



# SCABIES in the community

## Scratching Below the Surface

# Picture it.....

- June 2018
- The day of the IPAC-MB conference
- My work phone rings.....



# It's a Friday of course...

- The call is from a private company that runs group homes...
- She is looking for disposable gowns
- I don't have access to any so I tell her to call a medical supply company in the city like Steven's
- I ask her why she needs gowns and she says she needs them for her workers in a group home because they have a scabies case...
- I put in a call to public health for more details.....a CDC

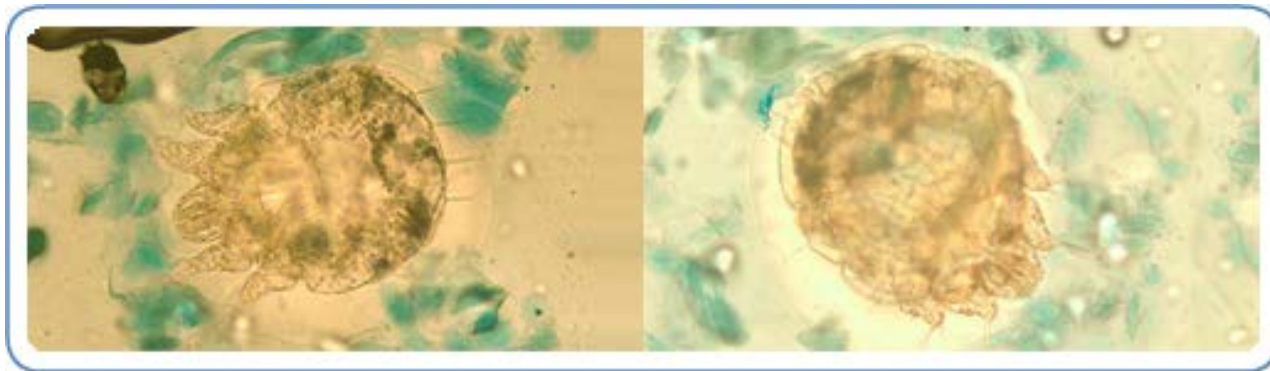
# The initial case

- Woman in her 50s
- Lives in a privately owned group home in the community
- Multiple health issues
- Non-mobile- uses wheelchair
- Non-verbal
- Workers noticed rash about 4- 6 months ago – PCP diagnosed eczema and provided cream
- Rash did NOT improve
- Multiple visits to walk in and ED
- Finally diagnosed with crusted scabies admitted to hospital for treatment
- Unfortunately the client was now deceased

# NOW WHAT?



# First let's review: Scabies – *Sarcoptes scabiei*



- Credit: DPDx

# What is Scabies?

- Scabies is a rash that occurs when very tiny bugs (mites) burrow into the skin and cause itching



# Clinical Presentation

- Presents like pimple-like (papular) rash
- Affects much of the body
- In typical scabies a person may have 10- 20 mites on their skin





# Where does itching/rash typically appear?

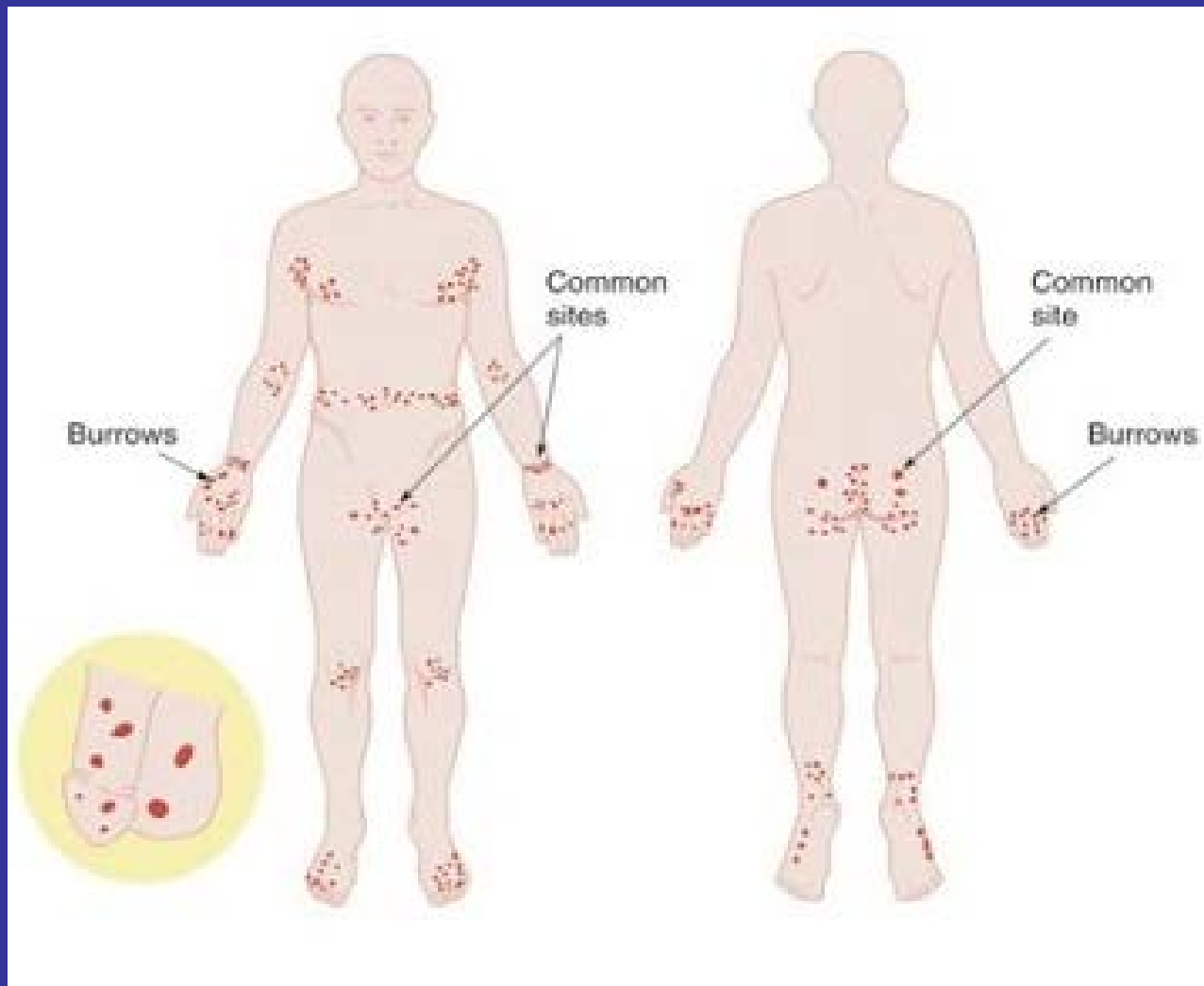
- It appears as a rash or small sores around finger webs



- As well as:
  - Elbows
  - Armpits
  - Male genitalia
  - Nipple areola
  - Skin folds
  - Around the waist
  - Lower portion of the buttocks



# Common Sites for Scabies



# But scabies can appear anywhere!



# In infants



- Rash in infants can also be seen on the:
    - Head\*, Neck\*, Palms, Soles of feet
- \*this presentation also seen in the elderly

# Burrows



Characteristically the burrows appear as tiny and crooked grayish-white or skin coloured lines on the skin surface

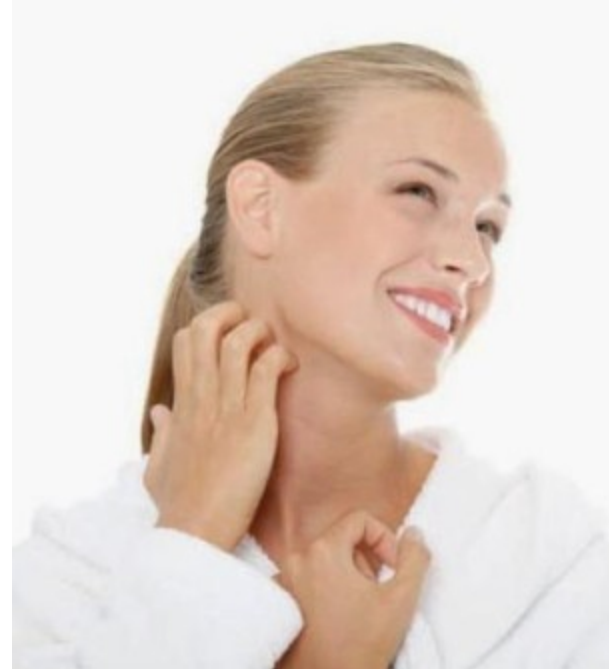
# Signs of scabies

- The itching is usually worse at night or after a bath.



# Why does it itch?

- Because of a sensitivity reaction to the proteins and feces of the mite!





# Onset of symptoms

- Symptoms usually develop 2-6 weeks after exposure
- If your client has had scabies before the itching usually begins 1-4 days after exposure

# Transmission

- The mite spreads through direct prolonged skin to skin contact (e.g.: moving a client around, bathing them)
- They can also be spread through significant touching of undergarments, sheets and pajamas of the patient (this can occur with healthcare workers)
- In your personal life scabies can be transferred to household members and sexual partners

# You should also know

- An infested person can spread scabies even if they have no symptoms (itch or rash)
- So you might not know if your client has scabies

# And another thing.....

- You can pick up scabies from an infested person as long as they remain untreated
- You can also pick up scabies from an infested person until 24hrs after treatment
- Mites do not live for more than 3 or 4 days without contact with skin

# Who gets scabies?

- Anyone
- However we typically see outbreaks in child care settings, long term care and prisons (environments where people are together a lot)

# Difficulties in Diagnosis

- Can be confused with other pruritic rashes such as:
- Eczema
- Impetigo
- Tinea corporis (ring worm)
- Psoriasis
- Or just plain old dry itchy skin
- Think scabies if they aren't responding to treatment for a different skin condition



# Confirming the Diagnosis

- Confirming the diagnosis of scabies often requires consultation to a Dermatologist or Infectious Diseases (ID) physician as it is difficult to diagnose
- Skin scrapings may be done by the Attending or ID physician, Dermatologist, or trained professional to confirm presence of scabies mites, ova, or inflammation caused by same

# Complications from Scabies

Intense itching

Skin sores/breaks in skin

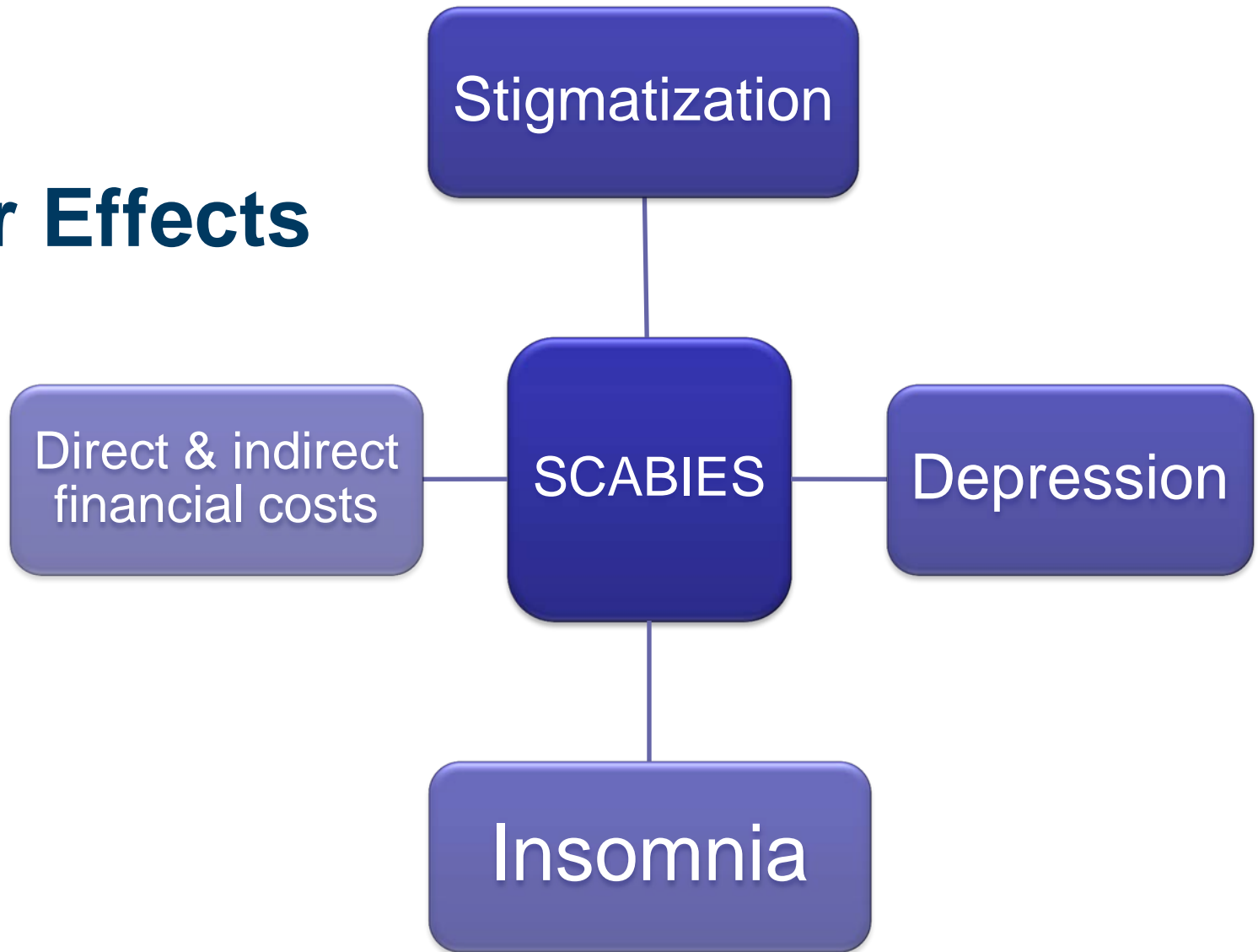
Infected from bacteria  
under nails or on skin

Impetigo, pyoderma with  
*S. aureus* and GAS

Complications of bacterial infections  
include: poststreptococcal  
glomerulonephritis and cardiac disease



# Other Effects



# Crusted Scabies (Norwegian)

- A rare condition caused by the host response to the mite
- Occurs in immunocompromised, elderly, disabled, developmentally delayed, malnourished or debilitated persons
- More often related to persons with HIV, human T-lymphotropic virus 1, Leukemia, T-cell lymphoma or autoimmune disease



Crusted Scabies *Sandre et al*

# Crusted Scabies

- Results in:
  - Hyperinfestation of mites (in the millions)
  - Severe inflammation
  - Hyperkeratotic reaction
- Approximately one-half of patients with crusted scabies do not report itching
- Is commonly misdiagnosed as psoriasis or eczema



Bart Currie, Menzies School of Health Research.

# Crusted Scabies

- Far more contagious than typical scabies
- Contacts only need minimal contact
- Exposure to crusted scabies is defined as minimal direct contact to an infested person before treatment until lesions have resolved
- A crust filled with mites can fall off. This shed crust can provide food and protection for the mites, allowing them to live for as long as 1 week without human contact.



# Crusted Scabies

- Requires “aggressive” treatment
- Can cause significant outbreaks
- Causes typical scabies in contacts rather than crusted scabies

# Treated individuals may still have some itching even after treatment



Some sources say up to 4 weeks!

# The initial case of crusted scabies

- Woman in her 50s
- Multiple health issues
- Non-mobile- uses wheelchair
- Non-verbal
- Workers noticed rash about 4- 6 months ago – PCP diagnosed eczema and provided cream
- Rash did NOT improve
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# Contact follow up....

- Not just for treatment but teaching as well
- Who all is involved?
  - Other residents of the group home (3)
  - Staff of the group home
  - Visitors to the group home
  - Did the client go on any outings where she would have had interaction with others?
  - WRHA Home Care Staff
  - Everyone's family



# Education

- Public Health took the lead
- Discussed scabies vs. crusted scabies with staff
- Risk of transmission
- Cleaning of the group home
- Treatment

# In the end

- None of the other residents had contact, staff watched for rashes
- Staff was affected, every one received treatment through the company that ran the group home
- Family of the staff were also affected (30-40 cases in the end?)
- Family of the client not involved
- Client didn't participate in activities outside the home
- WRHA contacts???

# But really it was just the beginning

- It happened again about 2 months later
- Very similar client
- Lived in a group home (not associated with the other group home – two different companies)
- Client had multiple health issues, non-verbal, non-mobile
- Took multiple trips to PCPs to get diagnosis
- Again the client was deceased while in hospital for treatment

# Education

- Public Health took the lead
- Discussed scabies vs. crusted scabies with staff
- Risk of transmission
- Cleaning of the group home
- Treatment

# Things were a little different this time

- None of the other residents had contact, staff watched for rashes
- No staff was affected/none of their family was affected
- Family of the client not involved
- Client didn't participate in activities outside the home
- WRHA contacts???

# Things come in threes.....

- The third case was an elderly lady in hospital
- Again the client was deceased
- Crusted scabies was listed on the cause of death
- Outbreak precautions in hospital (affected 2 units?)
- Client was receiving home care while in the community
- Multiple staff was involved
- PPH not involved, but did lots of education with Home Care support staff
- Some Home Care Staff were very anxious about bringing scabies home with them
- Lots of differing information for WRHA staff, not sure about follow up

# The Scabies tool kit (for CHS)

## Scabies Toolkit

Public Health Scabies Information for the General Public

Scabies frequently asked questions

SCRIPT - Notification of a Home Care Client with a Scabies exposure

What to do if you suspect Scabies in your HOME CARE client

WRHA Community Health Services Scabies Algorithm - CLIENT

WRHA Community Health Services Scabies Algorithm - HEALTHCARE WORKER

# The algorithms –

- [https://www.wrha.mb.ca/extranet/ipc/files/Tools/CHS\\_Scabies\\_Algorithm\\_CLIENT.pdf](https://www.wrha.mb.ca/extranet/ipc/files/Tools/CHS_Scabies_Algorithm_CLIENT.pdf)
- [https://www.wrha.mb.ca/extranet/ipc/files/Tools/CHS\\_Scabies\\_Algorithm\\_HCW.pdf](https://www.wrha.mb.ca/extranet/ipc/files/Tools/CHS_Scabies_Algorithm_HCW.pdf)



# ITCHY YET?



# QUESTIONS?

