Tattoo and Body Art

An Environmental Health Impact

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- Introduction & Outline
- Define "Tattoo"
- Tattoo Relationship
- History of Tattoo & Body Art
- Tattoo data
- Regulation
- Tattoo & Body Art complications
- Trends
- Looking to the Future
- Recap
- Resources

Introduction & Outline

Definitions

Merriam-Webster

• "An indelible mark or figure fixed upon the body by insertion of pigment under the skin or by production of scars."

N.C. General Statute 130A-283

 (a) – "As used in this Part, the term 'tattooing' means the inserting of permanent markings or coloration, or the producing of scars, upon or under human skin through puncturing by use of a needle or any other method."

Define "Tattoo"



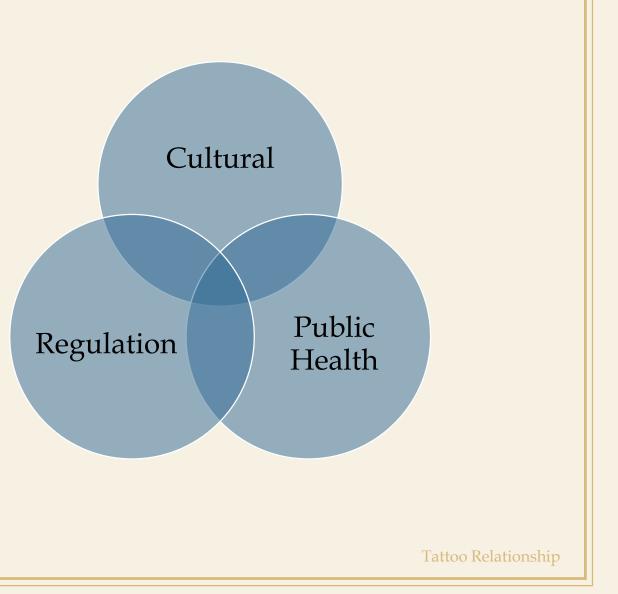
Slow motion of tattooing process

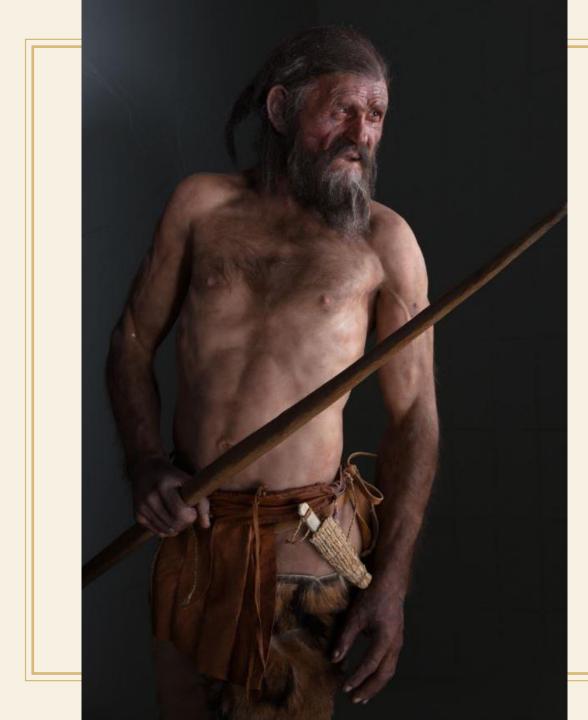
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Define "Tattoo"

Tattoo Relationships

- Cultural importance ranges from societal and religious beliefs, personal reasons, criminal, healing purposes, and many more!
- Regulation is constantly evolving. It can vary between Cities, Counties, States, and Countries.
- Public and Environmental Health impact both affects and is affected by Regulation and Cultural significance.
- Tattoos & Body Art are affected and affects all aspects of relationship.





Tattoo and Body Art History

Otzi the Iceman

• 5,300 years old!

Covered with over 50 "tattoos" or permanent markings

- Location of "tattoos" may have significance
- Method of application was important
- "Tattoo" style and application most likely was present 2,000 years earlier!

Early Tools and Applications

- 2,000 year old tattoo needle
- Needles are cactus spines while handle is from lemonade sumac and bound with yucca fibers





Early Civilizations and Tattoos

- Ancient Egyptian mummies found with various tattoos and markings
- Also found in China, Siberia, Peru, and more!
- Historical significance and evidence beginning to take shape





Tattoo and Body Art variations

Markings varied between civilizations

Cherokee

- Staining or painting faces
- Used natural colors: Red from clay, Black from soot or ash



Greco-Roman

- Permanent markers or tattoos
- Used for identification for military units or criminals



Cultures and Empires

We are beginning to get a glimpse of why tattooing and body art are important

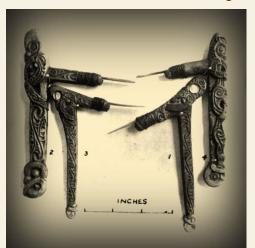
Persia	Greeks	Picts	Norse	S. Pacific	Japan
• Marked criminals for range of crimes	 Took idea from the Persians Also used for I.D. 	 Picti or "The Painted Ones" Northern Scotland Very fierce warriors 	 First described by Arab traders No actual evidence 	 Extremely important Varied between Islands and peoples Public health importance 	WarCrime
					History of Tattoo & Body Art

South Pacific

- Varied between Islands and Polynesian people (Maori, Samoa, Tonga, Tahiti, and more)
- First to address environmental health concerns
- Extreme importance for both application and style









Holocaust

Tattoo application and purpose

Jews

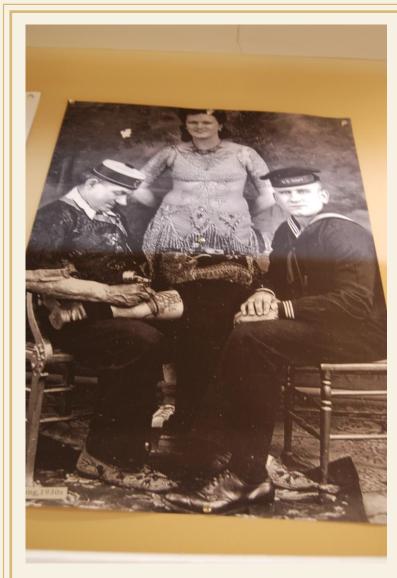
• Identification purposes



Tools and application

- Very painful
- Public health impact None







Var

Past & Current

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Past & Current

Japan

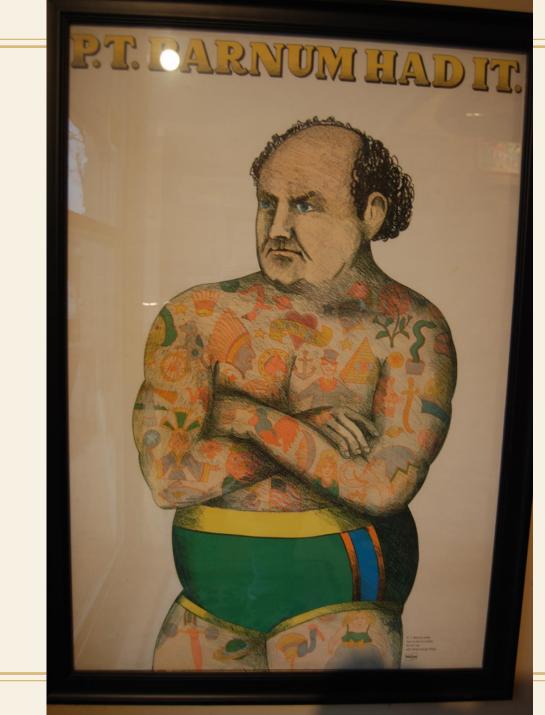
- General criminals
- Organized crime
- Body suits



El Salvador

• Gangs & MS13





Entertainment

"See the Tattooed man!"

• Circuses and "Freak Shows"

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- Trends and regulations are evolving
- Ethics
- "Do not resuscitate"

Prisons grapple with tattoo problem

'I lost a job because of my tattoos'

WA LEGISLATURE

Proposal Calls For Banning Eye Tattoos in Washington State

Canada has already banned this procedure.

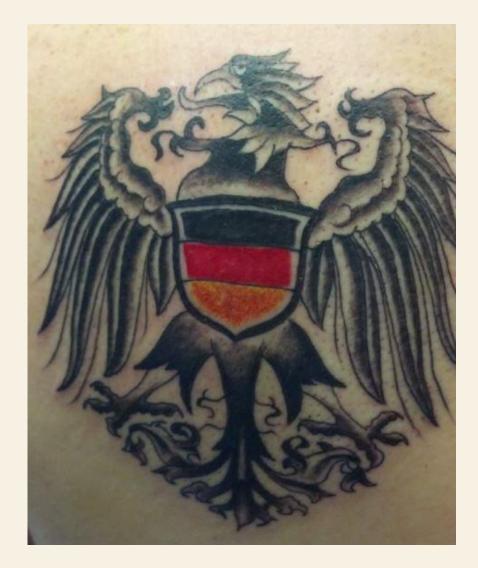
Boy, 8, left scarred after allergic reaction to henna tattoo

Mom claims tattoo removal left her with horrific scarring

People with tattoos have more sexual partners and more mental health issues, study declares



- What percentage of Americans have at least 1 tattoo?
- 5%?
- 10%?
- 20%?
- 50%?
- 80%?
- No accurate or readily available information from CDC or WHO. Why?



Tattoo Data

Regulation

- North Carolina G.S. 130A-283
- North Carolina 15A NCAC 18A .3200
- Effective April 1, 1995
- Amended effective November 1, 2002
- Purpose: To prevent bloodborne pathogens and environmental microbes
- Complaint based
- All or nothing approach to permitting artist

	Environmental Health Section Date of Insp/Chg			cility ID		<u>61</u>
ispe	ection of Tattoo Establishment Status Code:	Old	Facility	10 <u> </u>		
ater	Supply: Community 3 Non-Transient Non-Com	nmunity	Wa	ter sample take	1 today?	Yes No
	2 Transient Non-Community 4 Non-Public Water Supp			Inspection		Name Change
		~	2	Re-Inspection		Verification of Clo
	water System: 1 Community 2 On-Site System		M	Visit	H	Status Change
		Nar	ne of	VISIC		Sunto eninge
	of Establishment:	- Tatt	oo Artis	st:		
ocat	ion Address:	Ma	iling Ad	dr		
	State: NC Zip: City				States	
lity:		•				exp
	DRDS: (.3206; .3208) Records maintained for each patron include name, address, phone number.					
	date of birth, and signature					
2	Monthly records of bacterial endospore destruction tests maintained for					
	eachautoclave		_			
	OOROOM: (.3205; .3207; .3208; .3210) Separate and apart from areas used for other purposes					
3. 4.	Separate work stations for each artist					
5.	Room clean and good repair					
6.	Furniture easily cleanable, kept clean					
7.	Instruments, dyes, carbons, stencils kept in clean closed containers, case		_			
	or storage cabinet					
	Sterile instruments packaged in sterile containers					
	Rigid solid waste container with plastic liner					
0.	No animals or use of tobacco in tattoo room					
1.	No eating or drinking by artists in tattoo room					
ava	TORY: (.3203; .3204; .3207; .3208)					
2	Accessible to tattoo room					
	Use restricted to tattoo artists					
	Clean and good repair, kept free of storage					
5.	Hot and cold water under pressure, mixing faucet					
6.	Antiseptic soap and germicidal solution provided					
	Individual scrub brushes and fingernail files or orange sticks provided for each artist					
	Individual disposable hand towels provided					
	Approved water supply and sewage disposal					
лтт	OOING PROCEDURES: (.3208; .3209)					
0.	Hands washed thoroughly before each patron					
1.	Clean disposable latex gloves worn					
2.	Clean gown or lap cloth used					
3.	Sterile instruments handled by aseptic technique					
4.	Ink dispensed into disposable ink caps					
5.	Skin examined and only healthy skin tattooed					
	New disposable or sterile razor used Germicidal solution applied to skin					
	Only new sterile needles used					
o. 9.	Tattoo cleaned and sterile dressing applied					
	rando creane a and sterrie areasing upprice					
REC	AUTIONS: (.3207; .3208; .3209)					
0.	Blood and body fluid precautions taken					
1.	Protective coverings & lap cloths removed & disposed of or laundered.					
2.	Contaminated Equipment cleaned and disinfected	·				
3.	Contaminated instruments properly stored, cleaned, and autoclaved					
4.	Needles removed and placed in sharps container					
ISC	ELLANEOUS: (.3205; .3207; .3210)					
5.	Poisons in covered, labeled containers					
6.	Premises free of vermin, flies, or mosquito breeding places					
	Outdoor solid waste in watertight containers with tight lids, properly					
	secured					
8.	Litter and solid waste not allowed to accumulate	ĸ	eport			
isno	EIIS I.D.# Berg General Statute 190A-283 requires the Commission for Health Services to adopt rules go can is developed to be used in making impections of fathoo establishment. Preparation 1: pecision. Based on observations and information provided by the tattoo artist, place a check and one cocy for E. Original to be left with tables originatized. Copy for the local health dopt my sheet. Dispatibility of the weat of the second ketention and Disposition Schedule B16 for histor and Distory. Additional forms ung be ordered from: Environmental Health Section.)	D	again ad I	by:		
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EHS 4014 (Revised 4/12) Environmental Health Section

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Inspection items

Sample of items that must be present to obtain a permit

Regulation

Other States

Regulation varies from State to State

Virginia

- G.S. Title 54.1, Chapter 7
- Board for Barbers and Cosmetology
- Tattoo application be in good standing in every jurisdiction where licensed or registered
- Must have attended and passed an approved tattooing school and apprenticeship
- Must complete 1,500 hours as apprentice
- Must pass Board approved test

Oregon

- Div. 915, 331-915
- Graduate from an Oregon Licensed Career School for Tattooing
- Course must contain 360 hours of instruction
- Bloodborne pathogen training
- Documented minimum of 50 completed procedures
- Use and maintain equipment in accordance to manufacturer's specifications or not approved by the governing body and FDA
- Adhere to CDC precautions
- Must complete at least 10 hours of continuing education, regardless of status
- Also governs piercing, branding or scarification, and implants



Regulation is still evolving between Countries and Unions

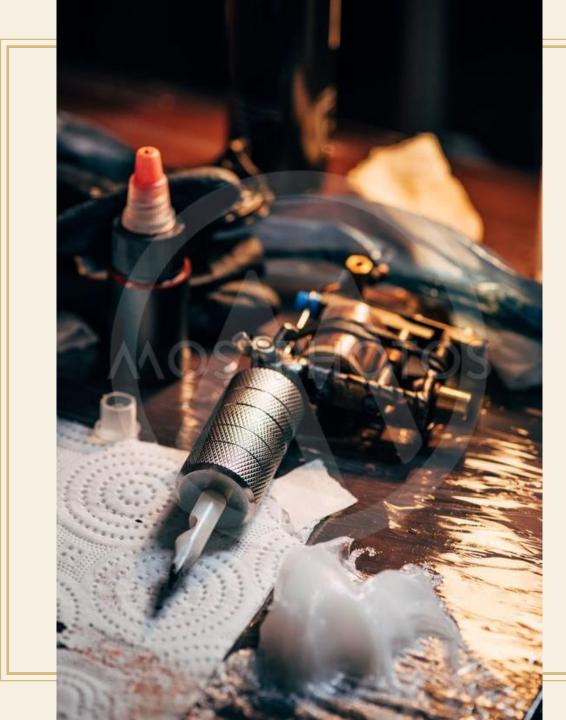
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England

- Laws and regulations
- Easily accessible information
- Priorities

European Union

- Culture vs. Science
- Cloudy regulations
- Centralized Government and data access
- Push for more data and sources for inks
- Medical concerns
- Priorities



General Regulation

Often overlooked facts about Tattoo and Body Art regulation in the U.S.

- Currently no regulation for inks in U.S. FDA
- Very little data available
- Bodily fluids are not considered medical waste
- Autoclave or single use?
- Sharps disposal container is loosely defined
- Bandaging type

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- No after care data or follow-ups
- Leading the way or falling behind?

Regulation



- Infections: HIV, Hepatitis B & C, Staph, and more
- Rash and allergic reactions
- Granulomas
- Keloid formation
- MRI burns
- Tattoo removal: scarring



Trends

- Implants
- Scleral "tattooing"
- Microblading
- UV or "invisible" tattoos
- Scarring
- Branding
- Social media impact
- Technology impact







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Evolving Regulations

Regulation

- H.B. 250
- Culture change
- Unintentional consequences leads to stricter rules
- More data available

Consequences

- Difficult to change
- Definitions change
- Unqualified inspectors
- Lobby groups
- Unintended/unforeseen/unwanted additions or changes to laws and rules

Recap

- Tattooing and Body Art have a long history
- The relationship between tattooing and body art directly affects and is affected by culture, regulation, and public health
- Very little data is available
- Regulation varies from City to City, County to County, State to State, and Country to Country
- The future of Tattooing and Body Art remains ever evolving
- Answer to initial question?



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Chuck Eldridge, Tattoo Archive, Winston-Salem, NC



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