Guidelines for Tattoo Image Collection

Summary

- ✓ Collect at least two photos – far away and zoomed close-up
- ✓ Plain background and uniform, diffuse, bright office lighting
- ✓ Tattoo is in focus with good contrast against skin
- ✓ No occlusions or background clutter
- ✓ Subject body limbs are parallel to the torso
- ✓ Minimum distance of 1 meter between camera and subject
- ✓ Minimum image size of 1920 x 2560 (5 Megapixels)
- ✓ JPEG format (compression ratio of 15:1 or less)
- ✓ Store and transmit in ANSI/NIST-ITL Type 10 format

Collect far away and zoomed close-up

Photo #1: Tattoo is far enough away to show the body location

Photo #2: Tattoo is centered and occupies majority of the image

Multiple Body Locations

Multiple tattoos

For distinctly separate tattoos on different body locations, collect separate images for each tattoo.

Multipart tattoos

For tattoos that span multiple body locations, collect multiple images from different location viewpoints with overlap where possible.

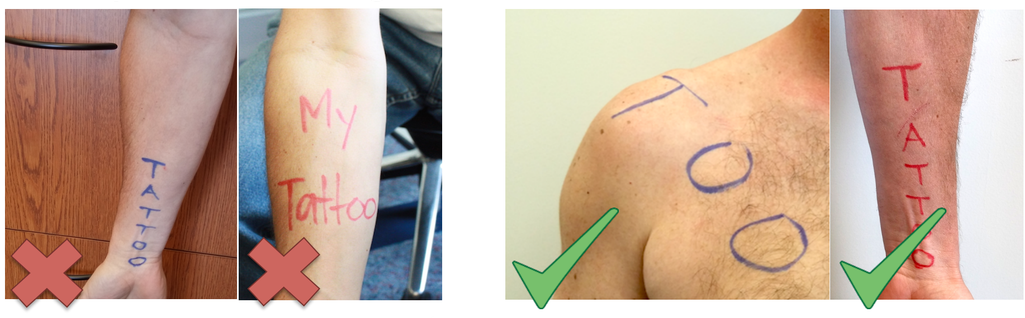
Full-body tattoos

For full-body tattoos, photograph the entire tattooed area, along with smaller areas of interest

Collection Considerations

Background

Use a plain, solid background



Ensure background and/or floor
- *is a plain, solid color*
- *does not contain any objects, clothing, or patterns*

Sensor Plane

Ensure tattoo is parallel to sensor plane

- *Adjust camera and/or subject position so tattoo is in straight view and not at a vertical or horizontal angle*

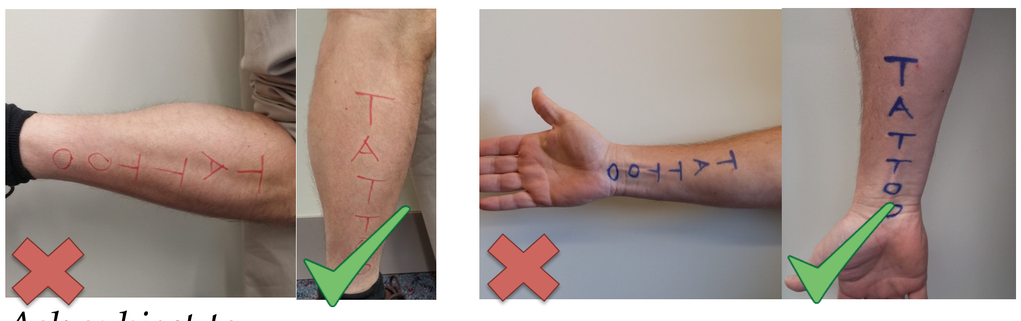
Body Hair

Avoid irrelevant body hair

- *In close-up photo, hairy regions that are not part of tattooed area(s) should be avoided*
- *Adjust camera position and zoom to minimize irrelevant body hair from camera field of view*

Orientation

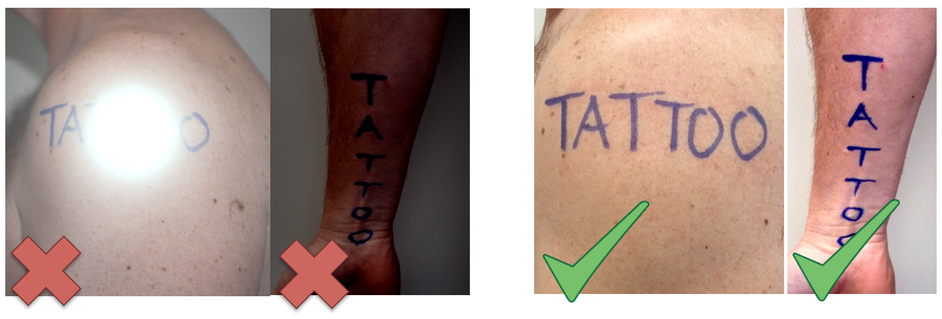
Ensure body limbs are parallel to torso



Ask subject to
- *stand upright with both feet on the ground*
- *point forearms towards the ground*

Illumination

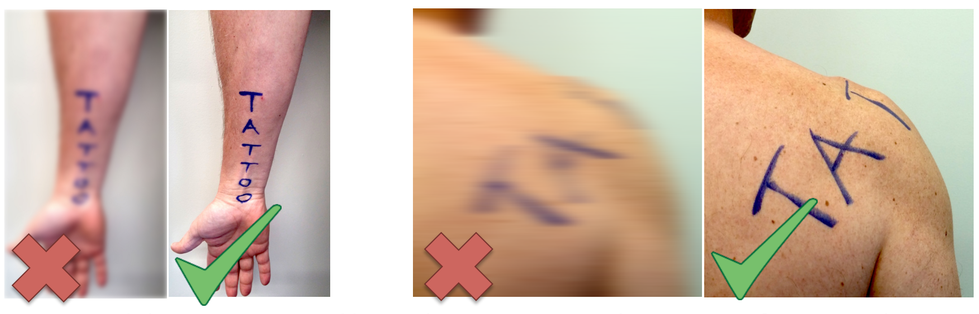
Ensure adequate lighting; avoid large shadows and hot spots



- *Employ adequate, uniform, diffuse lighting*
- *Adjust camera flash settings*
- *Recommend room light level of at least 500 lux*

Focus

Ensure tattoo is in clear focus; Avoid blur



- *Hold camera still and at proper distance from subject*
- *Ask subject to remain still*
- *Adjust lens focus*

For more details on tattoo image collection, please visit http://www.nist.gov/itl/iad/ig/tatt-bp.cfm

Tattoo Recognition Technology

NIST National Institute of Standards and Technology U.S. Department of Commerce

FBI Biometric Center of Excellence

Poster developed by NIST in furtherance of its statutory responsibilities under the Federal Information Security Management Act (FISMA) of 2002, Public Law 107-347.

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