

Aurora Le ORCID iD: 0000-0002-6866-6779

Marie-Anne Rosemberg ORCID iD: 0000-0003-0536-2062

Title: Licensure and citations among nail salons in Michigan from 2017-2021: A cross-sectional study of an overlooked and vulnerable industry

Running Title: Nail Salons in Michigan

Authors: Aurora B. Le, PhD, MPH, CSP, CPH^{+a}; Marie-Anne S. Rosemberg, PhD, MN, RN, FAAOHN^{+b}; Anna C. Sturgis, BA^a; Brianna M. Siracuse, MPH^a

⁺*Co-First Authors*

^a Department of Environmental Health Sciences, School of Public Health, University of Michigan, Ann Arbor, MI, USA

^b Department of Systems, Population and Leadership, School of Nursing, University of Michigan, Ann Arbor, MI, USA

ORCID: Aurora Le (0000-0002-6866-6779); Marie-Anne Rosemberg (0000-0003-0536-2062)

Corresponding author: Aurora Le, 1415 Washington Heights, SPHII M6242, Ann Arbor, MI, 48109; aurorale@umich.edu; +1 734-615-7105

ABSTRACT

Background: Nail salon workers in the United States (U.S.) are predominantly immigrant women who face a number of occupational hazards, such as biological, ergonomic, and chronic chemical exposures. Additionally, there are challenges to keep up with the latest practices in this evolving small business industry. Licensure requirements are intended to keep not only consumer but also these workers safe, but licensure requirements vary between states creating little skill, education, and occupational health and safety knowledge and practice consistency among the nail salon workforce. The current state of nail salons and licensure of workers in the State of Michigan—an

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overlooked state and region (Midwest) in nail salon worker research—was determined to better characterize this workforce.

Methods: A Freedom of Information Act request was submitted to the Michigan Department of Licensing and Regulatory Affairs regarding nail salon establishments and their workers, formally termed manicurists, and citation data for breaches. Data was provided on the number of licensed cosmetologists and cosmetology businesses from January 2017 to March 2021. From there, the total number of licensed manicurists was determined, and the cosmetology establishment list was analyzed to see if the businesses exclusively or predominantly provided nail services.

Results: As of March 2021, there were 1,372 nail salons that exclusively provided nail services and over 12,000 licensed manicurists. Over half of the disciplinary actions cited were for salons not officially licensed. Michigan also has reduced licensure requirements compared to other states and no continuing education requirements for license renewals.

Conclusion: There is a need for industry educational and training standardization, across the nation, as well as heightened legal protections for these vulnerable workers.

Continuing education not only keeps workers abreast of the latest practices in the industry, but also provides them the skills and knowledge to enhance their worker health, safety, and wellbeing.

MeSH KEYWORDS: Emigrants and Immigrants; Occupational Health; Government Regulation; Michigan; Nails

INTRODUCTION

Until the COVID-19 pandemic destabilized the United States' (U.S.) economy, nail salons were a growing, lucrative, multi-billion-dollar small business industry.¹ It is estimated that there are between 125,000 and 400,000 nail salon workers (NSW) in the U.S.^{2,3} This wide range can be attributed to the number of immigrants and refugees employed in this industry who may be unaccounted for. Nail salon worker is appealing to this population because it does not necessarily require English proficiency and licensure can be obtained through lower cost routes, such as an informal apprenticeship, rather than investing in tuition through a cosmetology program.² Nail salons predominantly employ women of child-bearing age predominantly of Vietnamese, Korean, Chinese, Indian or Latina descent.² The intersectionality of identities for this workforce—largely immigrant or refugee women of color (80%)—makes it a niche industry that requires advocacy for safe, quality jobs that take into consideration the health, safety, and wellbeing of this vulnerable worker population.^{2,4} NSW are regularly exposed to biological hazards (e.g., bloodborne pathogens, bacteria, viruses, fungi)⁵⁻⁷, ergonomic hazards from awkward posturing or bending⁸⁻¹⁰ as well as chronic exposure to chemical hazards (e.g., toluene, methyl methacrylate, acetone, xylene) associated with respiratory irritation¹¹⁻¹⁴, endocrine and reproductive system issues^{13,15,16}, and are potentially carcinogenic.^{12,13}

NSW also face additional challenges, such as labor rights issues and wage violations, as well as prejudice (e.g., racist name calling, requests for non-Asian nail technicians) which has increased in light of the anti-Asian sentiments associated with the

COVID-19 pandemic.^{1,17,18} Furthermore, new developments in cosmetics, fashion, and nail design technology dictate the pace of emerging trends in this industry (e.g., gel polish, acrylics, dipping powder); therefore, NSW have to continually learn new nail techniques with unknown occupational health ramifications.^{2,19}

While nail salons in the U.S. are regulated by federal and state agencies (e.g., Occupational Safety and Health Administration [OSHA] and state licensing boards), many of these agencies lack the capacity and resources to enforce occupational health acts, regulations and mandatory standards, as well as enforce labor rights. This largely leaves oversight and enforcement to under-resourced and overburdened local and state agencies. Over the past decade, advocacy and policy efforts have gradually improved the working conditions of NSW.² However, with differing state requirements on training, education, and licensure, not all U.S. NSW are provided comparable opportunities to learn to how to protect their safety, health, and wellbeing at work.

States, such as California, with a large number of NSW, and robust diverse community-based initiatives have advocated to protect these workers through policy changes (e.g., Safer Beauty Bill Package). Examples include state-wide bills requiring multilingual information for labor laws and NSW licensing and renewal information; there are also now requirements for ingredients to be listed on professional cosmetic product labels.^{20,21} In the State of New York, stricter ventilation standards were implemented to reduce the concentration of volatile organic compounds (VOCs) and other chemical hazards in an effort to protect NSW and their clients.²² However, despite efforts to improve occupational health and safety (OHS) among NSW in some states,

each state has unique licensing and renewal requirements, making it difficult to guarantee that all NSW are receiving adequate OHS and public health training, as well as continuing education (CE). Quality and up-to-date CE is critical for NSW to provide trending services and stay abreast of workplace OHS hazards so they are well-equipped to protect themselves. For example, the State of Florida has established bi-annual CE requirements for NSW and cosmetology license renewals.²³ However when there are no CE requirements and competing demands on employers, in conjunction with a lack of motivation to provide CE, worker health, safety, and wellbeing may be compromised.¹⁹

In the State of Michigan, nail salons encounter the aforementioned OHS challenges but without the robust advocacy or resources like California or New York.¹ Michigan does have a state-approved OSHA. Michigan Occupational Safety and Health Administration (MIOSHA), which regulates worker safety and health. However, generally inspections are only initiated if there is imminent health and safety risks; a fatality or catastrophe; a major accident requiring investigation; employee complaints; visual activity or Dodge Report (comprehensive listing of who, what, where, when, and cost); or a need for follow-up inspections and monitoring.²⁴ Few NSW are likely to whistle blow to authorities/agencies out of fear of retaliation based on their precarious employment and immigration status.² Another regulatory body in Michigan is the Department of Licensing and Regulatory Affairs (LARA) which oversees several occupations, including NSW, for general licensing matters, licensing complaints, and investigations to protect consumers. LARA can issue citations for violations to businesses for lack of identification or permits, unregistered apprentices, unlicensed workers, or

operation without a valid license.²⁵ Focus groups conducted among Southeast Michigan NSW in 2018, identified workers who were previously licensed in other states noted that the re-licensure requirements for Michigan manicurists are non-existent and expressed their desire for CE opportunities. The focus group participants also wanted additional knowledge on worker rights and protections, enhanced OHS, and for nail salons to collaborate with key stakeholders (e.g., nail supply companies, MIOSHA).¹⁹ However because CE is not required by LARA, there is no impetus for employers to provide it and infrequent MIOSH inspections of nail salons keep their workplace at less-than-ideal conditions.

We sought to find out the current status of licensure and citations in Michigan nail salons since this industry tends to be overlooked in less diverse regions, such as the Midwest. License renewal requirements in Michigan were explored, as well as the approximate number of nail salons and nail salon workers in the state, and reasons for inspections and citations of nail salons. The nature, frequency, and source of citations may suggest what OHS issues NSW encounter in Michigan.

METHODS

A formal request to LARA to inquire about licensing and renewal requirements for Michigan nail salon establishments and NSW, formally termed manicurists, was submitted. Since data on the current number of licensed manicurists were not readily publicly available on the LARA website, a Freedom of Information Act (FOIA) request was submitted to obtain this information. LARA provided a Microsoft Excel file detailing the licensed cosmetology businesses and cosmetologists from January 2017 to March

2021. The total number of licensed manicurists was determined from the file of currently licensed cosmetologists (e.g., stylists, barbers, manicurists). The list of 13,635 cosmetology establishments was then analyzed one-by-one to determine if businesses exclusively or predominantly provided nail service (Figure 1), followed by an analysis of violations and citations publicly available on the LARA website. Violations and citations were for all businesses (e.g., accounting, construction) in the state and were cross-referenced with the known licensed nail salons to determine the number of nail salon-specific violations and citations (Figure 1).

This study was deemed exempt by the University of Michigan Institutional Review Board, as is a secondary analysis of available data and does not involve direct interaction with or observation of human subjects.

RESULTS

As of March 2021, there were 1,372 nail salons in Michigan that exclusively provided nail services; 685 businesses provided nail services as a secondary or additional service. The current number of licensed manicurists in Michigan was 12,338. Of those, 12,292 were fully licensed, and 46 held the designation of “licensed limited manicurists.” A licensed limited manicurist is only permitted provided services for which the shop is licensed (e.g., manicuring only).²⁵ Michigan LARA does not have publicly accessible information on the demographics of the licensed manicurists (e.g., gender, age, race/ethnicity) nor was it provided in the FOIA request.

Licensing Requirements

For the worker. To become a licensed manicurist in the State of Michigan, an individual must meet a set of criteria:

- 1) have a 9th grade or equivalent education
- 2) pay a fee totaling \$63 for the license and processing
- 3) take a cosmetology exam with a theory and practical portion
- 4) have a social security number
- 5) have completed at least 400 hours of training at either a licensed school of cosmetology or serve as an apprentice for at least 6 months at a licensed cosmetology establishment where manicuring is practiced. Typical coursework at a cosmetology establishment includes sanitation/patron protection, laws and rules, personal hygiene, mechanical and electrical equipment safety, salon management, artistic principles, anatomy/disorders, chemistry/occupational safety, manicuring/pedicuring techniques, and artificial nails, extensions, and repairs. The requirements for an apprenticeship, outside of hours, is unspecified.
- 6) attest to good moral character. An individual is deemed to lack moral character when they are found to have committed offenses (e.g., bribery, fraud, filing of false claims, aiding or abetting) or have been convicted of certain crimes and misdemeanors.

7) have a social security number (SSN) at the time of application unless exempt under the law from obtaining an SSN or has an SSN affidavit form.

Again, there are no CE requirements for license renewal; the only requirement is that the fee be paid every two years.²⁶

For the business. Cosmetology business licensing requirements in the State of Michigan require routine inspection for sanitary and equipment standards. Sanitary and equipment standards are regulated and inspected by LARA and MIOSHA Regulatory Services. All nail services must be performed by licensed individuals. In addition, all licensed shops must be enclosed by full partitions or doors, have hot and cold water, have handwashing facilities, provide a drawing or diagram of the licensing premises, and list all required equipment and facilities.^{26,27} There are no requirements for the business to require or provide CE on workplace health and safety hazards, new industry practices, risk management, or any other topic to maintain licensure.

Licensing Disciplinary Actions

From January 1, 2017 to March 14, 2021, 272 disciplinary action reports for licensure violations were reported for the 1,372 nail salons that exclusively provided nail services. The primary violations categories related to: 1) the business not being licensed; 2) occupational code violation which refers to the breaking of administrative rules governing licensed occupations that lack professionalism and threaten safety, the ethical code, and the general public welfare; 3) aiding and abetting in unlicensed practice which is classified as knowingly helping, conspiring, or acting as an associate with another

individual who manages an unlicensed business; 4) and unlicensed activity is knowingly managing an unlicensed practice of an occupation.²⁷ Over half of the disciplinary actions cited were for salons that were not officially licensed with the state, and nearly two-thirds of the 272 reports from 2017-2021 were cited for some form of unlicensed activity (e.g., expired license, performing services without a license). Over half of the citations were also for occupational code violations which are charged as misdemeanors, followed by aiding and abetting unlicensed practice (e.g., allowing an unlicensed worker to work in a licensed business). The highest numbers of disciplinary actions took place in the year 2018 (n=107; 39.3%) and within that year occupational code violation was the highest citation followed by unlicensed activity. There was a notable decline in the number of disciplinary actions in 2021 (n=4; 1.5%) compared to 2020 (n=50; 18.4%) and 2019 (n=79; 29.0%) (Table 1).

DISCUSSION

The goal of this study was to better understand the state of licensure in Michigan nail salons; specifically the number of licensed nail salons and workers within the state, as well as the number of violations and reasons for the citations. This aim was important because despite the known plethora of occupational hazards among NSW, there is still limited information being collected on them to better understand and characterize issues relating to licensure and OHS violations. In the State of Michigan, there is a lack of publicly available information from state agencies responsible for OHS and professional certification. Understandably, these entities have to prioritize industries traditionally deemed higher risk (e.g., auto manufacturing, surface mining, construction), but in

addressing occupational health disparities and social justice, it is important to recognize that workers with intersectional identities—such as NSW (e.g., low-wage, women, immigrant)—may have varied OHS needs that require greater attention and cultural-appropriateness to ensure workplace protection. Suggestions to bolster CE and worker safety and health protections for these NSW that may be applicable to other states, as well as comparable vulnerable workers in the services sector, are provided.

The findings, indicate that there needs to be improved CE and OHS protections for Michigan NSW, which may be applicable to other states and could be adapted for other service sectors with similar vulnerable working populations..²⁸ Michigan, California, and Washington all have state-level OSHA plans –policies that cover workplace safety and health programs in the private and public sector which must be at least as effective as the federal level OSHA plan in preventing work-related injuries, illness, and deaths.²⁸ Michigan, with its population of nearly 10 million, aforementioned approximately 12,000 licensed manicurists, and a location quotient (ratio of the area concentration of occupational employment to the national average concentration) of 0.08-0.40 manicurists and pedicurists²⁹, requires only 400 hours of traineeship/apprenticeship or six months at a licensed cosmetology program; a theory and practice-based exam; and no continuing (CE) requirements.²⁶ California, with its population of nearly 40 million, an estimated 100,000 licensed manicurists¹⁷, and a location quotient of 1.25 to 2.50 manicurists and pedicurists²⁹, requires 3200 hours of traineeship/apprenticeship or 1600 hours at a licensed cosmetology program; a written and practical exam; and CE is highly

recommended but not required.³⁰ Washington, with its population of 7.5 million, no publicly available estimates of number of licensed manicurists, and location quotient of 1.25 to 2.50 manicurists and pedicurists²⁹, requires 800 hours of traineeship/apprenticeship or 600 hours licensed cosmetology program; a written and practical exam; and CE is highly recommended but not required.³¹ While none of the three states require CE, California and Washington strongly encouraged it and had significantly greater training requirements than Michigan. This may be attributed to these two states' higher concentration of NSW and/or a great focus on NSW regulation compared to Michigan.

The number of registered businesses did decline from 2017 to 2020. This decline could be due to several factors including: enhanced enforcement of rules and regulations to mitigate unsafe work activities that potentially endanger the worker and the general public or missed-reporting. The significant decline in disciplinary action reports from 2020 to 2021 is likely due to the COVID-19 pandemic, as many businesses temporarily or permanently closed, and all non-essential government activities were halted.³² Recent reports in California, New York, New Jersey, and Pennsylvania found NSW returned to work, after COVID shutdowns with reduced employment and business – with the majority of workers only work 10-20 hours per week.^{1,18} With reduced work capacity in nail salons, but also across all sectors, there might be reduced efforts for provision of citations by the state.

The number of businesses that received the majority of LARA disciplinary action were not officially licensed, and two-thirds of citations during the four-year period

analyzed were due to some form of unlicensed activity. Occupational licensure is primarily to protect consumer health and safety from professions determined to pose sufficiently dangerous hazards (e.g., construction, medicine). There can be notable public and OHS risks for unlicensed premises and unlicensed activities, especially in the services sector. Without licensure and unlicensed activities, consumers may not be given the right to a safe, sanitary services and establishments that can lead to adverse health consequences. From the worker perspective, it sets a minimum standard of training and practice to ensure the worker is informed on how to protect themselves. Consumers also voice support for licensure for health and safety accountability.³³ For example, unlicensed practices and workers can unknowingly expose customers to fungi or bloodborne pathogens through improperly sanitized instruments, or workers can unknowingly expose themselves to the aforementioned toxic chemicals due to inadequate knowledge and training of emerging techniques and products.³⁴ In New Zealand, a survey of nail and beauty salons found that for salons with a lack of recognized formal qualifications and there was limited understanding about: bloodborne viruses and other infections, the spread of fungi, hygienic practices, disinfection and sterilization, and personal health protections (e.g., vaccination).³⁵

In Michigan, because there is a requirement to have a SSN at the time of licensure application and for renewal, that may also be contributing to the number of citations for unlicensed activities. Aforementioned, many NSW are immigrant and refugee women who may have vary citizenship and documentation statuses.(2) Due to precarious financial situations and lack of employment opportunities elsewhere, NSW may provide

nail services without proper licensure due to a need to earn a living.^{2,13,35} In 2016, the California cosmetology board amended its law requiring an SSN to apply for a cosmetology license and offered the alternative of an individual tax identification number (ITIN) to open greater opportunities for undocumented immigrants.³⁰ As the U.S. becomes more diverse and with its steady flow of immigrants, other states including Michigan should consider adopting something similar to California to enable NSW without an SSN the chance to become properly licensed. This will not only decrease citations but improve consumer health and worker OHS health.

In the U.S., the patchwork of differing occupational licensing requirements by states can create barriers to employment and decrease occupational protections for vulnerable workers, such as NSW. As such, the need to encourage not only licensure but CE is needed for the nail salon workforce. In, Dang et al. (2021), several Michigan NSW noted being surprised by differences in licensure and training and education requirements in different states they have worked in. The discrepancies from state-to-state made NSW now working in Michigan feel less protected and have heightened perceived occupational exposures.¹⁹ Therefore, for standardized licensure requirements, as well as CE for re-licensure, across all 50 states is highly recommended. While not in the services sector, certified nursing assistants (CAN)—another predominantly female, low-wage worker population—also regularly encounter a number of occupational hazards and also have extremely close contact to clients. Studies regarding continuing education for CNAs found face-to-face/in-person CE was better at advancing technical knowledge and skills and also increased job satisfaction.^{36,37} While CNAs are part of a healthcare team where

CE is expected, NSW do encounter comparable circumstances where they could also benefit from required CE.

Limitations

This study has its limitations. First, the data provided was restricted to what was publicly available through the FOIA. No demographic data on the nail salon workers or business owners was provided, and the authors were not able to perform inferential statistics to glean more insights into the characteristics, if any, that may make certain nail salons more prone to violations or draw implications from trends. Additionally, if a salon was cited for an occupational code violation, the nature of the code violation was not specified to the public so its impact on worker health and safety could not be determined. No business-specific citation MIOSHA information could be found because this data was not publicly available. Additionally, there is a lack of injury and illness data specifically on NSW, and are typically grouped with personal care services or the beauty industry, their occupational health exposure profiles are different than others, such as hair stylists.

State agencies should collect demographic information (e.g., gender, age, race/ethnicity, years licensed, etc.) for all licensed manicurists, if they are not already. If this information is collected, making it be available to the public and researchers can help better characterize the state's worker population. Additionally, future research should follow up with the cited nail salons (e.g., detailed inspections) to document specific health and safety risks at these salons and follow-ups to note changes and compliance, which enables the development of evidence-based and culturally-appropriate resources to address this diverse workforce's needs. The large number of violations for licensure,

creates a significant public and OHS risk for both clients and there is a need to identify the potential barriers and “why” businesses are not seeking to get their businesses licensed. Focus groups and/or key informant interviews can be conducted with nail salon owners and NSW to identify specific barriers to licensure. There appears to be a need to support these small business owners in identifying the resources needed to get properly licensed, understanding what licensure entails, and appropriately providing licensed services. Without the aforementioned information, gaps in regulation, practice, and research cannot be identified and interventions (e.g., California Healthy Nail Salon Recognition Program³⁸) and policy to address the health, safety, and wellbeing of NSW will be ill-equipped to address their needs.

Conclusion

The unique contribution of this report is providing a general overview of the state of licensure of the Michigan nail salon industry—an overlooked state, along with the Midwest, within this industry. The reasons for licensure violation among nail salons in this state is also better characterized. It is time for educational and training standardization as well as heightened occupational protections for these overlooked and vulnerable workers. They may be largely invisible to the communities they serve but that does not mean they have to continue to be unprotected. While there are still information gaps to be addressed, this work underscores the need for greater data transparency and

collection among NSW so that researchers, occupational health practitioners, and state agencies will be better equipped to provide support to the salons within the community.

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Author Contribution:

Conceptualization: Aurora Le, Marie-Anne Rosemberg

Data Curation: Aurora Le, Anna Sturgis

Formal Analysis: Anna Sturgis, Brianna Siracuse

Project Administration: Aurora Le

Supervision: Aurora Le

Writing – Original Draft Preparation: Aurora Le, Marie-Anne Rosemberg

Writing – Reviewing & Editing: Aurora Le, Marie-Anne Rosemberg, Anna Sturgis, Brianna Siracuse

All authors have read and approved the final version of the manuscript. Aurora Le had full access to all of the data in this study and takes complete responsibility for the integrity of the data and the accuracy of the data analysis.

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Data Availability Statement: The data that support the findings of this study are available from the corresponding author upon reasonable request.

Institution and Ethics Approval: This study was given the notice of determination of “Not Regulated” Status (HUM00195906) by the University of Michigan Health and Behavior Sciences Institutional Review Board. This study was deemed as non-human subjects research given that there were no human subjects, and that the data was publicly available.

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The Classification of Nail Salons

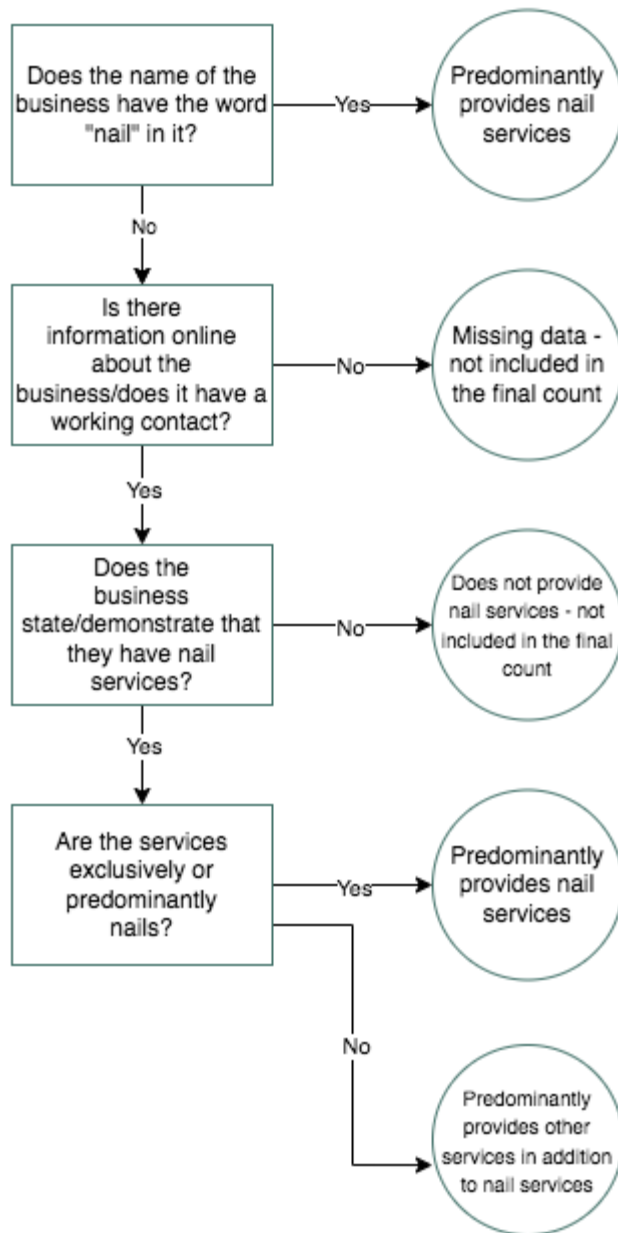


Figure 1: Classification of nail salons based on MI LARA data, January 2017-March 2021

Table 1: LARA Disciplinary Action Reports for Nail Salon Businesses, 2017-2021

Year	2017	2018	2019	2020	2021 (through March 14)	Total
Number of disciplinary action reports	32 (11.8%)	107 (39.3%)	79 (29.0%)	50 (18.4%)	4 (1.5%)	272
Unlicensed business	23 (15.6%)	62 (41.9%)	40 (27.0%)	20 (13.5%)	3 (2.0%)	148
Act or rule violation	13 (12.3%)	0	43 (40.5%)	46 (43.4%)	4 (3.8%)	106
Occupational code violation	12 (8.0%)	107 (71.3%)	31 (20.7%)	0	0	150
Aiding or abetting in unlicensed practice	12 (9.5%)	66 (52.4%)	17 (13.5%)	28 (22.2%)	3 (2.4%)	126
Unlicensed activity	21 (12.3%)	78 (45.9%)	52 (30.6%)	16 (9.4%)	3 (1.8%)	170
Other (e.g., lack of moral or good character)	--	--	--	1 (100%)	--	1

Note: Percentage is from row