SPASTIC OVER ELASTIC: THE EMBALMING INDUSTRY'S NEVER-ENDING LOVE AFFAIR WITH LATEX.

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In this issue we reexamine the embalming industry's obsession with cheap latex gloves and the negative ramifications from their continual use. The lack of protection and the possibility of latex sensitization is literally off the scale. What propels this ridiculous and ill-fated "love affair"? Why does the embalming industry ignore the warning signs and pretend everything is "just all right"? These and other questions will be answered in our current article.

Leaky rubber gloves and bathtub formaldehyde was good enuf fer granpappy, and it's good enuf fer me!
*Calvin "Cal" Daver, CFSD**
*Undertaker, Embalmer, *(Certified Funeral Service Dinosaur)*

An extensive Champion Encyclopedia article regarding the dangers and lack of protection in embalming rooms when latex gloves are used was written by me several years ago and is available through the Expanding Encyclopedia link on this website and also Champion's website. I encourage you to read this article as it is still timely and informative. Sadly, after all this time and dissemination of information, little appear's changed in the embalming industry. Massive quantities of cheap, disposable latex gloves are used by embalmers every year, with no end in sight. The embalming industry has always been backward and slow to change and this mindset reveals itself, all to clearly, in the situation with latex glove usage. Bottom line, latex gloves do not offer chemical protection against formaldehyde and other components of embalming fluids, present a major health danger due to latex sensitization potential and offer only short- term, limited protection against blood and body fluids exposure. What more does the embalming industry need to know? The various associations and even the embalming manufacturers pretend the problem does not exist and, at most, offer some alternatives, if desired, and basically just apologize for latex. One manufacturer, several years ago, even went so far as to say, in their own catalog, that nitrile gloves (a superior substitute for latex) need only be used if glutaraldehyde was the embalming agent. This subterfuge was used to deflect the truth regarding latex and formaldehyde - that formaldehyde penetrates latex gloves faster than virtually any other chemical in the embalming room and renders latex gloves essentially useless in embalming operations. The Champion Company is the only manufacturer/supplier to the embalming industry that, to my knowledge, actively and aggressively advocates nitrile gloves as a safe and effective substitute for obsolete and defective latex products. Unfortunately, in the funeral industry, that's just the way it is.

Since its first sporadic usage in the 1890's, latex gloves slowly became a concept in surgery and medicine. However, after the CDC recommendations in the 1980's regarding the AIDS epidemic, latex usage literally exploded and the problems with their usage started to become evident. Literally billions of latex gloves are used every year, for better or worse. With warning labels on boxes, and anywhere from 10-30% of health care workers adversely affected by latex gloves, alternatives, such as nitrile gloves, are being actively used in medical/surgical/dental applications. The rubber industry has drastically contracted with at least 10% of all rubber workers experiencing adverse reactions or serious health consequences from their employment. Allergies and sensitizations in the general public is also on the rise with possibly 5% of the general population experiencing allergic reactions.

The discussion of what latex really is and how it is harvested and eventually manufactured into gloves has been extensively covered by me in my earlier Champion Expanding Encyclopedia referenced above, and I encourage you to read it. In addition, I discuss in depth the allergic reaction at a biochemical level and comment regarding allergy in general in the U.S.

The problems with latex glove usage in embalming rooms is five-fold: generalized irritant dermatitis, allergic contact dermatitis, true IgE latex sensitization/allergy, defective blood barrier due to hydration effect, and total lack of chemical protection. Irritant dermatitis is not a true allergy and is generalized skin irritation that occurs from continual use of powdered gloves, irritating soaps and excessive hand-washing with dry, itchy, scaly skin and redness, swelling and cracking/peeling evident. The result is a compromise of the skin barrier of the embalmer to pathogens and possible infection. Allergic contact dermatitis is a true Type IV hypersensitivity to additives and chemicals used in the latex glove manufacture. This form of dermatitis is a predecessor of true latex allergy and causes redness, itching, blistering and oozing of skin tissues and is a serious health hazard. The result could easily develop into true latex allergy (Type 1) and manifest as hives, conjunctivitis, broncho/laryngospasm with anaphylactic shock and death possible. There is no cure for latex allergy and it will have to be dealt with for the rest of the affected persons life. The hydration effect manifests when cheap, disposable latex gloves are worn for more than 10-20 minutes or so. The blood borne barrier breaks down due to swelling and opening of the microscopic pores and inherent defects in latex. Sweating of the wearer is the primary cause with moisture from the embalming environment also contributing. This is the reason for continual regloving and double gloving in health and medical care situations. The basic result is lack of protection for the user in a very short time. Latex has never been and never will be a chemical barrier to virtually any of the chemicals used in embalming. Latex has a miserable breakthrough time of barely 90 seconds against formaldehyde, and with other chemicals, such as glutaraldehyde, exhibiting times of 2-4 minutes or more, the situation is basically pathetic. Consequently, the embalming industry has been deluding itself for years pretending that latex was some kind of a chemical barrier – it is not!

The source of the problem in embalming is the continual use of cheap, poor quality, disposable latex gloves that cause irritant dermatitis, contribute to allergic contact dermatitis and hasten the onset of true latex sensitization and allergy. The cornstarch or talc powders that are usually present just make matters worse by amplifying the airborne exposure problem of latex and contribute to dermatitis by literally grinding the allergenic particles into your skin during glove use. When cheap latex gloves are used , the hydration effect is rapid and profound with serious blood/body fluid protection rapidly disappearing in a matter of minutes. Latex gloves rapidly degrade when exposed to the typical chemicals used during the embalming operation, including formaldehyde, glutaraldehyde, phenol, methanol and isopropanol. The permeation rates are worse for formaldehyde as it rapidly penetrates and becomes trapped in the latex matrix of the glove in about 90 seconds. Prolonged exposure literally disintegrates the disposable latex glove. Latex has an intrinsic failure rate of 2.5-4% anyway and 2 to 4 gloves out of every box is anticipated to be defective.

The solution to this problem in embalming is so simple that it borders on the ludicrous that it has not been universally adopted in the embalming industry. You simply don't have to use latex gloves! There are numerous styles of nitrile gloves on the market that are perfect for embalming use. Nitrile exhibits high chemical resistance against formaldehyde and other embalming chemicals, excellent durability with high cut and abrasion resistance and is resistant to hydration effects and completely eliminates the problems of latex usage. In my previous Champion Encyclopedia article I discuss other acceptable alternatives such as butyl, neoprene and

PVC gloves and explain why my personal choice and recommendation is nitrile for all phases of embalming usage.

So, why is it that a massive quantity of latex gloves are still used in embalming despite the fact that we know they don't work, don't protect us from chemical exposure and have a serious potential for sensitization/allergy to latex? The first reason is that they are cheap and nobody cares. The second reason is that they are cheap and nobody cares. The third reason is that they are cheap and nobody cares. The fourth reason is - well you get the idea. This mindset in the funeral industry is probably never going away. Embalming has always been relegated to the back room where "keep it cheap", "do it like we always did", and "it doesn't really matter anyway" is the pervasive attitude. Little, if anything, has changed in embalming in 100 years and with this neanderthal thinking it is unlikely we will ever come out of the dark ages. The truth is painful, I don't like it anymore than you do, but that's just the way it is.

In summary, latex has nothing going for it in embalming operations, while nitrile is an absolutely excellent alternative that solves all the problems of exposure and protection for the embalmer during all phases of embalming and preparation. I encourage you to adopt nitrile gloves for all embalming operations and abandon latex gloves. Nitrile gloves will do what embalming gloves should have been doing all along.

Despite all this, still going to use cheap, disposable latex gloves? The next time you pull on and snap your cheap, disposable latex gloves, that is if they don't rip apart first, envision the allergenic powder/latex microparticles grinding into your skin and being sucked into your lungs while your skin absorbs the formaldehyde embalming fluid. I wish you the best of luck; I really do, you'll need it. My final words, as always – embalm smart, embalm safe.

References abound on this topic. Just search the web for "latex allergy" and a shocking amount of information will appear. All of my references from my previous Champion Encyclopedia article are all relevant and valid. The lack of chemical protection is factual and unassailable. The reality of this problem for the embalming industry cannot be denied. Sorry, but that's just the way it is.