

**Care of your hands**  
Practice Nurse Programme  
Rotorua National GP Conference  
2009

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Dermatologist  
Palmerston North

# Hand washing technique

- thorough for optimal hygiene control
  - Strong antibacterial / antiseptic agents
  - Prolonged scrub duration
  - +/- scrub brushes etc
- dry well
  - Easier to done gloves
  - reduces microbial proliferation

# Health care workers

- Irritant contact dermatitis is often found on the hands of healthcare workers and is generally caused by
  - frequent hand washing
  - aggressive disinfectants or detergents
  - gloves
- Frequent hand washing important and unavoidable
- What other steps can we take to minimise adverse impact?

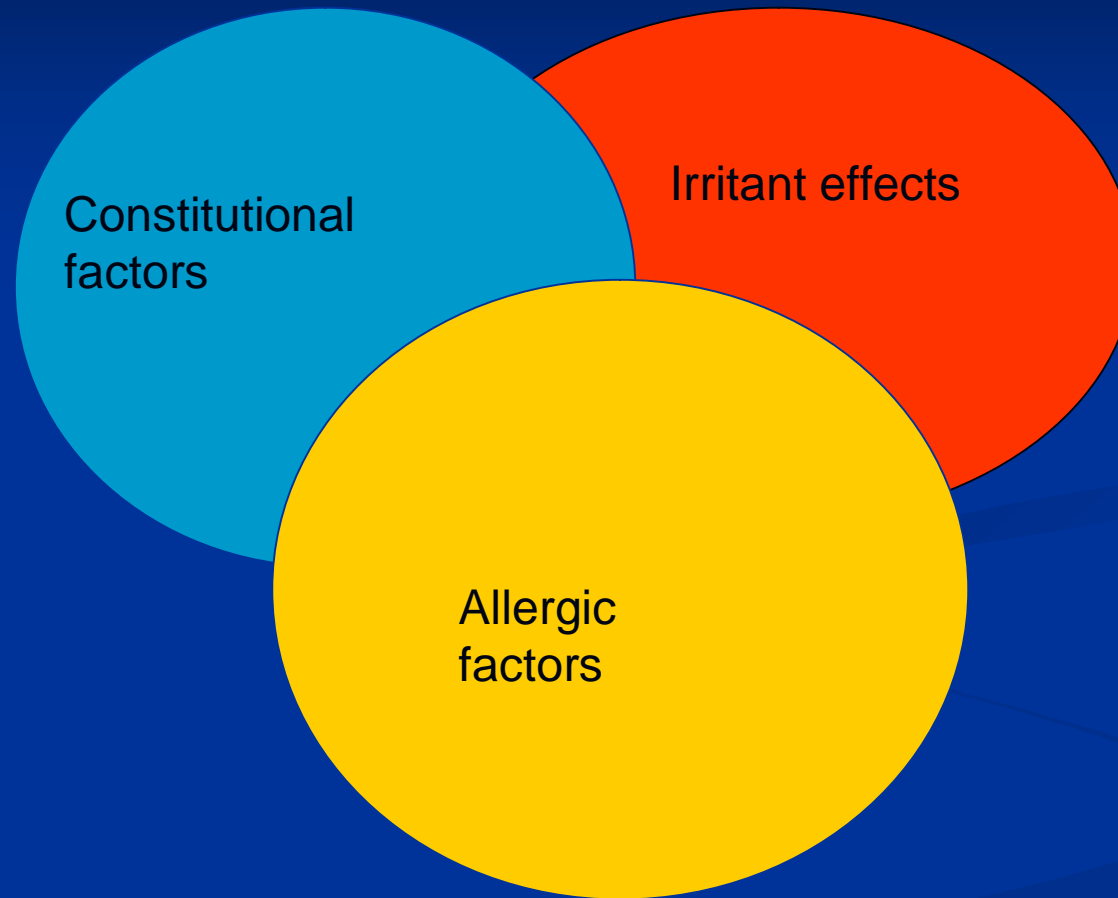
# Skin barrier

- Intact skin protecting interior from exterior
  - No breakages
- Sub-clinical impairment
- Eczema - inflamed “leaky skin”
  - reduced function / flexibility
  - morbidity
  - infection (especially bacteria / viruses)
  - allergies

# Irritant hand eczema



# Multifactorial causes of dermatitis



# Irritant eczema caused by

- Short infrequent exposure to strong irritant
- Regular repetitive exposure to less damaging irritant / irritants
- Variable pattern of exposure to varying strength of irritants
  - All with insufficient recovery time

# Irritant hand eczema: Web-space



# Risks from irritant hand dermatitis

- Contracting infection through damaged skin  
∴ wear gloves if contacting blood, body fluids, soiled linen, cleaning toilets etc
- If infected, and preparing food, could cause food poisoning
- Acquiring contact allergy

# Constitutional factors for hand eczema

- Skin resilience
- Atopy major predisposition to hand eczema
  - Counsel against high risk occupations e.g. nursing, hairdressing, baker, mechanics
- Dry skin
- Atopy predisposes to irritant eczema
- Irritant eczema predisposes to contact allergy

# Factors contributing to skin irritation

- Chemical e.g. detergents, excess water
- Temperature – extremes heat and cold
- Humidity
- Mechanical – e.g. rough surfaces, rubbing
- Ultraviolet rays (immunosuppression)
- Frequency and duration of exposure

Prevention of irritant contact dermatitis among health care workers by using evidence-based hand hygiene practices: a review.

[Ind Health. 2007; 45\(5\):645-52](#) (ISSN: 0019-8366)

Kampf G; Löffler H

Bode Chemie GmbH & Co KG, Scientific Affairs, Hamburg, Germany.

- 2 options for hand hygiene
  - hand washing with some type of soap and water
  - hand disinfection with alcohol-based hand rubs
  
- **alcohol-based hand rub superior for reducing nosocomial transmission infections**
  
- Washing with soap and water should be the exception,
  - perform only when skin visibly soiled or contaminated with proteinaceous material, blood or other body fluids.

Surgical hand antisepsis to reduce surgical site infection.

[Cochrane Database Syst Rev. 2008; \(1\):CD004288](#) (ISSN: 1469-493X)

Tanner J; Swarbrook S; Stuart J

De Montfort University and University Hospitals Leicester, Charles Frears Campus, 266 London Road,  
Leicester, UK, LE2 1RQ. jtanner@dmu.ac.uk

- Alcohol rubs used in preparation for surgery by the scrub team are as effective as aqueous scrubbing in preventing surgical site infections
- Limited evidence regarding the effects on colony forming unit numbers of different scrub durations.
- No evidence regarding the effect of equipment such as brushes and sponges.

## How irritant is alcohol?

[Br J Dermatol. 2007; 157\(1\):74-81](#) (ISSN: 0007-0963)

Löffler H; Kampf G; Schmermund D; Maibach HI

Department of Dermatology, University of California, San Francisco, CA, USA.

[harald.loeffler@med.uni-marburg.de](mailto:harald.loeffler@med.uni-marburg.de)

- Alcohol-based hand rubs cause less skin irritation than hand washing
- thus preferred for hand hygiene from the dermatological point of view
- An alcohol-based hand rub may even decrease rather than increase skin irritation after a hand wash due to a mechanical partial elimination of the detergent

# Reduction of mechanical and chemical irritation

- Alcohol hand rubs
  - Quick
  - Avoid exposure to detergent irritation
  - Obviate need to rub with paper towels
- No evidence to support use of brushes etc

# Alcohol hand rubs

- Use routinely
- More effective than soap and water
- Time saver
- Better on hands
- Choose perfume free e.g. Aqium over Purell

# Irritant contact dermatitis on healthcare workers' hands

- generally caused by:
  - frequent hand washing (*can't avoid*)
  - aggressive disinfectants or detergents

*Minimise by using alcohol hand rubs*

  - **gloves**

## CHEMICAL PROTECTION GLOVES

### TOUCH 'N' TUFF®

Offers a high level of resistance to nuisance nicks, cuts and abrasions and superior splash protection against irritating chemicals. Suitable for chemical handling, cleaning, manufacturing and horticulture. Ambidextrous. FDA (21CFR177) Compliant. Sizes: S, M, L, XL. 100 gloves per box.  
**CODE 122777** Touch N Tuff (lightly powdered)  
**122783** Touch N Tuff (powder free)



**Ansell**



### SOL-VEX®

Made from high performance Nitrile, glove is ideal for Chemical processing, Oil Refining, Machine operation, paint and workshop situations.

**CODE 128112** 33cm  
 Sizes: 6-11  
**128113** 46cm  
 Sizes: 7-11  
**129935** 33cm flock lined  
 Sizes: 7-10  
**403285** Diamond Grip flock lined  
 Sizes: 7-11



**Ansell**



### CHEMI-PRO™

Neoprene blend over natural latex rubber. Offers good flexibility and dexterity combined with high chemical, abrasion and tear resistance. Suitable for manufacturing, chemical handling, and the food industry. FDA (21CFR177) Compliant. Sizes: 8-10  
**CODE 129829**



**Ansell**



### THERMAPRENE™

Heat and liquid resistant. Intermittent protection against hot oils and water up to 200°C (Max 15 seconds). Suitable for hot food and chemical handling. Machine washable for longer wear. Sizes: 8-10  
**CODE 123277**



**Ansell**



### BARRIER®

A 5-layer flat film glove, offering extremely broad range chemical protection. Barrier features a non-woven polyethylene liner for wearer comfort and perspiration absorption. Suitable for the chemical and pharmaceutical industry and environmental cleanup. Sizes: 8-11  
**CODE 129925**



**Ansell**



### ALPHATEC™

AlphaTec™ is the first of a new generation of chemical resistant gloves. AlphaTec™ adopts the revolutionary new Ansell Grip Technology™ that enables the user to handle wet and slippery objects with less grip force and more control. Light to medium duty handling of slippery objects coated with wet chemicals. Ideal for chemicals handling, printing industry, automotive, agriculture and mining. Sizes: 8-10  
**CODE 402247**



**Ansell**



### PVA™

36cm polyvinyl alcohol coated organic solvent resistant glove with a cotton lining. Offers excellent protection against dangerous organic solvents. Suitable for chemical handling and processing, laboratories, and the printing industry. Size: M, L  
**CODE 128546**



**Ansell**

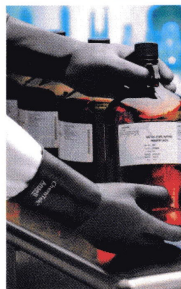


### CHEMTEK™

- Made from butyl or a combination of Viton® and butyl
- High resistance to most aggressive chemicals
- Viton® ChemTek provides broader range of chemical protection

Ideal for Chemical manufacturing, processing and handling, Chemical refining, Printing, Automotive, Mining, Disaster response

**CODE 403054** Butyl  
 Sizes: 7-11  
**403055** Butyl / Viton  
 Sizes: 8-10



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hand protection

# Gloves

- Right glove
  - Specially designed for specific application
- Comfortable
  - Correct fit
  - Flexible
  - Dexterity
  - Tactile sensitivity



## CHOOSING YOUR GLOVE

### CHEMICAL RESISTANCE

No glove made will resist all chemicals indefinitely. Chemicals that have contacted the glove material will permeate it. Therefore, it is best to avoid unnecessary contact of the glove with any chemicals. With the exception of PVA, wash gloves after use with mild soap and water and hang them up to dry.

If gloves show any swelling, colour change, wrinkling or other effects from contact with the chemicals, replace them immediately. Different kinds of gloves offer protection against the various chemical substances and mixtures.

Glove products will vary from one supplier to another in composition and performance results. Specific permeation data should be obtained from the supplier wherever possible to support the application for which the glove is intended.

We are able to supply this information where further advice is required.

Hazard	Natural Latex	Neoprene	Nitrile	PVC
Elasticity and Flexibility	EXCELLENT	GOOD	FAIR	POOR
Abrasion	FAIR	POOR	EXCELLENT	GOOD
Cut	EXCELLENT	GOOD	EXCELLENT	POOR
Tear	EXCELLENT	FAIR	POOR	FAIR
Puncture	FAIR	FAIR	EXCELLENT	FAIR
Acids	GOOD	EXCELLENT	GOOD	EXCELLENT
Bases	EXCELLENT	EXCELLENT	EXCELLENT	EXCELLENT
Disinfectants	GOOD	EXCELLENT	GOOD	GOOD
Oils and Greases	POOR	GOOD	EXCELLENT	GOOD
Hydrocarbons	POOR	GOOD	EXCELLENT	GOOD
Aromatic Solvents (styrene...)	POOR	POOR	GOOD	POOR
Chlorinated Solvents (perchloroethylene...)	POOR	POOR	FAIR	POOR
Ketonic Solvents (acetone...)	FAIR	GOOD	POOR	POOR
Acetates (butylacetate...)	POOR	GOOD	GOOD	POOR
Glycol ethers (ethoxyethylacetate...)	EXCELLENT	EXCELLENT	FAIR	POOR

### GLOVE MATERIALS

#### NATURAL LATEX

Excellent flexibility and resistance to tearing. Good resistance to numerous acids and ketones. Avoid contact with oils, greases and hydrocarbon derivatives.

#### NITRILE

Very good resistance to abrasion and perforation. Very good resistance to hydrocarbon derivatives. Avoid contact with solvents containing ketones, oxidising acids and organic compounds containing nitrogen.

#### NEOPRENE

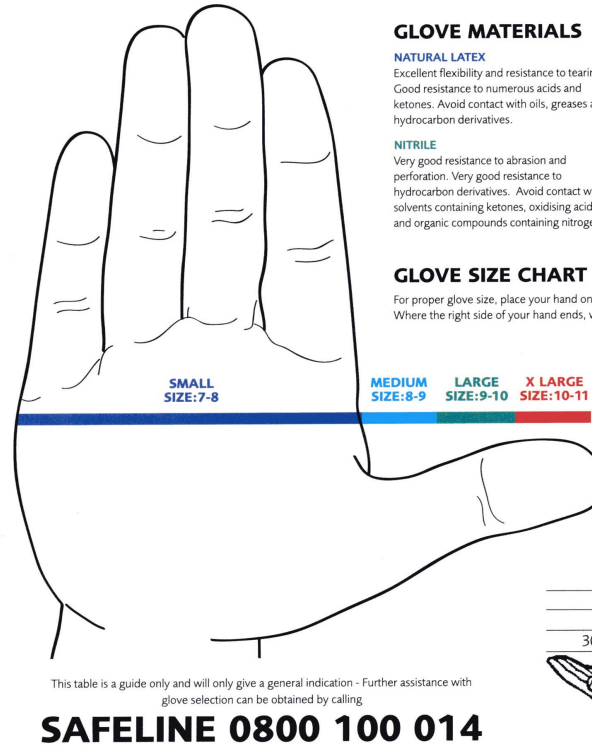
Multi-purpose chemical resistance: acids, aliphatic solvents. Performs well when exposed to sunlight and ozone.

#### PVC

Good resistance to acids and bases. Weak mechanical resistance. Avoid contact with solvents containing ketones and aromatic solvents.

### GLOVE SIZE CHART

For proper glove size, place your hand on the far left of the drawn hand print. Where the right side of your hand ends, will indicate what size glove you will fit.



This table is a guide only and will only give a general indication - Further assistance with glove selection can be obtained by calling

**SAFELINE 0800 100 014**

[www.nzsafty.co.nz](http://www.nzsafty.co.nz) 0800 NZSAFETY (0800 697 233)

hand protection

# Gloves

- Differ depending on fabric and construction
- Graded for
  - Chemical resistance
  - Mechanical rating

# GLOVE MATERIALS

## NATURAL LATEX

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Multi-purpose chemical resistance: acids, aliphatic solvents. Performs well when exposed to sunlight and ozone.

## PVC

Good resistance to acids and bases. Weak mechanical resistance. Avoid contact with solvents containing ketones and aromatic solvents.

# Gloves: Chemical resistance

- No glove made will resist ALL chemicals indefinitely
- Chemicals permeate glove material
- Choose glove for type for desired chemical resistance
- Ensure glove design and construction is suitable for its intended use

<b>Hazard</b>	<b>Natural Latex</b>	<b>Neoprene</b>	<b>Nitrile</b>	<b>PVC</b>
Elasticity and Flexibility	<b>EXCELLENT</b>	<b>GOOD</b>	<b>FAIR</b>	<b>POOR</b>
Abrasion	<b>FAIR</b>	<b>POOR</b>	<b>EXCELLENT</b>	<b>GOOD</b>
Cut	<b>EXCELLENT</b>	<b>GOOD</b>	<b>EXCELLENT</b>	<b>POOR</b>
Tear	<b>EXCELLENT</b>	<b>FAIR</b>	<b>POOR</b>	<b>FAIR</b>
Puncture	<b>FAIR</b>	<b>FAIR</b>	<b>EXCELLENT</b>	<b>FAIR</b>
Acids	<b>GOOD</b>	<b>EXCELLENT</b>	<b>GOOD</b>	<b>EXCELLENT</b>
Bases	<b>EXCELLENT</b>	<b>EXCELLENT</b>	<b>EXCELLENT</b>	<b>EXCELLENT</b>
Disinfectants	<b>GOOD</b>	<b>EXCELLENT</b>	<b>GOOD</b>	<b>GOOD</b>
Oils and Greases	<b>POOR</b>	<b>GOOD</b>	<b>EXCELLENT</b>	<b>GOOD</b>
Hydrocarbons	<b>POOR</b>	<b>GOOD</b>	<b>EXCELLENT</b>	<b>GOOD</b>
Aromatic Solvents (styrene...)	<b>POOR</b>	<b>POOR</b>	<b>GOOD</b>	<b>POOR</b>
Chlorinated Solvents (perchloroethylene...)	<b>POOR</b>	<b>POOR</b>	<b>FAIR</b>	<b>POOR</b>
Ketonic Solvents (acetone...)	<b>FAIR</b>	<b>GOOD</b>	<b>POOR</b>	<b>POOR</b>
Acetates (butylacetate...)	<b>POOR</b>	<b>GOOD</b>	<b>GOOD</b>	<b>POOR</b>
Glycol ethers (ethoxyethylacetate...)	<b>EXCELLENT</b>	<b>EXCELLENT</b>	<b>FAIR</b>	<b>POOR</b>

# Gloves for healthcare workers

- Non-powdered Latex gloves
  - Best protection against viruses
- Nitrile gloves if latex allergic
  - Usually blue, Dermaprene sterile green
- Vinyl gloves *not suitable*
- Risk of glove allergy ↑with irritant contact dermatitis

## DISPOSABLE GLOVES



### LATEX GLOVES

FDA (21CFR177) Compliant.  
Ambidextrous. Powdered.  
Box of 100. Sizes: S-XL.  
CODE 122106



pro safe

### NITRILE GLOVES

FDA Compliant powder free  
Nitrile gloves, ambidextrous,  
box of 100.

CODE 401660 290mm cuff  
Sizes: S-2XL  
401710 240mm cuff  
Sizes: S-2XL  
403616 290mm cuff  
doublelength  
Sizes: S-XL



pro safe

### CLEAR VINYL GLOVES

Powder free clear vinyl.  
Ambidextrous. FDA  
(21CFR177) compliant.  
Sizes: S-XL. Box of 100.  
CODE 501128



pro safe

### BLUE VINYL GLOVES

Powder free blue vinyl.  
Ambidextrous. FDA  
(21CFR177) compliant.  
Sizes: S-XL. Box of 100.  
CODE 403266



pro safe

### MED-X LATEX

Premium grade natural rubber single use  
glove. Form fitting and ambidextrous.  
FDA (21CFR177) compliant. Suitable for food  
processing and general industry applications.  
Sizes: XS-XL. Box of 100.

CODE 122416 Lightly powdered  
122440 Powder free



MED-X

### FRESHTOUCH™ VINYL (POWDER FREE)

A premium quality powder free glove that is ambidextrous. An alternative  
for people who have allergies to powder. Multi-purpose glove suitable for  
food preparation and general use situations. FDA (21CFR177) compliant.  
Box 100.

CODE 122823 Clear & Blue  
Sizes: S-L  
122831 Blue (1000)  
Sizes: S-XL



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### MED-X CO-POLYMER VET GLOVES (POWDER FREE)

- Light weight
- Ambidextrous
- Shoulder length protection
- Light green
- Box of 100
- Multifit

CODE 501093



MED-X

### MED-X HIGH RISK DISPOSABLE GLOVES

Ideal for high risk occupations and when extra  
protection is required.

- Natural Rubber Latex
- Powder free
- Thicker for increased protection
- Extended length – 290mm
- Blue for ease of identification
- Ambidextrous
- 50 gloves per box

Sizes: M-XXL  
CODE 500095



MED-X

hand protection

# Gloves for cleaning

- Reusable rubber gloves
- PVC gloves
- Cotton gloves underneath if necessary
  
- \* wearing rubber gloves >20minutes occlusive irritant dermatitis from sweating







## RUBBER GLOVES

### YELLOW RUBBER GLOVE

Flock free "Silver" inner silver lining for easy-on easy-off. Anti-slip honey comb pattern for good grip in wet and dry conditions. Chlorinated for improved chemical resistance. Glove is compliant with FDA regulations for use in repeated contact with food. Applications include food processing, agriculture, domestic/industrial kitchens, light assembly, laboratories and electronics.

Sizes: 6.5-10.5

CODE 401605



3010



prosafe

### BLUE RUBBER GLOVE

Flock free "Silver" inner silver lining for easy-on easy-off. Anti-slip honey comb pattern for good grip in wet and dry conditions. Chlorinated for improved chemical resistance. Glove is compliant with FDA regulations for use in repeated contact with food. Applications include food processing, agriculture, domestic/industrial kitchens, light assembly, laboratories and electronics.

Blue is the recommended colour for use with food.

Sizes: 6.5-10.5

CODE 401604



prosafe

### HYCARE™

A cotton lined rubber glove which offers durability and wearability in a range of hot and cold situations. Suitable for chemical processing, food handling and heavy duty cleaning. FDA (21CFR177) Compliant.

Sizes: S, M, L, XL

CODE 127582



X231



Ansell

### ULTRA GRIP YELLOW™

A general purpose latex glove with diamond grip pattern. Silver lined.

Sizes: S, M, L, XL

CODE 127612



X010



Ansell

### PREMIUM PINK™

A general purpose latex glove with pebble grip pattern. Silver lined.

Sizes: S, M, L, XL, XXL

CODE 129895



1010



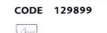
Ansell

### PREMIUM BLUE™

Economical natural rubber glove with silver lining for ease of removal. Designed for food industry use. FDA (21CFR177) compliant.

Sizes: 6.5, 7, 8, 9, 10

CODE 129899



1110



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hand protection

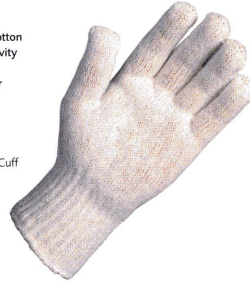


## KNITTED GLOVES

### POLYCOTTON

A standard, economical, polycotton knit glove. Allows good sensitivity and dexterity. Fully reversible, giving a longer life. Suitable for picking, packing and general assembly work.

**CODE** K316 Economy  
Sizes: S and L  
403230 Premium Long Cuff  
Sizes: L only



**prosafe**

### 100% COTTON

A fully reversible medium weight knit glove for use in areas where synthetic blends are not appropriate.

**CODE** 100K Small  
50KNIT Medium  
132K Large  
130K Fingerless



### 100% HEAVY COTTON

A fully reversible heavy weight knit glove for use in areas where synthetic blends are not appropriate.

Size: M  
**CODE** 103K



**prosafe**

### NYLON/COTTON

A blend of non-linting nylon and cotton. Fully reversible. Suitable for use in the food industry. Extra small.

**CODE** 99K



**prosafe**

### 100% NYLON

Manufactured from non-linting stretch nylon to ensure a snug fit. Suitable for use in the food industry. Fully reversible.

Size: M  
**CODE** 201K  
204K 80mm cuff  
202K Heavy duty



**prosafe**

### HEAVY DUTY NYLON

Manufactured from non-linting stretch nylon to ensure a snug fit. Suitable for use in the food industry. S - 2XL

**CODE** 403330



### COTTON FABRIC

A light cotton fabric glove offering excellent dexterity for light assembly work. Reversible and can be worn as an inner glove for extra protection.

**CODE** R7CL Hemmed cuff large  
R7W Hemmed cuff small



### LISLE KNIT WRIST

Manufactured from non-linting stretch nylon to ensure a snug fit. Suitable for use in the food industry. Fully reversible.

Size: Mens, Ladies  
**CODE** 403789 Mens  
403790 Ladies



**Ansell**

hand protection

# Glove mechanical rating

- Protection against mechanical risk varies with different gloves and is measured by
  - Abrasion resistance
  - Blade cut resistance
  - Tear resistance
  - Puncture resistance
- Ensure glove design and construction is suitable for its intended use

## COLD CONDITION GLOVES



### WINTER GRIP

Seamless brushed synthetic liner with a crinkle latex dipping. Brushed liner keeps hands warm in cold conditions, excellent grip. Applications include: Freezer/Cold storage, Construction, Warehousing, Shipping/Receiving and Farming.  
 Sizes: S-XL  
 CODE 401295



**prosafe** 3132

### NINJA ICE

Two-Layer Insulated Liner provides warmth with uncompromising flexibility. Proprietary HPT™ (Hydropellent Technology™) Coating. Unique coating formulation remains soft and flexible in temperatures as low as -50°C. Ideal for Cold Storage, Commercial Fishing, Agriculture, Construction/Utilities and Outdoor Winter Use.  
 Sizes: M-2XL  
 CODE 404314



**Ninja** 3232 02X

### POWERFLEX™ HI VIS YELLOW

General purpose glove that provides comfort and protection for the wearer in temperatures down to as low as -30°C. Bright yellow for added visibility.  
 Sizes: 7-11  
 CODE 403253



X231 020 X2XXXX

**Ansell**

### THERM-A-GRIP™

Foam insulation locks out cold and seals in warmth. Nitrile coating stays flexible, even at the lowest temperatures. Liquid-repellent Nitrile repels rain and snow, dirt and grease. Safer and more long-lasting than leather or other winter gloves. Ideal for Truck, fork-lift and crane driving, Working outdoors on construction sites, Cold-weather yard and field work.  
 Sizes: 9-10  
 CODE 401529

**Ansell** 3221



### POLAR FLEECE GLOVE

Polar fleece glove with reinforced palm patch to preserve the life of the glove.  
 Sizes: S-L  
 CODE 404312



### POLAR FLEECE MITT

Fleece mitt which turns into a fingerless glove to enable to operate machinery and able to write information.  
 Sizes: S-L  
 CODE 404313



hand protection



## ERGONOMIC AND ANTI VIBRATION GLOVES

### PALM GEL GLOVE

A leather glove with gel filled palm to protect against vibration. Designed for use with medium to high impact tools. Sizes: S-2XL  
CODE 129097



### ERGONOMIC GLOVE

Therapeutic support gloves that help prevent OOS. Sizes: E5-L  
CODE 129178



### ECONOMY WRIST STRAP

For repetitive tasks where RSI and other wrist injuries occur.  
CODE 1038



### POWER STRAP WRIST BRACE

Heavy-duty wrist brace providing support when using tools and equipment that put stress on the hand/wrist.  
CODE 1503



### 860

Finger less handling glove. Durable pig skin. Lap seam stitching eliminates pressure points in index finger for added comfort. Size: S - 2XL  
CODE 402396



### ANTI-VIBRATION LINER

Half finger liner with Gelform® composite pad in palm protecting workers from vibration. Can be worn under any work glove. Sizes: XXL  
CODE 49233LH left hand  
49333RH right hand



### 900

Gel glove, providing moderate protection from shock and impact. Abrasion-resistant breathable pigskin leather and stretch spandex. Neoprene knuckle pad. Sizes: S - 2XL  
CODE 402397



### ANTI-VIBRATION GLOVE

Hide leather gloves with Gelform® composite pad in palm, protecting workers from vibration. Suitable for use with all vibration tools. Sizes: M-2XL  
CODE 400255 Left hand  
400256 Right hand



hand protection

# Irritant contact dermatitis on healthcare workers' hands

- generally caused by:

- frequent hand washing (*can't avoid*)
- aggressive disinfectants or detergents

*Minimise by using alcohol hand rubs*

- Gloves

- *Choose correct glove for intended purpose*
- *Restrict duration or consider cotton gloves underneath*

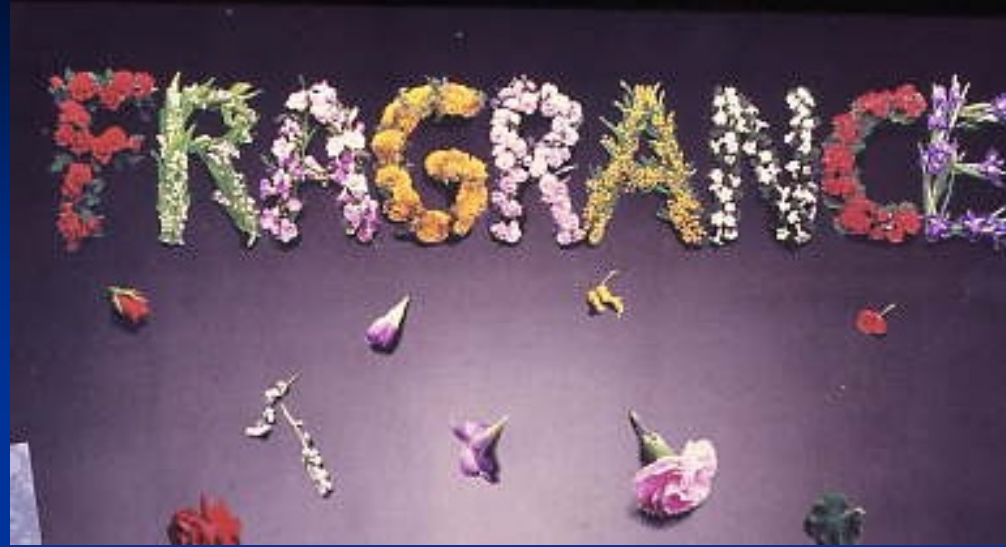
# Contact eczema

- Eczema resulting from contact with external
  - Irritants
  - Allergens
- Eczema begets eczema through damaged skin barrier
- Irritant hand eczema predisposes to allergic contact eczema



# Contact eczema - nickel





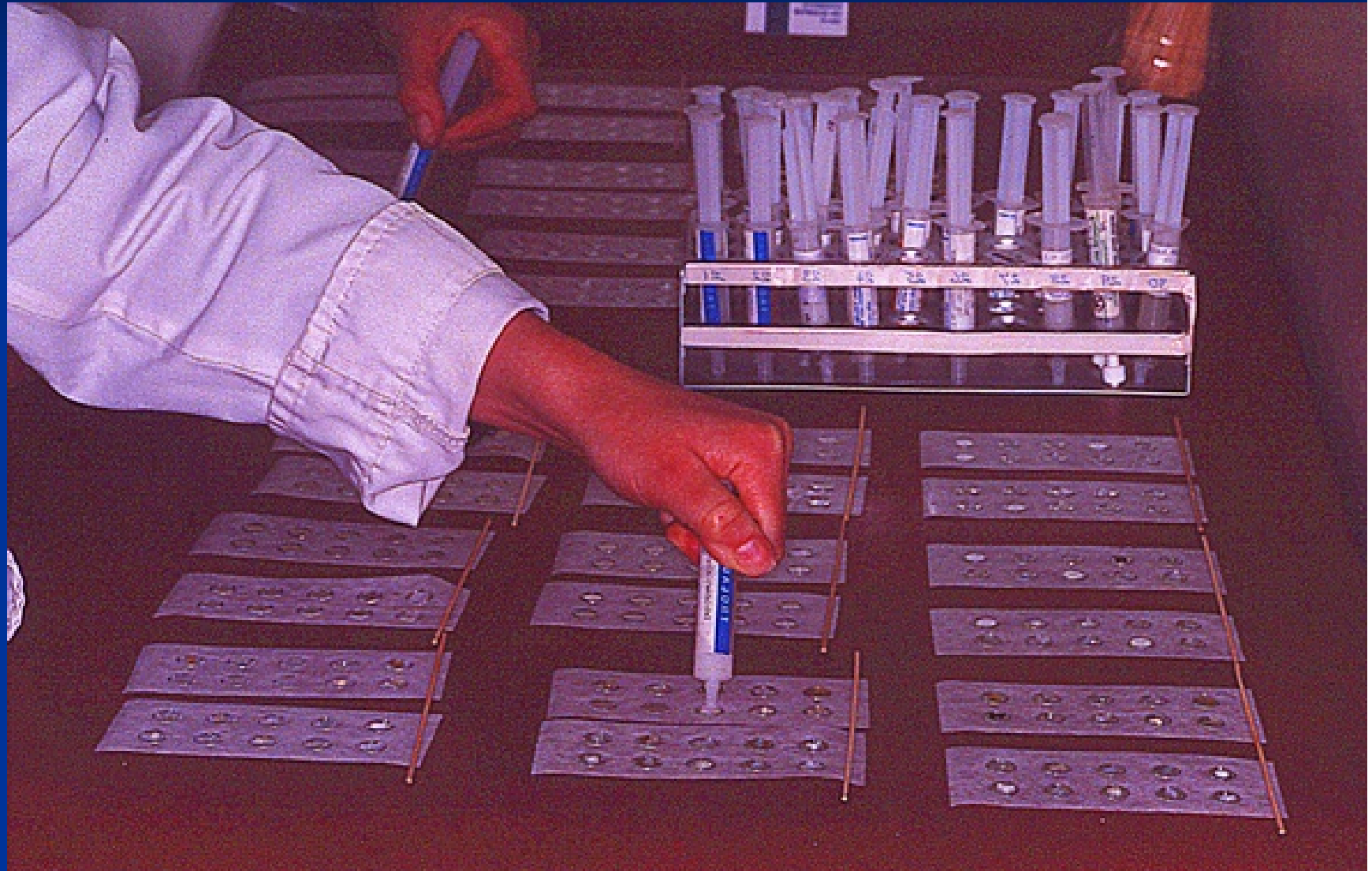
# Drug-induced



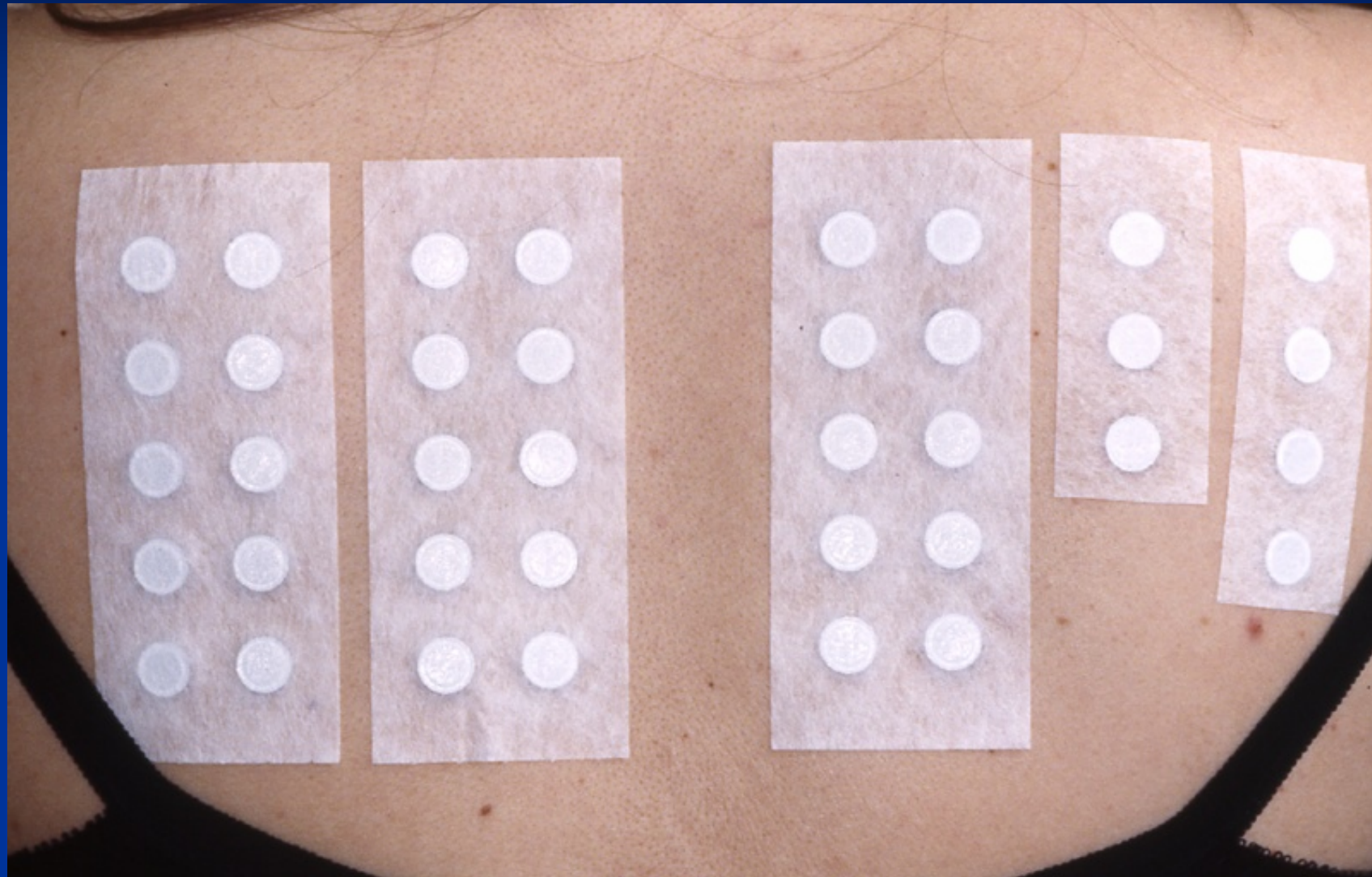
# Type IV / Patch testing for allergic contact eczema

- Specialised procedure
  - overall usefulness dependent on experience of physician interpreting results
  - clinical relevance of subject's reaction most important
- Expensive
  - Labour intensive & specialised imported testing

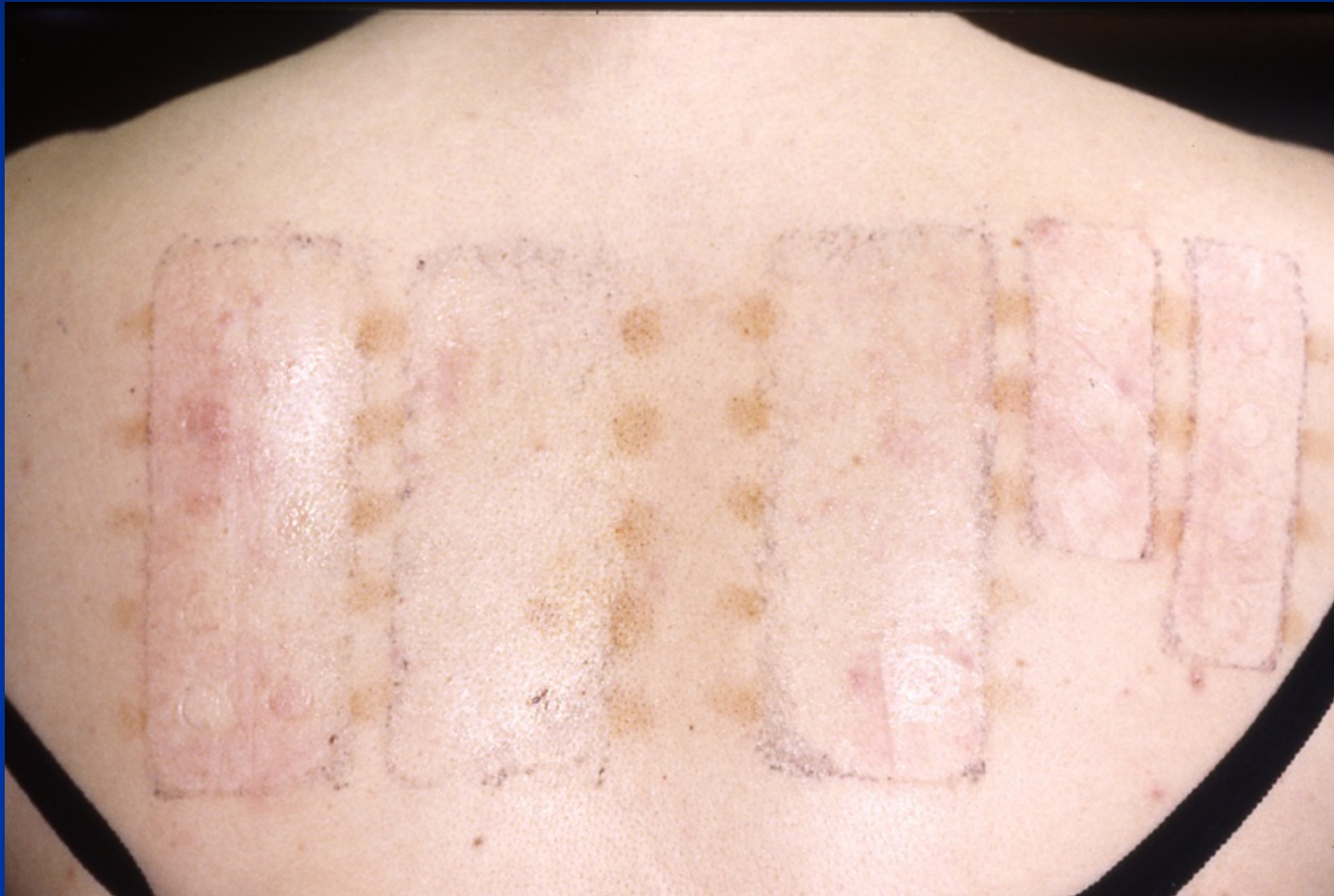
# Patch test preparation



# Patch test 0hrs



# Patch test 48hrs

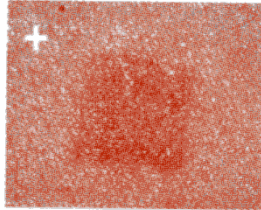


# Patch test 96hrs



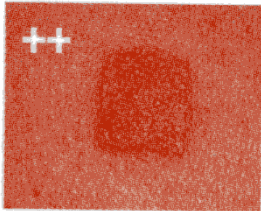
# Reading

## Pocket Guide to Patch Test Results



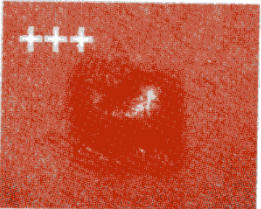
**+ Weak Positive Reaction**

- erythema
- infiltration
- papules



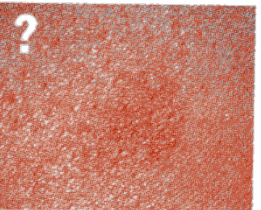
**++ Strong Positive Reaction**

- erythema
- infiltration
- papules
- discrete vesicles



**+++ Extreme Positive Reaction**

- coalescing vesicles
- bullous reaction



**? Doubtful Reaction**

- faint macular
- homogenous erythema
- no infiltration



**IR Irritant Reaction\***

- \* Discrete patchy erythema without infiltration

Please see prescribing information for further information



# Patch test results for hand eczema

- 60 % of those tested  $\geq 1$  positive reaction
- Of those with positive reactions
  - 71% nickel
  - 29% fragrance
  - 29% rubber
  - 26% hairdressing dyes
  - 24% formaldehyde
  - 15% lanolin





# Management

- Minimise irritants
- Avoid known allergens
- Treat damaged skin barrier / dry skin with frequent and liberal emollients
- Treat eczema promptly with potent corticosteroid weaning down to moderate potency
- Aim for *long term emollients* for treatment and prevention but *minimal topical steroids*

# Emollients

Ointment

Good for very dry skin

+ water + preservatives

cream

Good for less dry skin

+ water + preservatives

lotion

Good for hairy skin

# Emollients = moisturisers

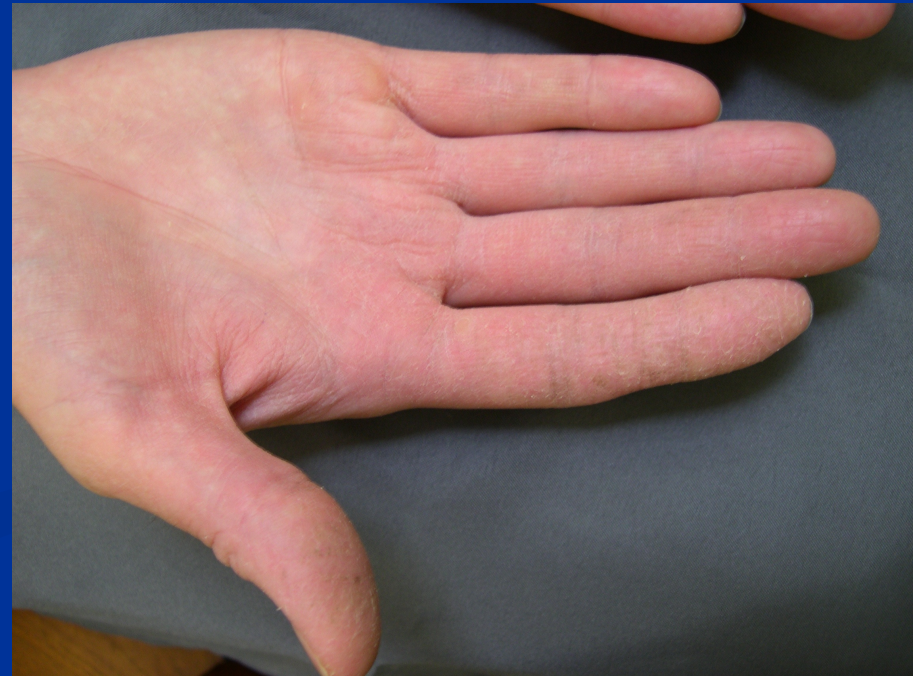
- Preferably choose non-perfumed
- Heavier ointments more hydrating but generally poorly tolerated
  - white soft paraffin, petroleum jelly / Vaseline,
    - Lipobase Repair, Neutrogena hand cream etc
  - Effective overnight under cotton gloves
- Use lighter / less greasy products during day
  - e.g. Cetomacrogol cream, Aqueous cream,
    - QV cream, Aveeno etc

# Moisturising balms, creams, lotions



# Corticosteroids

- Treatment for eczema
- Short-term potent
- *Not for treating dry skin*



# Hand care take home messages 1

- Irritant hand eczema is undesirable
  - Risk of infection for us and others
  - Reduced quality of life
  - Risk of allergic eczema
- Healthcare workers are at risk of irritant hand eczema through need for frequent hand washing

# Hand care take home messages 2

- Minimise risk by
  - Using alcohol hand rubs routinely
  - Soap / detergent wash for obviously soiled hands only
- Wear appropriately fitting gloves for intended task (work, home, recreationally)
- [www.nzsafty.co.nz](http://www.nzsafty.co.nz) useful resource
- Treat eczema promptly / optimise skin barrier
- Consider patch testing referral if eczema not improving