

THE FASHION ACCESSORY

that could save your life

What's the difference between a DOT helmet and a Snell certified helmet? Isn't it just a marketing gimmick?

TAMMY mathews #19139
roseville, california
(photos courtesy of mathews)



Kristen Johnson and Tammy Mathews toured the Snell Laboratory with their Chapter, the Gold Country Riders.

Many Women On Wheels® members live by the motto “all the gear all the time,” but what do you really know about the quality of your gear and its ability to protect you? Take your helmet for example; while it provides shelter from the elements and may even be a stylish accessory, how do you know which helmet will best protect your beautiful brain? What’s the difference between a DOT helmet and a Snell certified helmet? Isn’t it just a marketing gimmick? And how often should you replace your helmet?

The members of Northern California WOW chapter Gold Country Riders (GCR) went in search of these answers and more. We didn’t have far to ride on a cold, wet January morning since, thankfully, we are privileged to have in our backyard the only Snell independent testing laboratory in North America. Thanks to GCR member Dee Dee Gray for coordinating the outing, and thanks to the knowledgeable scientists at Snell for being kind enough to open their facility on a Saturday. Not only did they give GCR members our own private tour, but over the course of two hours they also demonstrated each of the rigorous tests a helmet has

to pass before it receives a coveted Snell certification, and answered every question we could possibly ask.

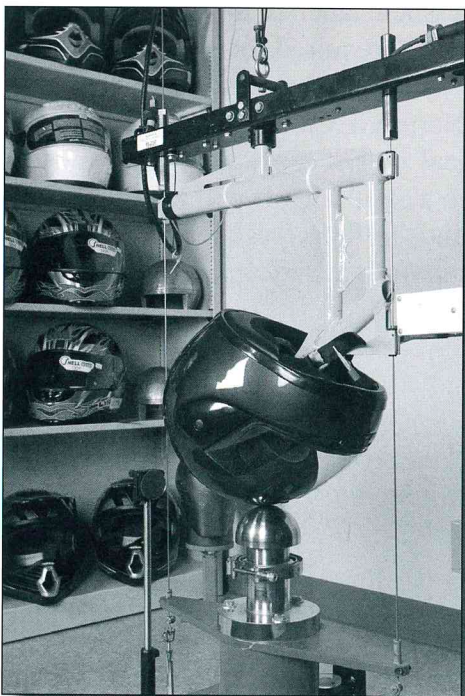
First, why wear a helmet? We learned from Snell Director of Education Hong Zhang, that “the primary purpose of a helmet is to manage energy so that if you have an accident all that energy is managed by the helmet and not your brain.”

So how can you tell how well a helmet can manage energy? “Well unfortunately it isn’t easy,” shared Hong. “It’s not something as a consumer you can determine by

looking at the thickness of the helmet, the weight, what it's made of or even the price tag. The only way to tell is through extensive testing."

That's where Snell comes in. The Snell Foundation prides itself on the fact that they don't make helmets. They make helmets safer. They do this by developing rigorous testing standards and serving as an independent testing laboratory to ensure the manufacturers meet these stringent requirements. Through a series of high tech tests, each helmet that enters the Snell lab is put through its paces. To receive the much-sought-after Snell certification, a helmet model in a specific size range must meet all the criteria in every single one of the following tests: impact protection, retention system, rotational stability, outer shell and face shield penetration and chin bar impact. My favorite test was the "buckshot test" which is meant to simulate debris that is hurled at a rider's visor.

Because of their standards, according to Hong, "Snell certified helmets can manage energy be-



tween 40% to 110% better than a standard DOT approved helmet." In fact, "The Snell standards are so high that many of the helmet models tested do not make the cut," said Hong. "And those that do pass continue to be tested on an ongoing basis for as long as the model is sold."

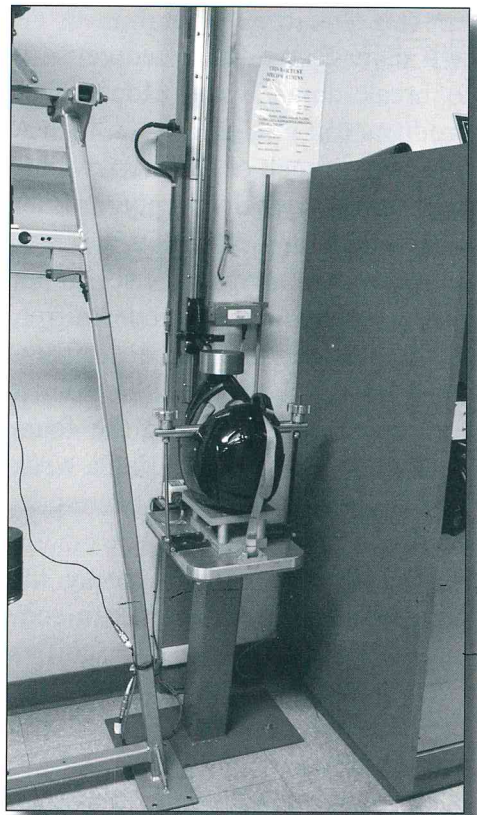
To ensure the integrity of retests, Snell procures helmets from online and local stores and not just from the helmet manufacturer directly. This guarantees Snell tests the same helmets you and I ultimately purchase and not just hand selected ones the manufacturer believes to be of the highest quality.

According to Hong, "If at some point down the road a previously certified helmet fails the battery of tests, the model has to be recalled. If you're interested in learning more about each of the demanding tests, please check out the Snell YouTube video, <http://youtu.be/DCyFJT74wQg>

So what's the difference between a DOT helmet and a Snell certified helmet? "DOT standards are maintained by the Department of Transportation, and are the minimum standards a helmet manufacturer must adhere to," said Hong. "DOT certification is done on the honor system. The helmet's manufacturer determines whether his helmets satisfy DOT and then claims the qualification for himself. There are no reporting requirements and the government provides very little spot checking that the standard is being adhered to."

The DOT standards are substantially more lenient than the Snell standards and therefore the protective qualities of a DOT helmet are not as strong. For more information on the differences check out <http://www.smf.org/docs/articles/dot>

The tour was truly fasci-



nating and there were so many tips shared and questions addressed during the two hours, it's impossible to share them all, but here are the top eight.

1. Fit: Fit is very important when it comes to your helmet. Hong shared that "Most riders wear a helmet that is too large. A helmet should fit snugly." For this reason, Snell encourages riders to wear the helmet in the store for at least three to five minutes to ensure the helmet is comfortable and does not have pressure points. Online helmet purchases should only be made after ensuring proper fit.

2. Care: Proper care will extend the life of a helmet. If you're riding in the heat, be sure to let your helmet air out after the ride. When your liner needs to be cleaned, use a mild hand soap, hand wash the liner and air dry it. "It is important that you NEVER use a blow dryer or place the liner in the dryer. Extreme heat

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will damage the foam and cause it to break down,” said Hong. Hair products can also damage a liner. A thin helmet sock or Buff (www.buffusa.com) may help keep your liner clean longer and extend its use.

3. Storage: When not in use, do not rest your helmet on your mirror, handlebars or other hard surfaces. Pressure on the inside the helmet will cause the liner and the foam shell to breakdown, creating a weak spot in the helmet and impacting its ability to fully protect you.

4. Damage: If while wearing the helmet the helmet comes into contact with a hard surface or you’ve been in an accident wearing the helmet, the helmet must be replaced immediately.

5. Myth buster: Contrary to urban myth, dropping a helmet does not mean the helmet needs to be replaced. The damage to the helmet actually occurs if your head is in the helmet when it collides with a hard surface since the collision compresses the foam shell.

6. Replacement: The helmet liner and foam shell break down over

time impacting the helmet’s ability to manage energy properly and decreasing its protective qualities. When this happens, the helmet should be replaced. As a general rule a helmet should be replaced at least every five years.

7. What types of helmets are not certified?

- While modular helmets pass the DOT standard, unfortunately they do not currently provide the impact protection required to be Snell certified. Additionally, the locking mechanisms don’t stay latched during the high impact Snell tests and this failure point could result in neck injuries during an accident. For those of us who prefer this style of helmet, it’s important that we put pressure on manufactures to improve the helmet safety.

- Helmets with built-in flip down sun visors have not been submitted by manufacturers to be tested. Manufactures are currently reducing the thickness of the foam in the brow area so that the visor fits in the helmet when the visor is in the retracted/stowed position. Unfortunately, this reduction compromises

the ability for the helmet to manage energy and results in inferior protection for the rider. If you love the sun visor feature as much as I do, I encourage you to reach out to your favorite helmet manufacturer and request they improve protection these helmets offer.

- Half helmets, AKA beanie helmets do not meet the Snell standard since they do not provide coverage for all the impact areas (back of the head) and offer adequate protection.

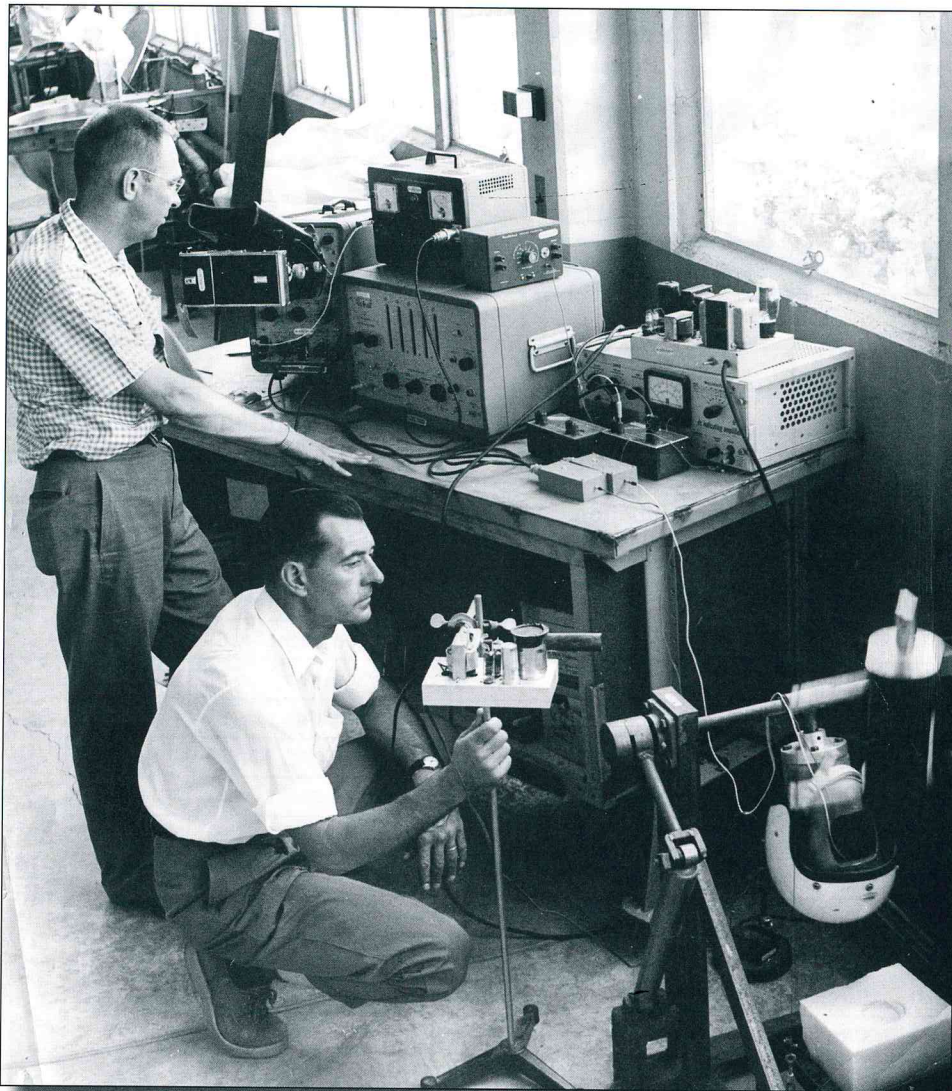
8. So how can you tell if your helmet is Snell certified? The Snell certification is often located under the helmet liner. You can also consult the certification list found on the Snell website at <http://www.smf.org/cert>.

The Snell tour was enlightening, educational and entertaining. After spending an afternoon with these knowledgeable helmet protection experts, it’s clear that the folks at Snell are extremely dedicated to our safety. Admittedly though, I rode home sad and nervous that my current helmet isn’t Snell certified and with the strong conviction that a Snell label is the only “designer label” required for my next helmet.

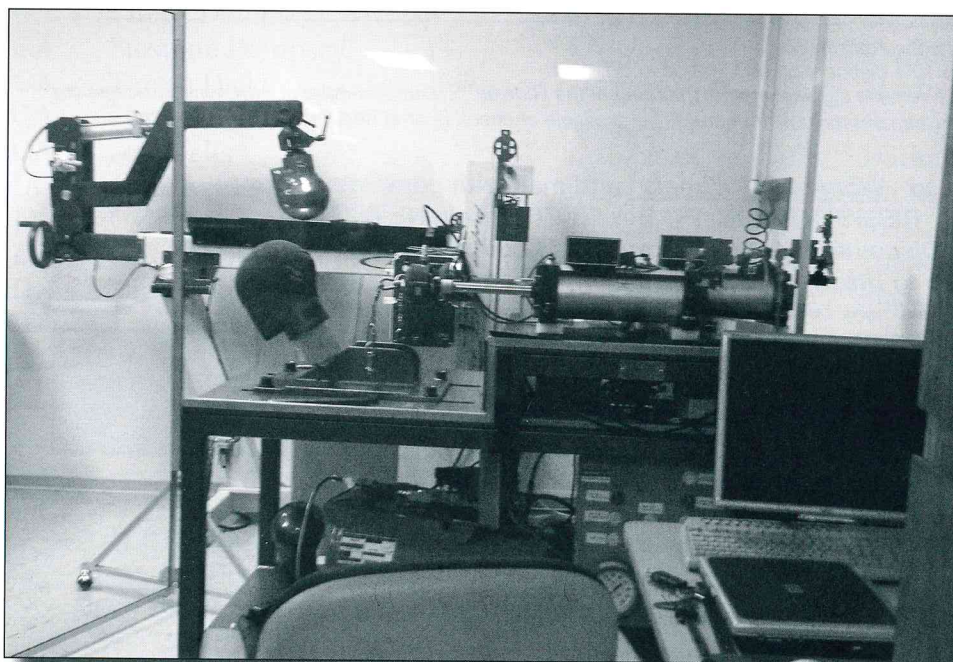
So the next time you visit Northern California, skip the typical tourist traps and treat yourself to a Snell tour. It will not disappoint and, in fact, the knowledge gained may just save your live.

“Wonderful presentation by enthusiastic, warm, friendly staff. It’s obvious they understand the importance and seriousness of sanctioning a reliable, safe and well-made helmet. It brought a whole new meaning to helmet safety. With the knowledge gained, I went out and bought a new helmet, Snell sanctioned, of course. I also forwarded the DVD they gave





Dr. George Snively was the principal architect of and formed the Snell Memorial Foundation to improve the design and capabilities of helmet design.



us to enlighten my niece and her husband, who recently bought new bikes."

~Shelia Hemmingway #19380

"The Snell tour was a mind opening experience. We saw motorcycle helmets put through rigorous tests to see how they would hold up with major trauma. I find it hard to believe manufacturers would even make helmets that could not be certified through this testing process. More people need to know the value of a helmet that has passed these tests. Be sure to look for the Snell sticker underneath your helmet liner!"

~Molly Korb #18348

"It was fascinating to hear how the physics theories I learned in college are used to create testing procedures that benefit such a fun hobby. I could have listened another three hours if they had been willing to stay all day!"

~Jill Dunphy #19185

"I have been on this tour three times and continue to learn something new each time. Snell Certified helmets is all I have and will ever buy.

Dee Dee Gray #11291

About Snell: Established in 1957, after the tragic death of race car driver Pete "William" Snell, the Snell Memorial Foundation has been a leader in helmet safety both in the United States and around the world. For over 50 years, the Snell Memorial Foundation, a not-for-profit organization, has been dedicated exclusively to head protection through scientific and medical research, standards development, helmet testing, and public education.

WOW