

# Microbial Detections at Skin Penetration Businesses



## Project aim:

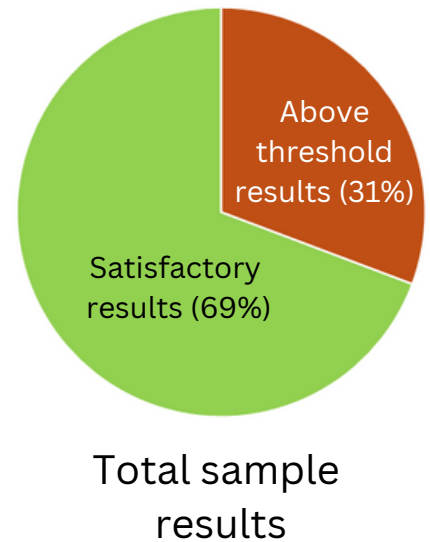
We examined the microbial safety of surfaces and appliances at skin penetration businesses like beauticians, spas and tattoo shops. They offer services such as manicures, pedicures, piercing, tattooing, waxing and others that are classed as skin penetration procedures.

## What's the risk?

When skin is damaged, pathogens can enter the body and infections can spread.<sup>1</sup> Microbiological risks in skin penetration businesses may be high due to limited enforcement provisions and variable staff training.<sup>2</sup>

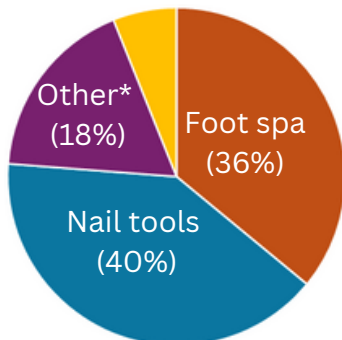
**Of the 573 samples tested, 31% of microbial detection results were above the threshold.**

	SPC/TPC	Mould	Yeast	Pseudomonas	CP Staph
<b>Threshold value</b>	≥100 cfu/ swab	≥10 cfu/ swab	≥10 cfu/ swab	≥10 cfu/swab	≥10 cfu/ swab
<b>Above threshold results</b>	164	28	16	6	4

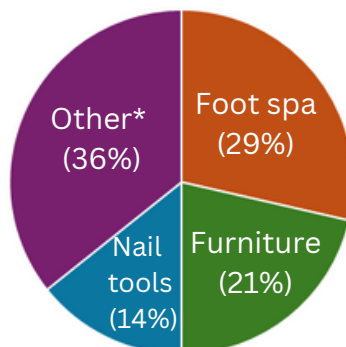


## Above threshold results by microbial analysis type

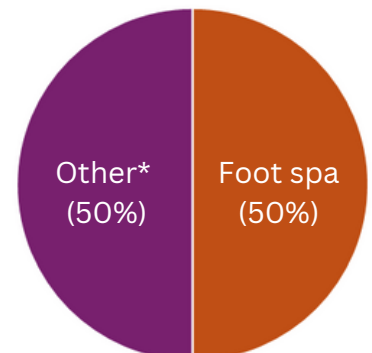
General beauty tools (6%)



SPC/TPC



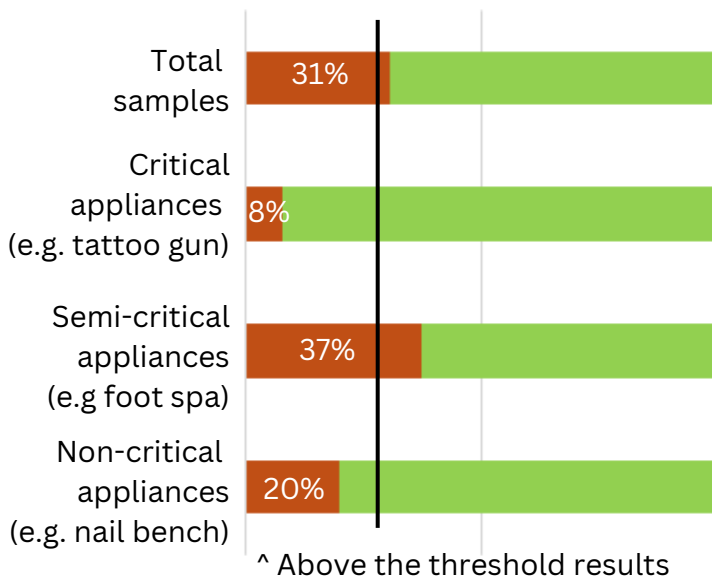
Mould



Pseudomonas

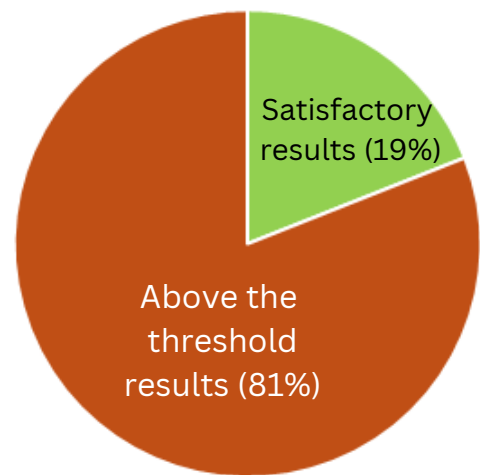
\*may include hair tools, furniture, foot tools, cleaning equipment, containers, facial tools, piercing tools cleaning equipment, body hair removal tools, tattoo tools

## Microbial detection results by Appliance Risk Category



^ Above the threshold results

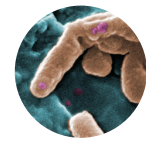
## Foot spa results



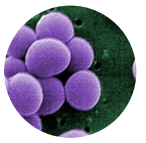
Mould



Yeast



Pseudomonas



CP Staph

## Key findings:

- Overall, the prevalence of mould, yeast, CP Staph and Pseudomonas in skin penetration business appliances is low.
- 37% of semi-critical appliance samples had microbial detections above the threshold.
- Foot spas were likely to have health risks than other appliances or surfaces with 81% of samples returning microbial detections above the threshold.

## Thanks to our participating LGAs:

- City of Armadale
- Shire of Augusta Margaret River
- City of Belmont
- City of Bunbury
- City of Busselton
- City of Canning
- Shire of Capel
- Town of Claremont
- City of Cockburn
- Town of Cottesloe
- Shire of Esperance
- City of Greater Geraldton
- City of Gosnells
- Shire of Harvey
- City of Kalgoorlie-Boulder
- City of Karratha
- City of Kwinana
- Shire of Manjimup
- City of Melville
- City of Nedlands
- City of Perth
- Shire of Serpentine-Jarrahdale
- City of Swan
- Town of Victoria Park
- City of Vincent
- City of Wanneroo

Complete report is available at:  
[www.lhaac.org.au](http://www.lhaac.org.au)

Contact LHAAC for more information:  
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### References:

1. Victorian Department of Health and Human Services. (2020). Infection prevention & control guidelines for hair, beauty, tattooing & skin penetration industries.
2. Environmental Health Directorate. (2021a). Advice for the beauty therapy industry.