

“Danger, Will Robinson!”

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The first rule of life casting should be the same as the first rule of medicine, “Do no harm.” Yet some people continue to use materials and methods that carry risks. The risks could be either for the caster or the castee. This article will emphasize danger to the castee.

About twelve years ago, when I had only been life casting for about eight years and was relatively inexperienced, I had just finished casting the faces of the son and daughter of an emergency room physician. Wanting to get a little free advice from a safety expert, I asked the doctor if he had noticed anything in the process that was potentially risky. Probably more than anything else, I was just making small talk, something I am well known for. His answer surprised me. He said the the only thing he had seen that concerned him was that a person might faint with the mold still on his/her face. He went on to explain that fainting is often followed by vomiting and if a person were to vomit with his/her mouth covered, the person could aspirate, i.e. have vomit forced into his/her lungs resulting in serious injury or even death! I was stunned, instantly I realized that what I was doing could have more serious consequences than I had imagined and since then I have paid more attention to safety. In this article, I will cover what I have become aware of in over twenty years of life casting, starting with fainting.

At the time of the event described above, I had never seen anyone faint, but since then I have. While I didn't keep a log book, I suspect that I have seen it only seven or eight times. While a person is more likely to faint during a face casting than a torso or a hand, I do recall a person fainting during each of the latter two. The torso casting casualty was a young lady just graduating from college who had seen my work and thought a casting of herself would make a wonderful graduation present. Naturally, I agreed. We were just about finished, we had applied the alginate and constructed the mother mold of cheesecloth and fast setting plaster as in Photo #1 (though the photo is of a different person). It had taken less than 20 minutes to get to that point and in less than five minutes, the plaster would have setup enough that we could have removed the mold. The subject mumbled something about not feeling good and immediately, before I could respond, collapsed on the floor as if a sack of rocks, “THUD!” Once she was in a horizontal position, the blood returned to her head and she quickly revived. The casting was ruined but luckily and more importantly, despite having gone down in dramatic fashion, she wasn't sore, bruised, or injured in any way. She admitted to being hypoglycemic and that she hadn't eaten anything all day because **she didn't want to look fat!** We rescheduled for a couple of days later and she came in well fed and the casting went off without a hitch (or a stitch for that matter).



Photo 1

Having spent over ten years as a helicopter pilot for a hospital, I am pretty sure what would have happened if she had, say, hit her head when she had fallen and had knocked herself out. I would have called 911. This is the call that the paramedics would have been waiting for, the reason why they had become paramedics in the first place. There on the floor would have been an attractive young lady in distress covered only with goo that **they would get to clean off**. All they usually got were old people having heart attacks. I was certain that if I had gone afterwards to central dispatch, there on the radio counsel would have been a sign that read, “TO ANY CALLS FROM PARVIN STUDIO, ALL UNITS RESPOND.” And if I had ever made another 911 call, my parking lot would have been full of ambulances, fire trucks, police cars, and maybe even a helicopter or two, all wanting to help!

Hand castings are so easy to do that one wouldn't imagine a person fainting. Photo #2 shows trusty and capable assistant, Jessica, with both hands in alginate to make them into a wall mounted business card holder Christmas present for her dad as in Photo #3. (Working at my studio is something like summer camp in that one is encouraged to make crafty items for mom and dad. Fortunately, no one has asked to make, shall we say, “more interesting castings” for boyfriends, at least not yet...) Amazingly, a woman with her hand in the goo actually fainted and went down for the count with another resounding

“THUD!” The reason was similar, she had eaten very little all day and had attended an office party where she had attempted to make up for lack of solid food with liquid nourishment. Fortunately, other than a bruised pride, she suffered no ill effects and also returned at a latter date for an event free casting.

The two examples I have given are not what the doctor was concerned about. While one could be injured from collapsing, vomiting with something on one’s face could be far more serious. I suspect that I have seen someone faint while having a face casting done only about five or six times in over twenty years of life casting and with no ill effects. I can recall only once that someone actually collapsed. The other times, I realized the the person was becoming unresponsive and aborted the procedure. I have, however, at least once seen someone vomit after fainting just as the doctor warned. I guess the good news is that fainting has been such a rare occurrence. Usually, the person has fainted (or started to) just as the mold was almost completed. But the one who actually collapsed did so just as we applied the first bit of alginate to her forehead. We caught her or she would have been a limp puddle person on the floor. We revived her and started over without incident. However, something else did happen which I will come back to later. But first, I will explain how I try to prevent fainting which is possibly the reason I have seen it so rarely.

I always try to meet with a castee before the day that we actually spread the goo. Many times the life casting is a parent’s idea and the child is somewhat suspicious. This first meeting allows me to put the subject at ease by explaining just what’s going to happen. It also gives me a chance to see what I have to work with and plan the pose. It also gives me a chance to mention safety. Part of the explanation includes showing a short video of someone being cast, both face and body. I encourage the model to eat normally and during the casting not to lock booth knees. I stress to the model that at anytime he/she feels strange or weak, we will stop at once. Every few minutes during the actual casting, I ask how the model is doing. Communication is not a problem if the model’s face isn’t covered since we and just talk to each other. For a face, however, my instructions are to respond with a thumbs up for “O.K.” and a thumbs down for “I want to stop!” I have gotten pretty good at appraising a model’s status and if anything just doesn’t seem right, even if the model has not requested to stop, we stop. I recall one face casting of a young lady during which she seemed to be a little unresponsive. We were just a few minutes from being finished when I said that we were stopping. Her mother, who was a nurse, wanted to finish. I said again that we were stopping and as I removed the mold, the girl fainted.

In recent articles, I explained how most of the time I position the model on an almost vertical padded board. If I decide to abort the casting, the first thing I do, if the face is covered, is remove the mold. Then my assistant and I lower the board into a horizontal position. Every time I have done this, the model has recovered within a few seconds with no ill effects. My advice is if something just doesn’t seem right, quit immediately, there is no such thing as being too safe.



Photo 2

Along the same line as fainting is sleeping. It isn’t hard to believe that if someone were lying down while being covered with warm goo that he or she might fall asleep. Probably the only danger would be to the mold because the model might wake up with a start and damage the it. However, I have seen a person actually fall asleep standing up and leaning back on a padded board. In this case, there is real danger of falling just as in fainting. If someone is so tired that he or she can not stay awake standing, then it is probably smart to reschedule for another day.

Once I had a reporter for a local newspaper come to my studio to write an article. Her college age daughter had volunteered to be the subject. The article was about casting her face though we also did a torso casting as well. Again, both went without a hitch or a stitch. I had requested that the reporter not explain the process in such detail or make it sound so simple that someone might attempt it from just the article without some instruction since one has to cover the model’s face and one should know what he/she is doing. I had also asked that she let me proof read the finished article



Photo 3

for errors which she promised to do. Poet Robert W. Service said in "The Cremation of Sam McGee," "A promise made is a debt unpaid..." Well, the reporter still owes me from what followed. First, her editor wanted the article more quickly than she anticipated and I did not get a chance to check it. Secondly, after making me sound like both a great artist and someone in line for the next Nobel Peace Prize for my humanitarianism, she did a great job of explaining the process until she said, "The next step, removing the mold, is critical and dangerous; the model can suffocate if not done properly." That particular newspaper was for the richest area in Denver. As you can imagine, even though the article was on the front page and was 99% excellent, I didn't get a single inquiry. That old adage that says that *publicity is only bad if it concerns children or small furry animals in a negative way* is true.

A mutual friend asked the reporter why she had said something so negative and she replied, "Dave wanted me to." Not only had I not wanted her to mention the that I might kill a subject, she was just flat wrong, removing the mold isn't dangerous. However, she did have a point that if proper attention isn't paid to the model's air passages, the model could suffocate. I can not even guess how many people, asking me about how a face casting is done have said, "So, what do you do, put straws up a person's nose?" To which I reply in my most condescending badly done French accent, "Only the most rank amateur would stick straws into someone's nose!" Straws are a really bad idea. Not only can the distort the shape of someone's nose, if bumped, can cause injury. If the alginate is just the right consistency, i.e. thin enough for application but thick enough to stay in place, it can be shaped around the nose without obstructing air flow. One of the reasons that I always work with an assistant is so that one of us is able pay close attention to assure that the model is able to breathe.

At my preliminary meeting with the model I always mention that the it is absolutely essential the he/she be able to breathe through his/her nose. If the model has a cold, we postpone the session. Recently I had a young man in my studio who said that he was never able to breathe through his nose. Now that was serious because he was a paying customer. Had this been a case of a friend or relative whom I felt compelled to give a serious discount, I would have just backed out of the deal and saved myself some time. But a full paying customer is another thing entirely. What I did was cast him with his lips parted enough for him to breathe. Actually, I have done this several times and the castings have turned out just fine. The only caution is an aesthetic and not a safety issue. You must be very careful when applying the alginate to the lower lip. If you force it into the mouth, the alginate may flow between the lip and the teeth, and it may look as if the subject has a wad of smokeless tobacco in there.

One last thing on noses. Earlier, I mentioned that the girl who collapsed just as we started applying the alginate had something else happen. As she fell foreword, my assistant, Melody, adroitly caught her not realizing that the model bumped her nose on Melody's collar bone. We revived her, gave her a non-diet soda to get some sugar and caffeine into her, and cast her again with no problem.

However, when we removed the mold, she had a very noticeably bruised nose! We figured out what had happened and, fortunately, neither she nor her parents were upset and her bruise went away in a few days. I never expected to see a bruised nose again, but I was wrong.

This is another of those very rare occurrences, but I think every life caster should be aware of the possibility. Perhaps, on five occasions, I have seen someone's nose bruised without being bumped. It seems that the bridge of the nose isn't well padded and some people are so tender there that even the light weight of a mold can cause a bruise. Most of the ones I have seen have occurred to rather prominent noses. One was the really excellent sculptor, James Muir. He had asked me If I would make a casting of his face so that he could use it for reference. Sculpting from a cast is far better than looking at one's self in a mirror. Jim has a prominent though rather distinguished nose, the bridge of which was bruised in the process. But another whose nose became bruised was at the time the reigning Miss Colorado USA Teen and her nose definitely wasn't large. While I do not consider this to be a serious concern or very likely to happen, I probably would not cast someone's face within a few days of a beauty pageant, screen test, wedding, etc.

Before I move on from parts of the face, I know of someone who did something that I wouldn't touch with a ten foot pole. Believe it or not, he actually convinced his own children to let him cast their faces *with their eyes open!* He somehow got some of the drops that eye doctors use to numb eyes and used alginate. I suppose that it is possible that it might not be harmful, I really don't know and I never will.

Every bag of gypsum products made by US Gypsum such as plaster, hydrocal, hydrostone, cement, etc. has the following warning printed on it

“!WARNING!

When mixed with water, this material hardens and becomes very hot - sometimes quickly. DO NOT attempt to make a cast enclosing any part of the body using this material. Failure to follow these instructions can cause severe burns that may require surgical removal of affected tissue or amputation of limb...”

Amazingly, I still hear of people who apply gypsum products directly on skin. Even if gypsum products are not thick enough for the exothermic reaction to generate enough heat to be harmful, the possibility of chemical burns is still very real. Also, even a thin layer of plaster, etc. absorbs water and can seriously dry skin. Let me relate four stories, from the humorous to the tragic. During one of my workshops a retired dentist confessed that he had cast his own face right after he got out of dental school. He arranged what he needed on a table and sat down to do the job by braille, so to speak. He mixed the plaster and spread it over his face. He didn't realize that he had forgotten a step until he tried to remove the plaster, it was stuck fast. He had forgotten to use a release such a petroleum jelly. The plaster was stuck to all the hairs it touched. He had no choice but to pull the plaster off taking all his facial hair including the roots with it. He then poured some plaster into the mold. This plaster locked onto the roots and when he removed the

positive impression from the mold the hairs came out too. So he ended up with a mask that contained all his facial hair. Said he, "It was the damnedest looking thing you ever saw!" Said I, "I'll bet it was."

Those old enough may remember that there used to be a television show called "911." There was a segment in which a high school age girl convinced her junior high age sister to let her cast her nude torso by spreading plaster over it. The older sister made the same mistake that the dentist above had done, no release. They finally called the fire department for help. The younger sister ended up in a bathtub while a crew of burly fireman chipped the plaster off her naked body. Though she wasn't seriously injured, she never forgave her sister.

There was a documentary on PBS that showed a South American artist making life castings of native peoples. He would talk some native into getting covered with plaster from head to toe. After the plaster had setup, the artist would break the plaster off. Then he would transport the pieces back to his studio, reassemble the puzzle, and fill it with plaster to get a reproduction of the native. As shown in the documentary, the plaster was applied in a heavy layer at least an inch thick. Jungles tend to be hot even without being packed in exothermic curing plaster. I was and still am amazed that the artist didn't kill some of his models.

A friend of mine named Todd Debreceni is writing a text book for special effects. He relates the following as part of a section telling the reader to never apply plaster directly on skin. "The reality of the danger of direct application of plaster to skin was illustrated in January 2007, when a sixteen year-old girl suffered third-degree burns after encasing her hand in plaster as part of a school art project in Lincolnshire England. She subsequently had both thumbs and all but two fingers amputated. Be forewarned!"

The most commonly used material for life casting is alginate but some silicone rubbers can also be used. I say "some" because only a few specific ones are approved for skin contact. There are two kinds of silicone rubber, platinum cured and tin cured. All those approved for skin contact are platinum's, tin cured silicone rubbers are not approved. Some people are tempted to use non approved tin cured silicone rubber because it can be less expensive. One of the necessary characteristics needed for any life casting material is that it setup very quickly. While regular slow curing platinum and tin cured silicones are about the same price, it is much less expensive to accelerate tin cured silicones than platinum's. The temptation is to use tin cured silicones with an accelerate though not approved for skin contact than use the more expensive fast setting platinum ones which are.

My concern is that anytime one uses something on a person's skin which is not only not approved but is expressly prohibited, one is not only putting the model at risk but also himself. If something went wrong and the model were injured, the artist would have a hard time convincing a jury of his innocence. Not only do I not want to hurt someone, but I would hate to see my artistic career come to an end by being sued out of existence. And any time even the possibility of spending time in the big house pops into my head, I imagine my roommate as a three hundred pound ax murderer named Bubba who makes me wear sun dresses...

In this article, I have been concerned with injury to the model. There is a whole another subject that I have not touched upon, the safety to ourselves of the materials and equipment that we regularly use. While this is a discussion for another time, there is one recent improvement that I will briefly mention. Since the most commonly used material for life casting is alginate which had always contained silica, the development of silica free alginate is significant. ArtMolds now has a line of SilFree MoldGel alginates that provide excellent reproductions and may very well help us avoid lung transplants. I'll cover this in more detail in the "discussion for another time."

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