

# Safer Handcuffs

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# Slave Shackles

- Note wide area of contact, chain



- <https://www.reuters.com/article/instant-article/idAFL8N24H5HI>

# Modern Handcuffs

- Promote dominance & submission, convenience, potential injury
- Thin edge
- Hinged to reduce mobility



# Differences

- Modern handcuffs smaller, thinner
- More convenient
- More confining
- Smaller area of contact on wrist
- Easier to abuse
- More dangerous

# Plasticuffs

- Handcuffs based on zip ties
- No double locking prevention for over tightening
- Police do not carry removal tools
- Used for mass arrests
- Longer time under restraint
- Usage pattern increases injury
- “Plastic Handcuff Use by NYPD During Anti-Brutality Protests Strikes a Nerve”  
<https://www.thecity.nyc>

# Hand Position

- Hands in front was former convention
- Hands in back common after 1960's
- Palms facing together or apart (more common)
- Modern convention stresses shoulder, arm, wrist
- Increases chance of discomfort, pain, injury

# Handcuff Injuries

- Long lasting nerve damage, neuropathy
- Bruises
- Laceration, abrasion
- Exacerbate old shoulder injuries
- Blood circulation or tourniquet
- Falling is more likely and severe
- Merinthophobia (fear of bondage), PTSD

# Possible Permanent Injury

- “All handcuffs cause compression injury at the site of application.”
- “serious injuries, including neuropathies and fracture”
- “Handcuff-related injury to the most commonly affected nerve, the superficial radial, can be severe and permanent.
- In “Restraint Techniques, Injuries, and Death: Handcuffs” on <https://www.researchgate.net>

# Legal Concerns

- Overly tight handcuffs, rough application, and worsening existing injury may lead to
- Excessive force lawsuits
- Rare for police to be criminally charged

# Designing Safer Handcuffs

- Protect people we're supposed to hate
- Wider area of contact – rubber padding?
- Replace steel with nylon webbing?
- Integrated pressure sensor to avoid over tightening
- Commission an engineer to create
- Safer arm and hand position

# Alien Landscape

