DID YOU KNOW EACH HAND CONTAINS:

- 29 major and minor bones (many people have a few more)
- 29 major joints
- At least 123 named ligaments
- 35 muscles which move the fingers and thumb
  - 17 in the palm of the hand, and
  - 18 in the forearm
- 48 named nerves
- 3 major nerves
- 24 named sensory branches
- 21 named muscular branches
- 30 named arteries and nearly as many smaller named branches
- The bones in your fingers are no stronger than a lead pencil
If all workers, from medical to industrial and everything in between, would just wear gloves, then more than 1 million hospital emergency visits by U.S. workers per year could be avoided (according to the Centers for Disease Control and Prevention).

OSHA 1910.132(h)(1) requires that protective equipment, including PPE, shall be provided by the employer at no cost to the employees. It's not a one shot deal- as a business owner, you have to be compliant every hour of every day. Safety has to be top of mind, comfort leads to compliance. Don’t let your workers become a statistic!

HERE ARE SOME HAND STATISTICS FROM THE CDC & OSHA:

- Hand Injuries have cost employers over $740 MILLION dollars in the US last year (lost time, settlements, etc).

- Non-compliance of PPE hand protection is among one of the most common OSHA citations to date, costing employers on average $6,000 per citation.

OSHA 1910.132(h)(1) requires that protective equipment, including PPE, shall be provided by the employer at no cost to the employees. It's not a one shot deal- as a business owner, you have to be compliant every hour of every day. Safety has to be top of mind, comfort leads to compliance. Don’t let your workers become a statistic!
<table>
<thead>
<tr>
<th>Category</th>
<th>Hazards</th>
<th>Weight Range</th>
<th>ANSI/ISEA Level</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>LIGHT CUT HAZARDS:</strong></td>
<td>material handling, assembly, maintenance, packaging, warehouse, general purpose, construction</td>
<td>200 - 499 grams</td>
<td>A1</td>
</tr>
<tr>
<td><strong>LIGHT/MEDIUM CUT HAZARDS:</strong></td>
<td>material handling, assembly, maintenance, packaging, warehouse, general purpose, construction, metal handling, appliance manufacturing</td>
<td>500 - 999 grams</td>
<td>A2</td>
</tr>
<tr>
<td></td>
<td>material handling, assembly, maintenance, packaging, warehouse, general purpose, construction, metal handling, appliance manufacturing</td>
<td>1000 - 1499 grams</td>
<td>A3</td>
</tr>
<tr>
<td><strong>MEDIUM CUT HAZARDS:</strong></td>
<td>bottle and light glass handling, canning, dry walling, electrical, carpet installation, HVAC, paper production, automotive assembly, metal handling, metal stamping, packaging, warehouse, appliance manufacturing</td>
<td>1500 - 2199 grams</td>
<td>A4</td>
</tr>
<tr>
<td><strong>MEDIUM/HEAVY CUT HAZARDS:</strong></td>
<td>bottle and light glass handling, canning, dry walling, electrical, carpet installation, HVAC, paper production, automotive assembly, metal handling, metal stamping, packaging, warehouse, appliance manufacturing</td>
<td>3000 - 3999 grams</td>
<td>A6</td>
</tr>
<tr>
<td></td>
<td>bottle and light glass handling, canning, dry walling, electrical, carpet installation, HVAC, paper production, automotive assembly, metal handling, metal stamping, packaging, warehouse, appliance manufacturing</td>
<td>4000 - 4999 grams</td>
<td>A7</td>
</tr>
<tr>
<td></td>
<td>bottle and light glass handling, canning, dry walling, electrical, carpet installation, HVAC, paper production, automotive assembly, metal handling, metal stamping, packaging, warehouse, appliance manufacturing</td>
<td>5000 - 5999 grams</td>
<td>A8</td>
</tr>
<tr>
<td></td>
<td>bottle and light glass handling, canning, dry walling, electrical, carpet installation, HVAC, paper production, automotive assembly, metal handling, metal stamping, packaging, warehouse, appliance manufacturing</td>
<td>6000+ grams</td>
<td>A9</td>
</tr>
</tbody>
</table>
EN388

EN388 ratings are also noted on Radians hand protection. EN388 includes more specific information about the resistance to particular types of hazards you may encounter on the job. There are five numbers listed which indicate the level of resistance to puncture, tearing, blade cut and abrasion. Look at the diagram to the left to reference which number corresponds to which hazard.

**EN388 Ratings**

- **Impact Test**
- **TDM-100 Test**
- **Puncture Resistance**
- **Tear Resistance**
- **Blade Cut Resistance**
- **Abrasion Resistance**

### FAST FACTS

**EN388 A**

**LIGHT CUT HAZARDS:**
Light material handling, small parts assembly without sharp edges

- 204 - 508 grams/2 - 4.9 newtons

**EN388 B**

**LIGHT/MEDIUM CUT HAZARDS:**
Packaging, warehouse, light duty general purpose

- 509 - 1,019 grams/5 - 9.9 newtons

**EN388 C**

**MEDIUM CUT HAZARDS:**
Light duty metal handling, metal stamping, HVAC, light duty glass handling, plastics, material handling

- 1,020 - 1,529 grams/10 - 14.9 newtons

**EN388 D**

**MEDIUM/HEAVY CUT HAZARDS:**
Light duty metal handling, appliance manufacturing, bottle and light glass handling, canning, dry walling, electrical, carpet installation, HVAC

- 1,530 - 2,242 grams/15 - 21 newtons

**EN388 E**

**MEDIUM/HEAVY CUT HAZARDS:**
Metal stamping, sheet metal handling, glass handling, automotive assembly

- 2,243 - 3,058 grams/22 - 29.9 newtons

**EN388 F**

**HEAVY CUT HAZARDS:**
Heavy duty metal stamping, metal recycling, food processing, pulp and paper

- 3,059+ grams/30+ newtons
GLOVE SHELLS

Glove shells are knitted on a flat head knitting machine and are measured by the gauge (ga) of the shell. The gauge of the shell identifies how many needles are used per linear inch on a knitting machine. A 15-gauge shell, for example, is knitted on a machine with 15 needles per linear inch. The smaller the gauge, the thicker the shell. 7 ga is the thickest shell and 18 ga is the thinnest, lightest weight shell.

SHELL DESCRIPTIONS

**POLYESTER:**
- Monofilament Yarn
- Single Fiber, Not Twisted

**NYLON:**
- Man-Made Yarn
- Durable
- Excellent Abrasion Resistant
- Varying Luster

**HPPE:**
- High Performance Polyethylene
- Same as HDPE or UHMwPE
- Offers Cut Levels A2-A3

**HPPE WITH FIBERGLASS &/OR STAINLESS STEEL:**
- Reinforced HPPE
- The addition of fiberglass can increase to A3 cut level
- The addition of stainless steel can increase to A5 or higher cut level

**KEVLAR®:**
- Engineered Yarn by DuPont®
- Fire Resistant
- Offers High Cut Levels
- Is available in gloves and cut sleeves

**DYNEEMA® DIAMOND TECHNOLOGY:**
- Uses embedded micro fibers to strengthen fibers up to 2x
- Offers higher cut levels
- Has great durability and abrasion resistance
- Cool to the touch

**TEKTYE™ by RADIANS®**

This engineered yarn can get to an ANSI cut level of A4 WITHOUT THE USE OF FIBERGLASS OR STAINLESS STEEL.

Provides more comfort and dexterity vs HPPE with fiberglass or Stainless Steel.

Cost effective option for higher cut levels.
To address specific work-related hand protection issues, Radians uses several different types of palm coatings: smooth nitrile, foam nitrile, sandy foam nitrile, foam latex, sandy foam latex, crinkle latex, PU (polyurethane), and FDG™. Palm coatings allow for better gripping capabilities and tactile sensation without losing dexterity.

**COATING DESCRIPTIONS:**

**SMOOTH NITRILE**
- Excellent Abrasion Resistance
- Synthetic Rubber, Latex Free
- Excellent Puncture Resistance
- Tactile Sensitivity and Flexible Grip

**FOAM LATEX**
- Micro Texture
- Better Breathability and Comfort
- Excellent Flexibility
- Resistant to Tears and Cuts

**FOAM NITRILE**
- Lightweight Micro Texture
- Good Grip in Wet or Dry Applications
- Breathable, Flexible and Porous
- Excellent Abrasion Resistance

**SANDY FOAM LATEX**
- Micro-Roughened Texture
- Better Breathability and Comfort
- Excellent Flexibility
- Resistant to Tears and Cuts

**SANDY FOAM NITRILE**
- Micro-Roughened Texture
- Excellent Grip in Wet or Dry Applications
- Breathable, Flexible and Porous
- Excellent Abrasion Resistance

**CRINKLE LATEX**
- Rough Texture for Better Grip and Abrasion
- Better Breathability and Comfort
- Excellent Flexibility
- Resistant to Tears and Cuts

**MICROFOAM NITRILE**
- Micro Textured
- Excellent Abrasion Resistance
- Good Grip in Wet or Dry Applications
- Breathable, Flexible and Porous

**PU (POLYURETHANE)**
- Semi-Smooth Texture
- Extremely Flexible
- Superior Dexterity
- Not as Durable as Nitrile or Latex

**FDG: WHY IS IT IMPORTANT?**

When dealing with Foam, Micro Foam or Sandy Foam Nitrile to get the best grip you must give up some abrasion resistance and to get the best abrasion resistance you have to give up some grip.

With FDG you no longer must give up any of these. You get the **BEST OF BOTH WORLDS**.

- **GRIP**
  - Good: Micro Foam Nitrile
  - Better: Foam Nitrile
  - Best: Sandy Foam Nitrile
  - Exceptional: **FDG™**

- **ABRASION**
  - Good: Sandy Foam Nitrile
  - Better: Foam Nitrile
  - Best: Micro Foam Nitrile
  - Exceptional: **FDG™**
FAST FACTS

CUT PROTECTION GLOVES

HEADQUARTERS
5305 Distriplex Farms Drive
Memphis, TN 38141
Toll Free: 877-723-4267
Phone: 901-388-7776 • Fax: 901-266-2558
www.radians.com

5131 fast facts_cut gloves_REV04