New Snell M2020 Standard Premium Head Protection

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SMSA
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Grand Rapid, Michigan
Helmet in 1950s
How to Choose among Today’s Motorcycle Helmets?

www.smf.org
Motorcycle Helmet Effectiveness

- NHTSA estimates that motorcycle helmet usage leads to:
  - 37% reduction of crash fatality
  - 67% prevention of brain injuries
Fact Check

- DOT Standard has not changed for more protection since 1974.
- Snell Standards Update Every 5 Years.
Current M2015 Standard
New M2020 Standard
Effective October 1, 2019
Newer Helmets and Greater Protection

• The effectiveness of helmet has increased from 29% between 1982-1987 to 37% between 1993-2002. (NHTSA reports)

• Tougher Snell Standards

• DOT Standard Unchanged

• Better Designs and Materials
Snell Motorcycle Helmet Standards
Impact Energy Management

as a percentage of ECE demands

- **ECE**
  - Smallest Sizes: 100%
  - Largest Sizes: 100%

- **DOT**
  - Smallest Sizes: 110%
  - Largest Sizes: 120%

- **SNELL**
  - Smallest Sizes: 210%
  - Largest Sizes: 160%
Snell Means Premium Protection. DOT and ECE are Minimum Requirement.

Impact Energy Management
Medium Size Helmets

- ECE 22.05 (45%)
- DOT (51%)
- SNELL (100%)
Effectiveness of Standards

• Standards = Documents

• Effectiveness of standards depend on
  * Strict and independent certification
  * Enforceable compliance
  * Experience and competence

• Testing and More Testing
Not how Snell tests helmet
Oldest Snell Testing Photo
Snell Lab in Early 1960s
Snell Test Lab Today
Scientifically Valid & Repeatable Test
Wireless Head Form for Rotational Impact Test
Snell Retention Test
Snell Penetration Test
Roll-off Test
Some fail tests.
Experience and Expertise
Snell Tests For Public Safety

- Snell Web Site Helmet List
- Updates Each Day
- Certified Helmets by Name and Size
- Decertified Helmets Noted
Snell Helmets Save Lives.
Austin Dillon Walking Away from 2015 Crash NASCAR Daytona Finish
Helmet Fit Research

• Well-fitted helmets protect better.

• Dr. Amy McIntosh reported in 2012 that children with help fitting a helmet had concussions reduced by 41%.
Shell Spreads the Load.
Liner Foam = More Braking Time
Snell’s Mission

• Evidence Based Helmet Standards

• Premium Protective Helmets

• Injury Prevention Education
We Don’t Make Helmet. We Make helmets Safer.
Helmet Dos and Don’ts

- Replace every 5 years.
- Fasten chin strap.
- Clean with only soap and water.
- Do not cut or alter the helmet liner.
- Do not put helmet near hot muffler or engine.
- Do not place helmet atop mirror or handle bar.
More Information

• Videos in Snell Youtube Channel
  • How Helmet Works to Protect the Brain
  • Why Helmet Standards Matter
  • Snell Lab Tour

• Snell Facebook/Twitter

• Call Snell Lab and Office: 916-331-5073
Last Words

• Riders have no direct indicators of helmet protective capability
• Riders can look for indirect indicators (e.g.: a serialized Snell sticker)
• There are reasonably foreseeable crashes that will exceed a helmet’s protective capabilities.
• In serious crashes riders need all the impact management capability a helmet can offer.
• www.smf.org 916-331-5073 for more info