



A CASE FOR LICENSURE

North Carolina Board of Electrolysis Examiners

January 2016



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INTRODUCTION

While North Carolina legislators are currently evaluating how the state should oversee occupational licensing boards, the North Carolina Board of Electrolysis Examiners (NCBEE) is seeking a proactive approach to ensure cooperation, progress, and transparency. The purpose of this report is to provide sufficient information to justify maintaining the licensing authority of the North Carolina Board of Electrolysis Examiners (NCBEE).

A 2014 report by the General Assembly's Program Evaluation Division recommended that the NCBEE be further evaluated by a subcommittee to determine if its licensing authority should be maintained or reduced to certification only (Recently Published Reports, 2014). The NCBEE seeks to open dialogue with NC regarding the best outcome for the public interest. We hope this report answers outstanding questions, provides satisfactory explanations, and proposes alternative accommodations to satisfy the evaluators.

Teresa Petricca, former Director of the American Electrology Association, has formally stated the following to the North Carolina Board of Electrolysis Examiners:

Since the practice of electrology is a parenteral (refers to instruments and objects that are directly introduced into the blood stream or into other normally sterile areas of the body, e.g., needles and forceps used in the practice of electrology), it is obvious that all consumers who seek this service will warrant the protective measures of a regulatory board.

FACT SHEET

Consumers assume they are protected by government regulations for electrolysis and laser

Unqualified practitioners are more likely to cause permanent damage to a client's skin

Disease is transmitted by using contaminated equipment

Licensure holds practitioners responsible for abiding by public health standards of practice

The Facts

Electrolysis is the **only** FDA approved method for permanent hair removal.

North Carolina has licensed practitioners for 25 years.

North Carolina is 1 of 33 states in the US that license electrologists.

Laser Hair Reduction is a booming industry and will continue to grow.

In lieu of Federal Regulations, North Carolina is responsible for protecting the safety, health, and welfare of consumers.

Consumers are women, men, teenagers, and transgender individuals.

ELECTROLOGY

Definition

“Electrolysis is permanent hair removal” (Essential Electrolysis Facts, n.d.). It remains the ONLY method approved by the FDA (Food and Drug Administration) for permanent hair removal.

Method

During electrolysis an electric current is transmitted through a fine, sterile filament directly into the hair follicle. This process destroys the follicle’s ability to grow hair. This technique involves the **one-at-a-time** destruction of the hair follicle and as such poses little threat of adjacent tissue damage.

Figure 1 Electrolysis (image from www.angelhair.ca)

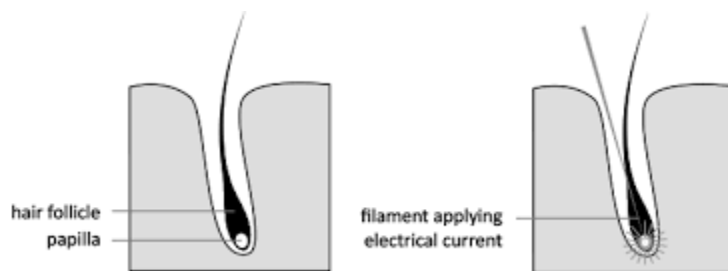


Figure 2 Electrolysis (image from www.hairlinesgoldwell.com)

Emotional Toll of Unwanted Hair (Hirsutism)

Excessive hair growth (scientifically known as hirsutism) is a medical condition, not a cosmetic problem (Örebro University, 2013). “Although some hair removal demand is cosmetically driven, in many cases there is health or medical reasons for hair removal” (Mullen, 2012, p. 7). Hormonal imbalances and polycystic ovary syndrome (PCOS) can cause excessive hair growth. Hair growth, especially in atypical areas, can be a lifelong issue for many women.

The psychological effects related to unwanted hair in women are very real, and for many women electrolysis can be life changing by increasing their self-worth and confidence. Electrolysis is not merely a cosmetic procedure. To view electrolysis as pure vanity is a misclassification of its full impact.

Standard Precautions

After the AIDS explosion in the late 1970s, the American Electrology Association (AEA) collaborated with the Centers for Disease Control (CDC) to draft a standards of practice protocol for the primary purpose of infection prevention. The resulting *Infection Prevention Standards for the Practice of Electrology* protect public health and safety. These Standards are nationally recognized by the CDC, FDA and other Federal Agencies as the Standards for the profession.

The Standards are consistent with Standard Precautions for infection prevention as recommended by the CDC. Standard Precautions apply to: (1) blood; (2) all body fluids, secretions, and excretions, regardless of whether they contain visible blood; 3) non-intact skin; and (4) mucous membranes.

Standard Precautions are designed to reduce the risk of transmission of both recognized and unrecognized sources of infection. The Standards have been developed for use by electrologists and electrology instructors and emphasize the need: 1) to consider all clients as potentially infectious; 2) to adhere to infection prevention precautions for minimizing the risk of exposure to blood or body fluids of all clients; and 3) to reduce the risk of transmission of infection and disease from client to client, practitioner to client, and client to practitioner.

Often electrologists break the blood barrier; therefore, following proper sanitation and sterilization techniques is a MUST for the sake of public safety. Without state regulations, compliance with Standard Precautions is relegated to a voluntary status.

Public Health and Safety Considerations

The nature and severity of any harm that might come to the public in the absence of the Board's regulation include:

- Failure to maintain proper sterilization procedures in any parenteral procedure can obviously promote the danger of infection and the transmission of blood borne diseases. In the practice of electrology, the risk (though small) of transmitting human immunodeficiency virus (HIV), a greater likelihood of transmitting the Hepatitis B Virus (HBV), along with a wide variety of less devastating yet still communicable diseases, is a possibility in any parenteral procedure where a needle encounters blood. The further necessity of wearing protective barriers i.e., fresh latex gloves, facial mask and a single-use, sterilized probe with each client would not be addressed.
- The necessity of taking a health history to determine contraindications to treatment, of when to refer to an endocrinologist, dermatologist, gynecologist or other physician for evaluation when medical problems are observed or suspected. This can only be accomplished through adequate training and continuing education. Recognizing and preventing infection and diseases of the skin cannot be stressed enough. Lack of education would result in the inability of Electrologist to properly refer clients to the appropriate proper medical personnel for the treatment of endocrine dysfunction, skin diseases or other medical disturbances which result in hirsutism (superfluous hair growth).

The components of the current *regulatory* board provide protection to the consumer's health, safety and welfare through examination of sterilization of instruments prior to treatment, demonstration of the applicant's proficiency in technique, and theoretical knowledge of the applicant is ascertained through the written portion of the licensure

examination thereby ensuring the patient's well-being. Current rules and regulations require specific compliance of the licensee to adhere to appropriate Infection Control and Standards of Practice. It is vital to public health, safety and welfare that regulation of the electrolyology profession be maintained.

LASER HAIR REDUCTION

Method

Laser Hair Reduction utilizes beams of highly concentrated light designed to selectively penetrate into the hair follicles, to be absorbed by the pigment (melanin) in the hair follicles and to destroy the hair within that hair follicle (Laser Hair Removal Information, n.d.). The laser energy passes through all layers of the skin. Additionally, Laser techniques can be applied to large areas of skin.

The FDA classifies the equipment used for laser hair removal as “medical devices”. Currently the state of North Carolina does not consider laser hair removal as the practice of medicine. Some states, such as Connecticut, require laser hair removal to be performed by a physician or by a licensed nurse or physician's assistant who is working directly with a physician (Mullen, 2012). The Food and Drug Administration (FDA) uses the phrase “laser hair reduction” instead of laser hair removal as a way to denote the impermanence of this method.

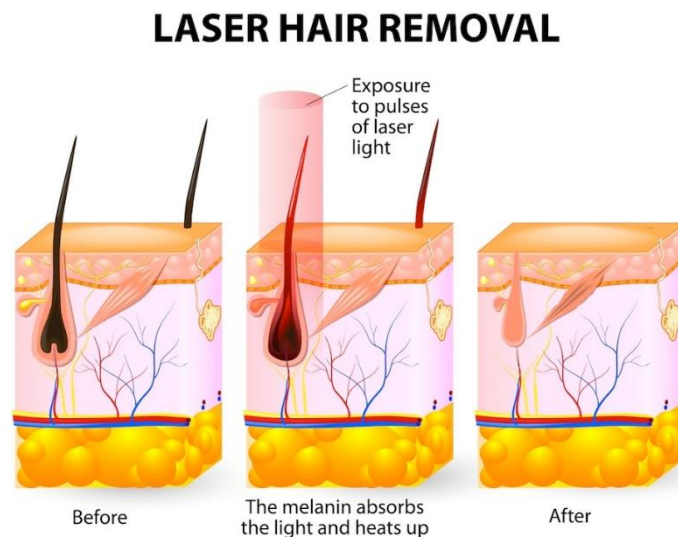


Figure 3 Laser Hair Removal (image from Zogg Dermatology)

Public Health and Safety Considerations

Lasers are considered **CLASS 4** (advanced) medical devices. The improper use of lasers can result in blindness, permanent scarring, infections, and permanent discoloration of skin. It is important to note that laser treatments alter the surface of the skin. Since serious complications can result from poor or improper use of lasers, 37 states expressly prohibit electrologists from performing laser hair reduction without onsite medical supervision (Mullen, 2012). North Carolina is one of 11 states that allow electrologists to perform laser hair reduction with offsite medical supervision and an initial physician examination.



Figure 4 Burns (injury) from Laser Hair Removal (image from northcarolinapersonalinjurylawyersblog.com)



Figure 5 Injury from Laser Hair Removal (image from American Society for Dermatologic Surgery Association)

In a 2005 study presented at the annual American Society of Lasers in Medicine and Surgery meeting, researchers found that 82% of all complications (from laser procedures performed by non-physicians) occurred in facilities that had no direct medical supervision (Narurkar, 2005).

The dermatologic and ophthalmologic communities are particularly concerned that laser hair removal may be performed by non-physicians. Laser practitioners must be formally trained and well educated. In addition, they must be aware of the potential for misdiagnosis of malignant lesions that require evaluation by a dermatologist. It is important to stress that laser safety protocols must include the patient, the provider, and any bystanders (Dawson, Willey, & Lee, 2007). Various medical reports suggest that lasers should not be used to remove hair around the eyes, such as the eyebrows. Laser hair reduction treatments near the eyes may injure the iris and lens.

Status of Practice

The NC Electrolysis Practice Act of 1989 was amended in 2007 to include laser hair removal in the scope of practice for licensed electrologists. Laser hair removal uses lasers and light devices to incapacitate the hair follicle. This method slows the growth of hair; however, it is not considered a permanent method for hair removal.

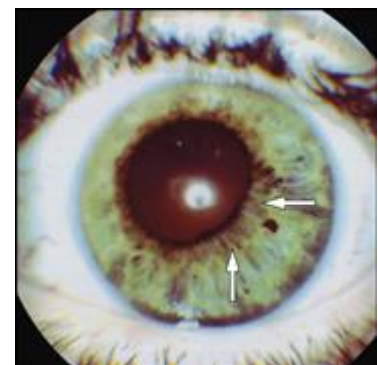


Figure 6 Eye Injury from Laser (image from JAMA Ophthalmology)

Laser hair reduction has dramatically increased since the mid-1990s. Consequently, a disturbing rise in litigation, especially from non-physician providers has also occurred. There are no federal guidelines for laser hair reduction, so the regulation of the practice is left up to the states. Researchers from the University of California collected data from a national legal database to determine the extent of liability claims associated with skin laser surgery. They looked at cases between 1999-2012. Laser hair reduction was the most common procedure. The researchers identified 175 cases where injury occurred. Non-physician operators (NPO) were involved in 43% of the cases. Most notably, the number of lawsuits involving NPOs has significantly risen from 75% (between 2004-2008) to 85% between 2008 and 2012 (Weber, 2013). There is a clear correlation between laser injury and non-physician operator application.

THE BOARD

Mission and Purpose

To regulate the practice to ensure adherence to laws and regulations, and to protect the public health, safety, and welfare. Responsible for licensing, monitoring, and educating practitioners to ensure competency and safety. The board is also responsible for disciplinary actions.

Ways the practice is regulated:

- 1) By qualifying practitioners and authorizing them through the licensing process
- 2) Enforces the laws and rules

Board Membership

The board consists of five (5) members and serve terms of three (3) years until a successor is appointed. The composition of the board includes three (3) electrologists, one physician, and one public member. All members volunteer their time and do not receive compensation. The NCBEE employs a compensated part-time administrative assistant.

Financial Information

The NCBEE is a self-supported (self-funded) board. Funds are obtained through by collecting licensing fees and are used to operate the program. Monies from state, local, or federal sources are not used for the operation of the NCBEE.

As of June 2014, there were 76 licensed practitioners in NC.

Practitioner Directory

As this is a very personal issue, consumers seek information about licensed practitioners through the NCBEE website. Referrals for services of permanent hair removal are recommended either through social media, the internet, Yellow Pages or word of mouth; however, the best referrals come through the NCBEE website in their area or a dermatologist, endocrinologist or physician. To know that a practitioner is required to abide by the Infection Prevention Standards as required by the Center of Disease Control (CDC)

and other rules set by the State of North Carolina gives confidence for the patron (and any referring doctor) that suitable adequate care will be received for the specific situation of each client. A continuing education requirement in the State also ensures that licensed electrologists stay current on relevant issues such as communicable diseases and new techniques.

Unless a consumer has had treatment by a competent electrologist, it is impossible for the consumer to readily evaluate the performance of another practitioner. For example, clients frequently ask: “*do you use a sterile disposable needle?*” However, they have no idea that the forceps used in treatment should be sterilized as well. Consumers are usually not informed of the possible risks related to electrolysis unless they are given such information during a proper consultation.

The consumers would not be able to control their exposure to risk if the practice of electrolysis was deregulated. The burden of consumer protection falls on the State of North Carolina legislature. While no regulation will preclude all injury or ensure perfect results, licensing requires evidence of minimal standards of competency and continuing education for all licensees. In addition, consumers now have an agency for redress of any problem that may arise.

Accomplishments

The NCBEE has effectively demonstrated that it can financially and professionally support its operations which include the administration of occupational licensing, education, and ethics.

The NCBEE has paved the way for neighboring states to adopt rules governing the practice of electrolysis. The members of the NCBEE as well as the practitioners continually seek to improve and elevate their individual practices and the reputation of their chosen profession. It is a great honor to be considered a thought leader in the electrolysis field.

Since 2013-2015, the NCBEE has accomplished advances such as:

- **Forms:** All forms related to licensure (application, renewal, continuing education, etc.) have been recreated as fillable PDF forms and posted to the NCBEE website. This has resulted in:
 - Easy access to the forms by practitioners
 - Uniform visual layout
 - Consistency between electrolysis and laser forms
 - Reduction in errors due to interpretation of handwritten forms
- **Expansion of Rules:** To fully accommodate the addition of laser hair reduction into the Electrolysis Practice Act, the governing NCBEE Rules were reviewed and amended as necessary to clarify specific areas related to laser.
- **Code of Ethics:** A professional code of ethics was developed and published to the NCBEE website. It is in alignment with state and national electrolysis associations.

- **Complaint Process:** In an effort to clarify the complaint process for consumers, a section for Complaints was added to the NCBEE website along with a NCBEE approved Complaint form.

RECOMMENDATIONS

As illustrated in this report, electrolysis and laser hair reduction techniques constitute medical procedures through the use of invasive needles/probes for electrolysis and a Class IV medical device, classified by the FDA for laser hair removal equipment. These medical devices and treatments pose a potential risk to the public. It is the responsibility of the state of North Carolina to protect the health, safety and welfare of consumers since no federal regulations are in place to govern the practice of electrolysis and laser hair reduction. Strict licensing procedures have historically produced fewer consumer complaints. Protection comes in the form of:

- Strict guidelines for practice
- Enforcement of regulations, rules, and standards of practice
- Evaluation and subsequent licensure of qualified practitioners
- Establishment and refinement of laws and rules as deemed necessary by these growing professions
- Continuing education requirements

The NCBEE respectfully acknowledges that the State of North Carolina has the authority to make changes regarding the existence of this board. At this time the NCBEE has several recommendations for the future of the board which reflect our serious concern over suggested outcomes from the program evaluation.

Recommendation #1: Consolidation under another board

The Program Evaluation Division (PED) did not add the NCBEE to the list of boards to be consolidated with an existing board. However, the treatment procedure administered by practitioners may have medical and/or emotional repercussions if treatment is not followed by training and educational protocol set by regulatory standards and requirement. It is the opinion of the NCBEE that consolidation with the Medical Board, Nursing Board, or the Department of Health and Human Resources (as an advisory board) would be favorable. Electrolysis is not cosmetology and we strongly discourage any consideration to consolidate with the NC Board of Cosmetic Art Examiners.

Recommendation #2: Separation of Electrolysis and Laser Hair Removal

The NCBEE recommends separation of electrology practice and laser hair reduction practice from the governance of a single board. It is our suggestion that laser hair reduction be governed by the NC Department of Health and Human Resources - Division of Health Services - Radiation Protection Section. Laser Hair devices are classified by the FDA as a Class IV

device. Laser practitioners are required to have medical supervision and additional training. The NCBEE has not been qualified to handle the issues arising from laser hair reduction requirements in a regulatory sense. As mentioned in this report, litigation due to injuries caused by laser procedures has skyrocketed across the nation over the past decade. The financial repercussions have proven to be extensive.

Appropriate government licensing of the electrology profession on the public's behalf is the only mechanism which protects the public health, safety and welfare. Our licensing program in North Carolina has worked for 25 years. Based on the lack of public complaints or incidents concerning licensed electrologists, we must continue to be evaluated in the same way as other medically related professions in North Carolina which use parenteral procedures. This is not the time to regress as the medical and social risks are greater than ever before.

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Board Members & Staff

As of January 24, 2016

Chairman – Ronda Jones, LE

Vice Chairman – Cheryl Delaney, LE

Treasurer – Beth Rountree, Public Member

Board Member – Dr. Girish (Gilly) Munavalli, MD MHS

Board Member – Jennifer Morris, LE

Administrative Assistant – Susan Magas

REFERENCE AND RESOURCES

Comparison of Electrolysis and Laser. (n.d.). Retrieved January 8, 2016, from American Electrology Association: <http://www.electrology.com/faqs-about-permanent-hair-removal/how-does-electrolysis-compare.html>

Dawson, E., Willey, A., & Lee, K. (2007). Adverse events associated with nonablative cutaneous laser, radiofrequency, and light based devices. *Seminars in Cutaneous Medicine and Surgery*(26), 15-21.

Essential Electrolysis Facts. (n.d.). Retrieved January 8, 2016, from American Electrology Association: <http://electrology.com/faqs-about-permanent-hair-removal/>

Laser Hair Removal Information. (n.d.). Retrieved January 8, 2016, from American Society of Dermatologic Surgery: <http://www.asds.net/LaserHairRemovalInformation.aspx>

Mullen, J. (2012, February 1). *Connecticut Department of Health.* Retrieved January 8, 2016, from Connecticut's Official State Website: http://www.ct.gov/dph/lib/dph/electrologist_final_report_to_General_Assembly.pdf

Narurkar, V. A. (2005, September). Complications from laser procedures performed by non-physicians. *Skin and Aging*, 13(9), 70-71.

Örebro University. (2013, December 13). *The Psychological Impact of Hirsutism.* Retrieved January 8, 2016, from Medical Xpress: <http://medicalxpress.com/news/2013-12-psychological-impact-hirsutism.html>

Recently Published Reports. (2014, December 17). Retrieved January 8, 2016, from North Carolina General Assembly Program Evaluation Division: http://www.ncleg.net/PED/Reports/documents/OccLic/OccLic_Report.pdf

Weber, B. (2013, October 17). *Laser Hair Removal Lawsuits on the Rise.* Retrieved January 8, 2016, from Medical News Today: <http://www.medicalnewstoday.com/articles/267527.php>

What Everyone Needs to Know About Electrology. (n.d.). Retrieved January 8, 2016, from American Institute of Education: <https://www.aielectrology.com/electrology-questions.shtml>

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