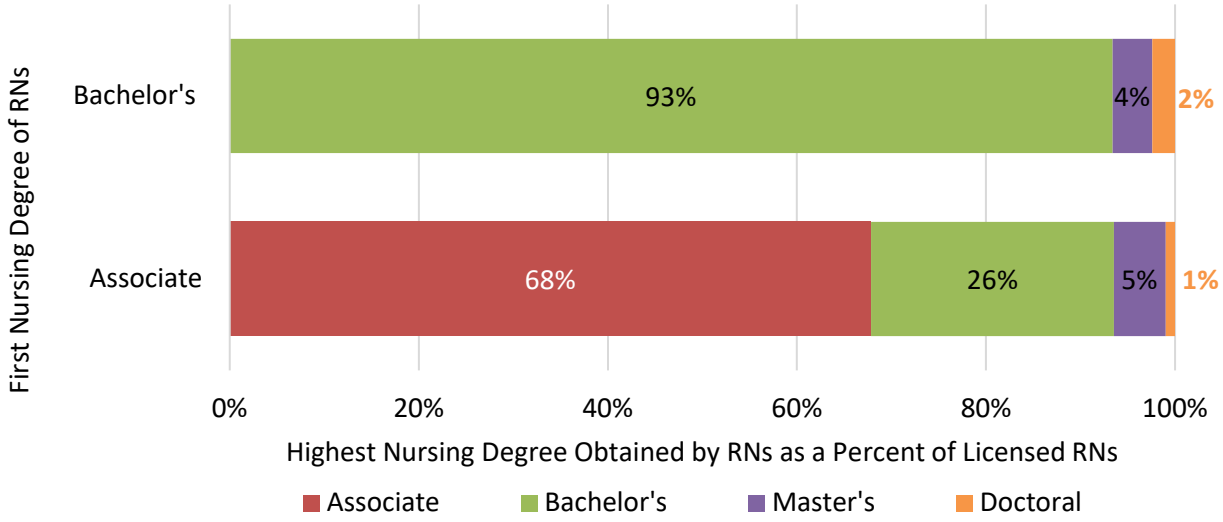
common nursing degree earned by RNs under 30 years old. As older RNs retire and are replaced by younger workers, the percentage of bachelor's degree RNs will likely increase.

While bachelor's degree attainment is most common among younger nurses, older nurses are more likely to have entered nursing with a certificate or diploma. Fifteen percent of nurses over 50 years began their career with a certificate or diploma compared with 4% of RNs under age 50. Associate degree attainment has remained consistent among age cohorts. Thirty-one percent under 30 started with an associate degree compared to 36% for RNs over 30.

*Of the RNs beginning their career with an associate degree, an estimated **32%** have since achieved a bachelor's degree or higher.*

Once RNs obtain their nursing license, most do not achieve a higher degree in nursing. The academic progression of RNs in Montana is displayed in Figure 4. Over 93% of Montana's RNs beginning their career with a bachelor's degree continue to hold that as their highest level of nursing education. For licensed RNs who entered their career with an associate degree, about 68% still hold that degree as their highest level of nursing education, while 32% have since progressed to achieve a bachelor's degree or higher.[6]

Figure 4. Academic Progression of RNs by Initial Nursing Degree Type in Montana



Source: National Council State Board of Nursing (NCSBN) 2020 Survey compiled by MTDLI.

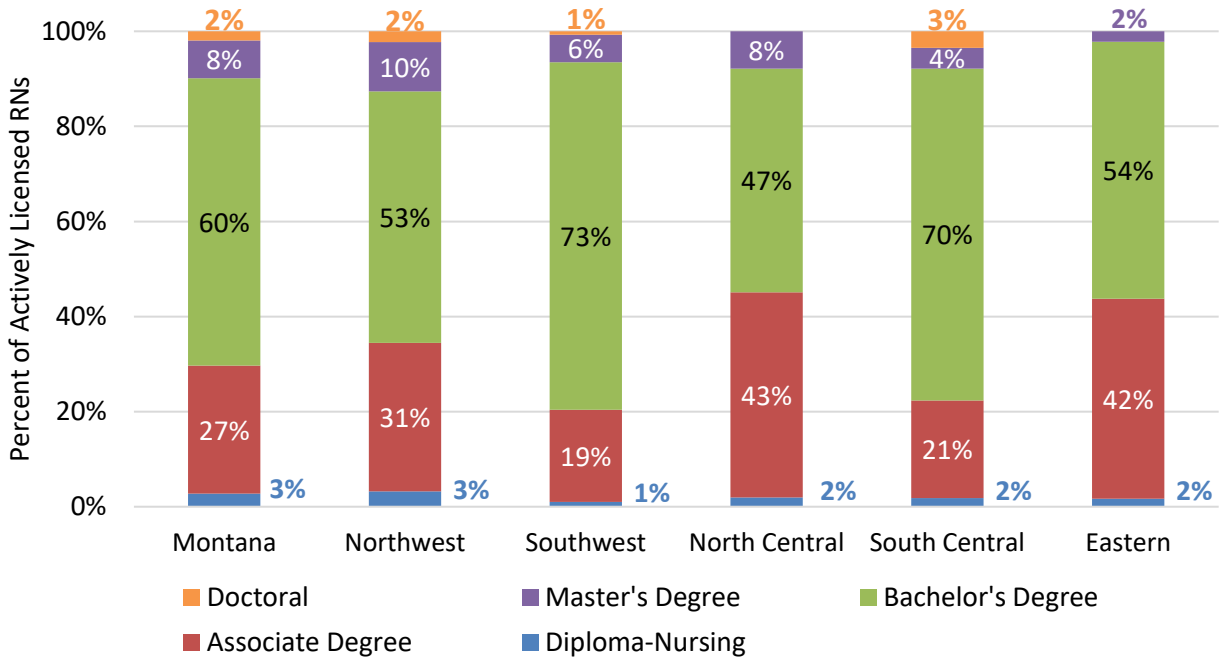
Sixty percent of RNs in Montana hold a bachelor's degree, as shown in Figure 5. RNs in the Southwest and South Central regions (which include Bozeman, Helena, and Billings) have above average bachelor's degree attainment compared to the rest of the state.[7] Higher educational attainment in the Southwest likely results from the presence of MSU's nursing programs within the region. For the South Central region, the high level of bachelor's educated nurses is likely attributable to the large hospital

[6] Responses are specific to education related to nursing. An additional 2% of BSN RNs earned a graduate degree in another field. Another 11% of ASN RNs earned a bachelor's or higher in another field.

[7] For a map of Montana's regions, see https://lmi.mt.gov/Projections

employment. Hospitals are more likely to employ bachelor's degree trained RNs than are other types of medical employers.

Figure 5. Highest Degree of RNs in Montana by Region



Note: Map of the regions are available at https://lmi.mt.gov/Projections.
Source: National Council State Board of Nursing (NCSBN) 2020 Survey compiled by MT DLI

Occupation and Wages

***Associate** and **bachelor's degree RN's both earn median wages of $60,000**, but those with a **master's degree** report a median salary of **$90,000**.*

Figure 6 shows the top occupations and wages of licensed RNs by educational attainment. The most common occupation among associate degree and bachelor's degree RNs is a staff nurse. An estimated 70% of RNs who are working in nursing are working as a staff nurse, with most working in hospitals. Sixty-five percent of staff nurses hold a bachelor's degree in nursing while another 30% hold an associate degree. Although increased education is generally correlated with increased earnings, the median wage for staff nurses remains consistent across education levels.

Although worker wages typically increase with education levels in most occupations, associate and bachelor's trained RNs report the same median wage of $60,000. The lack of difference in wages suggests that worker shortages result in all nurses being paid similarly, regardless of education levels. Also, associate and bachelor's trained RNs typically hold the same license type. However, RNs with a master's degree earn more, reporting a median wage of $90,000. Advanced practice registered nurse (APRN) is the most common occupation among nurses holding a master's degree. APRNs hold a more advanced license than RNs and earn a median wage of $100,000.

Figure 6. Occupation and Wages of Licensed RNs in Montana by Highest Degree

	Associate RN	Bachelor's RN	Master's RN
Median Wage	$60,000	$60,000	$90,000
Top 4 Occupations Median Wage (% Employed)	Staff Nurse $60,000 (80%)	Staff Nurse $59,100 (77%)	APRN $100,000 (33%)
	Case Manager $75,000 (6%)	Other Health $78,000 (8%)	Other Health $102,000 (19%)
	Nurse Manager $72,000 (5%)	Case Manager $66,000 (5%)	Staff Nurse $60,000 (17%)
	Other Health $70,000 (4%)	Nurse Manager $70,000 (5%)	Nurse Faculty $70,000 (17%)

Source: National Council State Board of Nursing (NCSBN) 2020 Survey compiled by MTDLI.

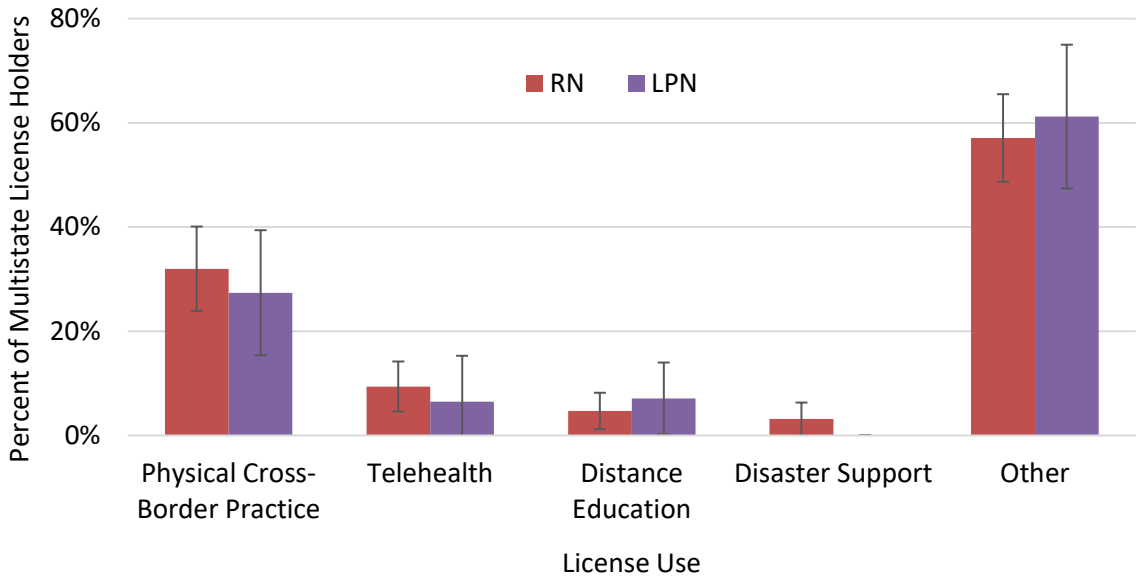
Wages of nursing faculty have surpassed staff nursing wages over the last five years. In 2015, faculty wages were not competitive with other occupations held by master's degree RNs. However, wages have grown over the last five years, which is important for recruitment and retention of qualified faculty needed to train the future workforce.

Increasing Supply of Nurses through Nursing Licensure Compact

Montana implemented the Nurse Licensure Compact (NLC) on October 1, 2015, allowing nurses who are both licensed in Montana and claim Montana as their primary residence to practice in any of the 34 states that are part of the NLC without obtaining a license in each of those states. New to the 2020 NCSBN survey are questions surrounding these types of multi-state licenses. According to the survey, 40% of Montana's licensed RNs who are actively employed in nursing report holding a multistate license, higher than the U.S. average of 24%. About 26% of Montana's licenses LPNs actively employed in nursing hold a multistate license, slightly higher than the U.S. share of 21%.

Both RNs and LPNs were asked how they used their multistate license. About 32% of RNs with a multistate license responded they used their license for physical cross border practice, 9.4% said for telehealth, and 57.1% reported other. Similarly, 27.4% of LPNs said they used it for physical cross border practice, 6.5% for telehealth, and 61.2% for other reasons. RNs and LPNs could specify their "other" response in a comment. The most common response is that the licensee hadn't had an opportunity to use it yet, with some clarifying that they still see benefit in the multistate license as it provides opportunity to move/travel with ease. Less common responses include traveling nurses, remote work opportunity (such as consulting), case management, and ease of transitioning to a new job.

Figure 7. RN and LPN Multistate License Use



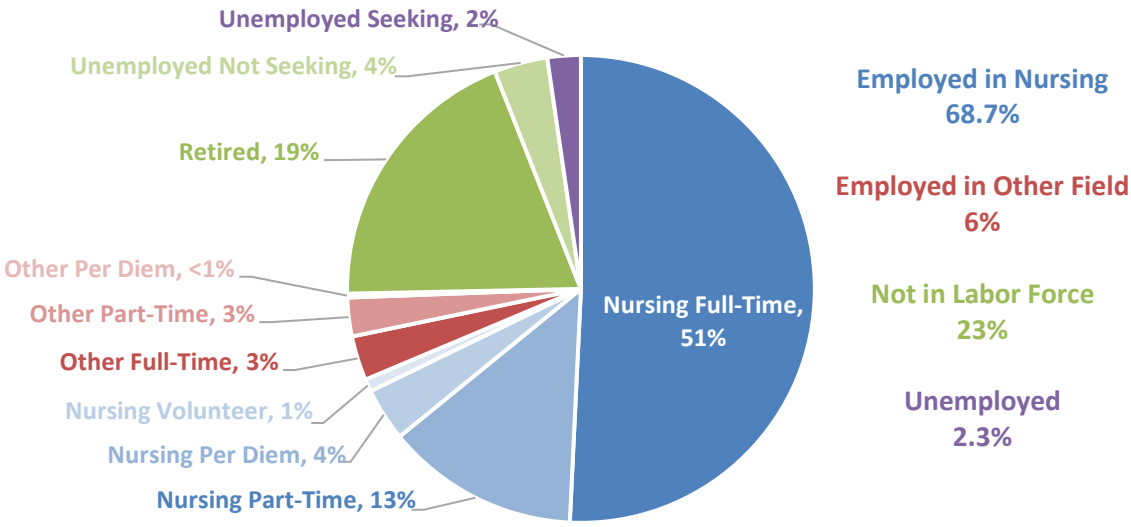
Notes: Error bars display 95% confidence limits.
Source: National Council State Board of Nursing (NCSBN) 2020 Survey compiled by MT DLI.

Licensed Practical Nurses

Employment Status

LPNs tend to be less engaged in the labor force than RNs, which is expected given lower wages. Approximately 69% of LPNs are working in the field, and 51% are working full-time. The number of licensed LPNs who are out of the labor force has increased over the last five years from 15% to 23%, primarily driven by an increase in retirements. The employment status of LPNs is shown in Figure 8.

Figure 8. Employment Status of Actively Licensed LPNs in Montana



Source: National Council State Board of Nursing (NCSBN) 2020 Survey compiled by MTDLI.

The percentage of licensed LPNs who are retired nearly doubled from 10% in 2015 to 19% in 2020. After retirement, family commitments were the most common reason LPNs were not seeking work. Only 2.3% of LPNs are unemployed and actively seeking work, not statistically different than the 3.2% across the U.S.

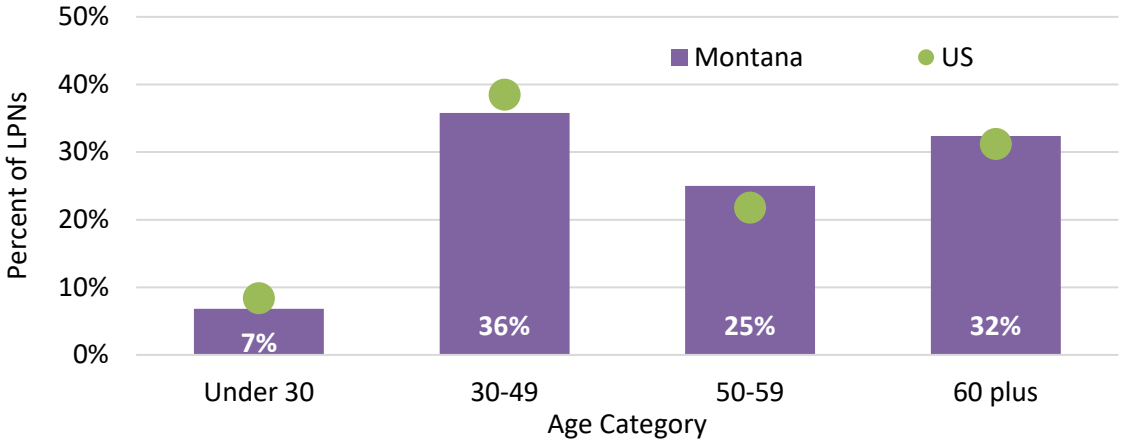
Age Demographics

Montana's LPNs are aging along with the rest of the state. The median age is 53.5 years compared with 50.9 in 2015. Figure 9 shows the age distribution of LPNs in Montana compared to the U.S., with the state having a higher concentration over age 50. Nearly half (48.5%) of all LPNs working in the field plan to retire or leave the nursing workforce within the next five years, or about 175 LPNs each year. The survey data provides similar results as MTDLI projections, which estimate 170 LPNs leaving their job each year over the next ten years, with 53% due to a career change and the other 47% to exit the labor force.

*Nearly half **of LPNs** say they plan on leaving the field in the next 5 years -- about **175 workers** each year.*

In general, LPNs have higher turnover than RNs, which is a result of lower wages. The aging population may exacerbate the turnover, making it difficult for employers to replace LPNs. Montana's LPNs are similarly aged to the U.S. median, indicating Montana employers may experience comparable LPN retirements as the national average.

Figure 9. Age Distribution of Actively Licensed LPNs in Montana and U.S.

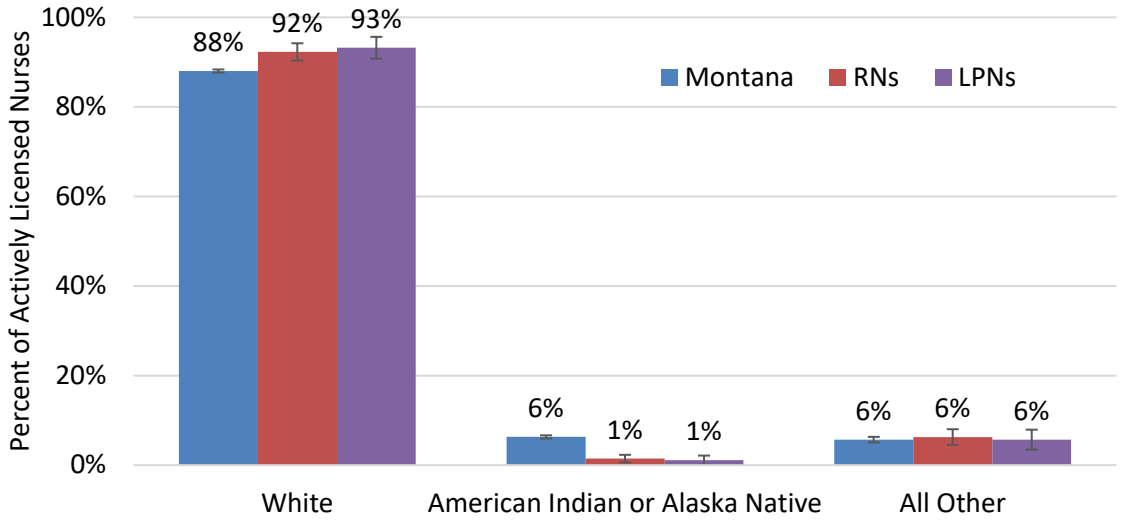


Source: National Council State Board of Nursing (NCSBN) 2020 Survey. Montana estimates compiled by MTDLI using licensure data as of 12/31/2019.

Racial Equity Among Nurses in Montana

Results from the survey suggest that the racial composition of the nursing workforce is different from the racial composition of the state. Over 92% of RNs and LPNs are white, between 1-2% are American Indian, and about 6% responded with some other race. In comparison, 88% of Montana residents are white, 6.3% are American Indian, and just under 6% are another race.[1] Results are in Figure 10. The racial disparity indicated by the survey suggest that schools and health centers may wish to consider programs to increase recruiting of American Indians into nursing professions.

Figure 10. Racial Composition of RNs and LPNs compared with Montana



Note: More than one race included in "All Other" group.
Source: National Council State Board of Nursing (NCSBN) 2020 Survey compiled by MT DLI. Montana racial composition from the 2019 American Community Survey 1-Year Estimates, U.S. Census Bureau.

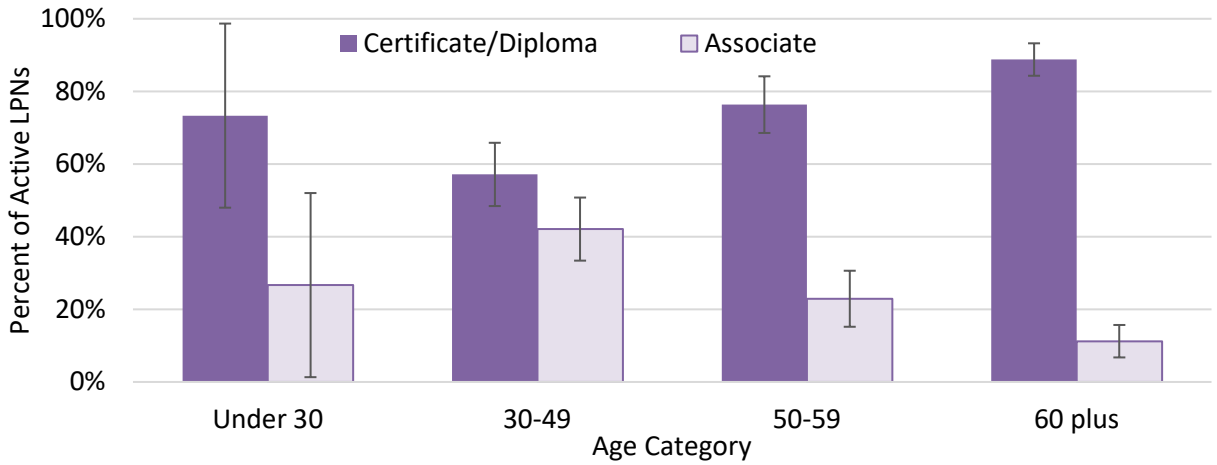
Educational Attainment

About 83% of Montana's LPNs begin their career with a certificate or diploma, and 17% begin with an associate degree. Associate degrees are more common among starting Montana LPNs than the national average of 7%. Compared with five years ago, the share of LPNs in Montana entering the profession with an associate degree decreased from 29% to 17%. Like RNs, this trend could be related to the worker shortage and the shorter training time for a certificate compared to an associate degree.

Once licensed, LPNs rarely obtain further degrees. Only 3% of those entering with a certificate and 2% entering with an associate degree obtained a higher degree after entering the field.[8] These shares are similar across Montana's regions. However, LPNs that pursue higher nursing degrees may become licensed as RNs and no longer included in the LPN statistics.

Younger LPNs are more likely than Montana's older LPNs to have received an associate degree, as shown in Figure 11. Fourteen percent of LPNs over age 50 have obtained an associate degree, compared to 41% of those under age 50. Less than 1% of both age groups have received a bachelor's degree or higher. Despite higher levels of education among younger workers, a nursing certificate/diploma is the most common educational attainment.

Figure 11. Highest Nursing Education for Montana's LPNs by Age



Notes: Error bars display 95% confidence limits. Degrees are Associate in Nursing and vocational/practical nursing certificate.
Source: National Council State Board of Nursing (NCSBN) 2020 Survey compiled by MT DLI.

Occupation and Wages

Most employed LPNs are working as staff nurses (78%) with a median wage of $42,000. Figure 12 shows the percent of LPNs employed by occupation with the median salary. Nurse managers make the most of the occupations listed, earning $50,000 per year. However, nurse managers also work more hours than the other occupations, meaning their hourly wage may not differ significantly from that of a staff nurse or case manager.

[8] These career pathways only take nursing education into consideration. Including all fields of study, 18% of LPNs beginning their career with a nursing certificate/diploma have an associate degree, 8% have a bachelor's degree, and less than 1% have a master's degree. 9% of LPNs beginning their career with an associate degree have a bachelor's degree, and 1.5% have a master's degree or higher.

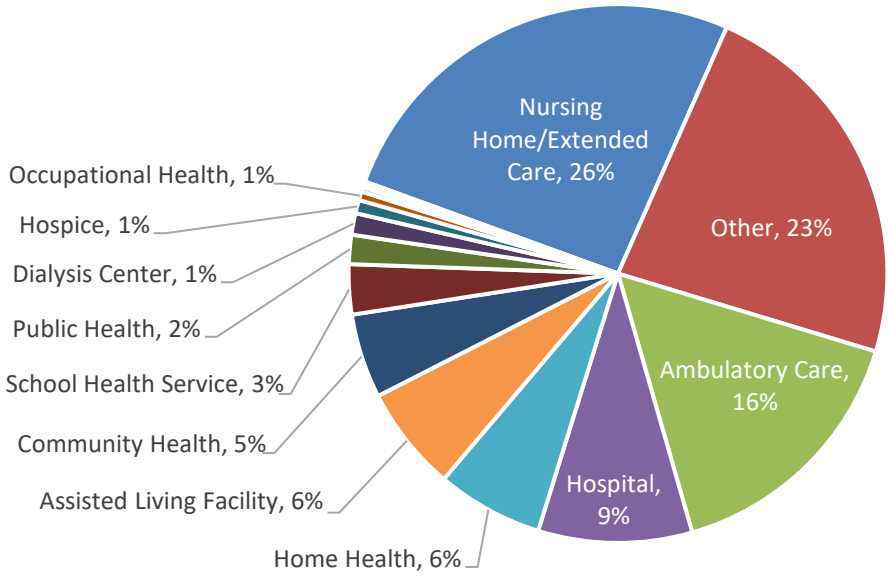
Figure 12. Salary and Hours Worked per Week of Primary Job for LPNs in Montana

Primary Job Title	*Percent Employed*		*Median Salary*	*Median Hours Worked*
Case Manager	2.8%	+/-1.8%	$44,500	40
Nurse Manager	4.3%	+/-1.8%	$50,000	42
Other-Health Related	12.0%	+/-3.6%	$43,000	40
Staff Nurse	78.0%	+/-4.5%	$42,000	40

Notes: Occupations with less than 10 responses are excluded.
Source: National Council State Board of Nursing (NCSBN) 2020 Survey compiled by MT DLI.

While most RNs work in hospitals (54%), LPN staff nurses work in a variety of different settings. The most common places for LPNs to work are in a nursing home/extended care (26%) or ambulatory care (16%). Only about 9% of LPNs report working in a hospital. Figure 13 shows LPN employment by primary setting.

Figure 13. LPN Primary Employment Setting



Source: National Council State Board of Nursing (NCSBN) 2020 Survey compiled by MT DLI

Conclusion

The NCSBN survey continues to provide critical insight into the nursing workforce during a time when the population is aging into retirement and the global pandemic has caused additional stress to the healthcare system. Recruitment and training of nurses will continue to be essential in the next several years. Low unemployment leaves few licensed nurses available for work, and nearly one-fifth of RNs and almost half of LPNs plan on retiring or leaving the field in the next five years.

Tight labor markets are already showing an effect on Montana's nursing workforce in several ways. First, higher education is not correlated with increased earnings when comparing associate and bachelor's degree RNs, suggesting employers need workers regardless of educational attainment. Second, the

share of RNs with bachelor's degrees and the share of LPNs with associate degrees has not increased since the 2015 survey. Shorter training times may be necessary to get nurses to work faster, despite the push for increased education.

Multistate licensing can help overcome workforce shortages in nursing by allowing employers to hire nurses from outside the state. Four years after implementing the Nurse Licensure Compact, 40% of Montana's licensed RNs and 26% of Montana's licensed LPNs say they hold a multistate license (both higher than the U.S. average). Multistate licenses allow nurses the flexibility to use their current state license in other participating states. However, this flexibility may increase competition for in-state employers as they compete with employers in other participating states.

The NCSBN survey continues to provide critical information on the status of the nursing workforce in Montana. Understanding the demographic and educational trends of nurses in the state, as well as their engagement in the labor force, will help continue to build Montana's healthcare sector.

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