Safer Care Victoria

VICTORIA State Government

February 2024

Protocol for Management of Herpes Zoster (Shingles)

Victorian Community Pharmacist Statewide Pilot

To receive this publication in an accessible format phone 03 9096 1384, using the National Relay Service 13 36 77 if required, or email
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Authorised and published by the Victorian Government, 1 Treasury Place, Melbourne.

ISBN 978-1-76131-470-4 (pdf/online/MS word)

Available at Safer Care Victoria www.safercare.vic.gov.au (2309598)

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1. About

This Protocol has been developed to provide pharmacists authorised under the Drugs, Poisons and Controlled Substances Regulations 2017 (the Regulations) a clear framework to supply the Schedule 4 poisons documented in this Protocol for the purpose of managing herpes zoster (HZ) under a structured prescribing arrangement. It is a requirement of the Secretary Approval: Community Pharmacist Statewide Pilot that pharmacists comply with this Protocol when supplying Schedule 4 poisons for patients seeking treatment for HZ. It is also a requirement of the Secretary Approval: Community Pharmacist Statewide Pilot that pharmacists have completed the designated pharmacist training requirements specified in the departmental guidance before supplying the Schedule 4 poisons.

Pharmacists authorised to supply Schedule 4 poisons under the Regulations must:

- Operate at all times in accordance with the *Drugs, Poisons and Controlled Substances Act 1981*, the Regulations and all other applicable Victorian, Commonwealth and national laws.
- At all times act in a manner consistent with the Pharmacy Board of Australia's (the Board) Code of Conduct and in keeping with other professional guidelines and policies as set out by the Board as applicable.

Pharmacists are also expected to exercise professional judgment in adapting treatment guidelines to presenting circumstances.

1.1. DEFINITIONS AND ACRONYMS

HCP: Healthcare practitioner

HPI-I: Healthcare Provider Identifier-Individual number

HZ: Herpes zoster (shingles)

MHR: My Health Record

NIP: National Immunisation Program

NSAID: Nonsteroidal anti-inflammatory drug

PHN: Postherpetic neuralgia

VZV: Varicella zoster virus

ZIG: Zoster immunoglobulin

2. Protocol for Management of Herpes Zoster (Shingles)

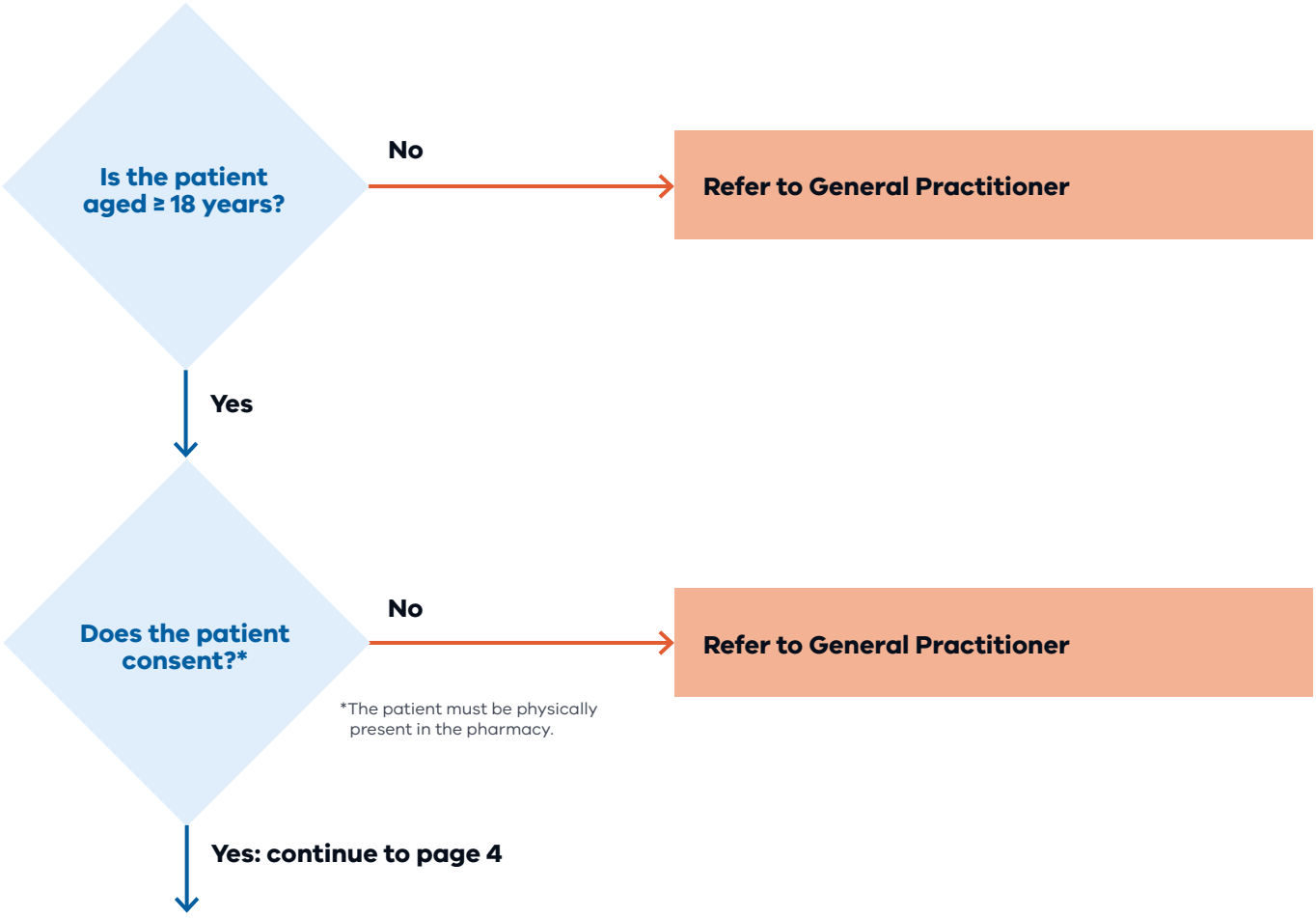
2.1. KEY TO COLOURS USED IN THIS PROTOCOL

Preliminary enquiries

Immediate referral

Refer to GP, ED or specialist

Care provided by pharmacist



Continued from page 3

CONDUCT CLINICAL REVIEW

Examination

Confirm presenting signs and symptoms indicative of HZ including a rash characterised by pain and blistering which usually appears on one side of the face/body and **does not** cross the body's midline.

- When examining patients, standard and contact precautions apply for cases of localised HZ
- PPE including gloves, gowns and/or masks should be used, and surfaces should be cleaned with neutral detergent and disinfectant after examination
- Ensure hand hygiene is being performed

Does the patient report any of the following?

- ☐ Hearing loss, hyperacusis (reduced tolerance to sound), tinnitus (ringing in ears) or otalgia (ear pain) but no rash can be identified
- ☐ Other symptoms suggesting Herpes Zoster Oticus (Ramsay Hunt syndrome)

Yes → **Immediate referral to General Practitioner for urgent review or local Emergency Department to confirm presence of HZ**

No

Does the patient have vesicular rash in or around the ear that can be confirmed as HZ?

Yes → **Refer to the Royal Victorian Eye and Ear Hospital Emergency Department if feasible, otherwise refer to local Emergency Department**

No: continue to page 5

Antiviral treatment by pharmacist may still be considered if clinically appropriate.

→ go to: **ANTIVIRAL THERAPY** section on page 8 below.

Continued from page 4

Does the patient report a rash affecting the eye or other symptoms suggesting Herpes Zoster Ophthalmicus?

- Skin symptoms can include acute vesicular rash that is unilateral
- Ocular symptoms can include pain, redness, watering, photophobia, blurred/ decreased vision

Yes

Refer to the Emergency Department

If rash affecting the eye has been present >72 hours, critical to have urgent ophthalmologist review if feasible. **Urgent referral to an ophthalmologist through General Practitioner or immediate referral to Emergency Department. If availability or location is an issue, a review by an optometrist may be appropriate.**

Antiviral treatment by pharmacist may still be considered if clinically appropriate.

→ go to: **ANTIVIRAL THERAPY** section on page 8 below.

No

Does the patient report a rash that involves the tip of the nose (Hutchinson's sign)

- Nasociliary nerve involvement significantly increases the risk of ocular involvement

Yes

Refer to the Emergency Department

Antiviral treatment by pharmacist may still be considered if clinically appropriate.

→ go to: **ANTIVIRAL THERAPY** section on page 8 below.

No

ASSESS

Patient history

1. Medication history including new medications
   - Review MHR as necessary, where possible/available
2. Medical history including complications, contraindications, pregnancy and/or breastfeeding

Continue to page 6

Continued from page 5

Does the patient report / present with any of the following?

- ☐ Diagnosis is unclear, including atypical cutaneous presentations
- ☐ Rash involving more than two separate dermatomes and/or crosses the body's midline
- ☐ Rash affecting genital area
- ☐ Patient presents with superinfection of HZ skin lesions including secondary bacterial skin infections
- ☐ Other complications of HZ including:
  - Neurological complications such as meningoencephalitis and myelitis (particularly in the elderly)
  - Scarring
  - Pneumonia
- ☐ Antiviral treatment is indicated but the patient is allergic to valaciclovir, famciclovir and/or aciclovir
- ☐ Patient is pregnant and does NOT have a past history of VZV (or known history)
- ☐ Patient is breastfeeding a neonate
- ☐ Early presentation with pain prior to onset of rash

Yes → **Immediate referral to General Practitioner for urgent review**

No: continue to page 7

Continued from page 6

Does the patient report / present with any of the following?

- Patient is immunocompromised or taking immunosuppressant medicines (regardless of the time lapsed since rash onset)
- Rash indicative of HZ affecting areas other than torso but excluding eye and ear (see above)
- Patient presents with complications of HZ including:
  - PHN
  - Disseminated zoster (VZV dissemination): Whilst most individuals have some lesions external to the primary dermatome, disseminated zoster is defined as 20 lesions outside of the dermatome and may be clinically indistinguishable from varicella infection.
- Patient is requiring pain management for neuropathic pain or moderate to severe nociceptive pain associated with HZ or PHN
- Patient is pregnant and has a definite history of previous VZV
  - Refer to treating obstetrician or shared care GP (also refer to perform urgent serology if uncertain of history of previous VZV)
- Patient has been previously vaccinated against HZ
- Patient is breastfeeding a baby aged over one month
  - Rash needs to be covered to reduce exposure to the baby, however noting this may cause difficulty in breastfeeding if HZ is affecting the breast

Yes

Refer to General Practitioner

Antiviral treatment by pharmacist may still be considered if clinically appropriate.

go to:
ANTIVIRAL THERAPY section on page 8 below.

No: continue to page 8

Continued from page 7

PHARMACIST CARE

PHARMACOTHERAPY

Does the patient have allergies, drug-drug interactions or any other contraindications to management options?

Yes → Where antiviral therapy is considered the appropriate treatment option but all recommended antivirals under this protocol are contraindicated, **refer patient to General Practitioner**

No

Has rash been present for longer than 72 hours? (For immunocompetent patients only)

Yes → Conservative management including symptomatic treatment with non-prescription medicines (if appropriate) can be recommended. **Refer to General Practitioner following provisional treatment by pharmacist**

No

CONSIDER ANTIVIRAL THERAPY

Provide antiviral therapy, where indicated

- Valaciclovir (1st line) 1g orally, every 8 hours for 7 days (42 x 500mg tablets) OR
- Famciclovir (1st line) 500mg orally, every 8 hours for 7 days (21 x 500mg tablets); 10 days for immunocompromised (30 x 500mg tablets) OR
- Aciclovir (2nd line) 800mg orally, 5 times a day for 7 days (35 x 800mg tablets)

→ Dispense medications via pharmacy dispensing software and label according to the legislative requirements outlined in the Drugs, Poisons and Controlled substances Regulation 2017

Continue to page 9

Continued from page 8

Provide conservative management with non-prescription analgesia for mild acute nociceptive HZ pain

- Paracetamol 1g orally, every 4-6 hours as required. Maximum dose of 4g in 24 hours AND/OR
- Ibuprofen 200-400mg orally, every 6-8 hours as required. Maximum dose of 2.4g in 24 hours AND/OR
- Lidocaine 5% patch, up to 3 patches applied at the same time to the painful area (after shingles has healed). Wear for up to 12 hours, followed by a patch-free interval

- Advise patient regarding follow-up for HZ vaccination at a later date.
- Provide non-pharmacological and supportive management advice
  - Care of lesions i.e., applying hydrogels such as Solugel™ or Solosite™ for lesions
  - Transmission and infectious precautions required until skin lesions have healed

Communicate agreed treatment plan:

- Treatment and management recommendations
- Counselling for antivirals and analgesics, including adverse effects
- Duration of treatment and expectations around duration of symptoms
- General health advice
- Infection control advice/outbreak measures
- Recommendations for vaccination
- Communicate with other health practitioners (especially high-risk patients such as immunocompromised patients, pregnant patients)

Document the consultation and share a record of the service with the patient, patient's usual treating GP or medical practice where the patient has one

Continue to page 10

Continued from page 9

Provide follow-up/clinical review:

- Progression of rash
- Worsening of clinical signs/symptoms
- Complications of HZ including management of PHN
- Adverse effects
- Communication with other health practitioners (if required)
- HZ vaccination follow up plan

Notify the Victorian Department of Health of HZ case within 5 days of initial consultation (see Section 3 for more information)

3. Clinical documentation requirements

The pharmacist must make a clinical record of the consultation that contains:

- Sufficient information to identify the patient
- Date of treatment
- Name of the pharmacist who undertook the consultation and their Healthcare Provider Identifier-Individual (HPI-I) number
- Consent given by the patient regarding: pilot participation, costs, pharmacist communication with other healthcare practitioners (e.g. patient's usual treating GP) and access to the patient's My Health Record for the purpose of checking inclusion/exclusion criteria and uploading information relating to the consultation as required
- Any information known to the pharmacist that is relevant to the patient's treatment's diagnosis or treatment and any observations and assessments including allergies and adverse drug reactions
- Any clinical opinion reached by the pharmacist.
- Actions and management plan taken by the pharmacist (including any medications supplied or referrals made to a medical practitioner)
- Particulars of any medications supplied to the patient (such as form, strength and amount)
- Information or advice offered to the patient in relation to any treatment proposed by the pharmacist who is treating the patient

The pharmacist must share a copy of the record of the service with the patient and, if the patient consents, with the patient's usual treating medical practitioner or medical practice, where the patient has one.

The pharmacist must make a record in the pharmacy software and an IT system approved by the Victorian Department of Health, regarding the supply.

The pharmacist must notify the Victorian Department of Health of a HZ (shingles) case within 5 days of seeing the patient, completing an online form available at: https://forms.business.gov.au/smartforms/servlet/SmartForm.html?formCode=cd_routine2022

Note that while this form is directed at medical practitioners and laboratories, for the purposes of the pilot, pharmacists are to use the same form. Where the form requests "Identifier Type", change the dropdown field to: "DHHS Notifier Reference". The pharmacist must then enter their AHPRA registration number: ***PHA0000XXXXXX****.*

Supplementary information

The supplementary information below provides additional guidance and information to Victorian pharmacists participating in the Community Pharmacist Statewide Pilot (the Pilot). It is intended to be used together with the guidelines and other resources referred to here to assist pharmacists in adhering to the management protocol and facilitate delivery of a safe and high quality HZ management service to the community.

4. Assess patient needs

Typical presentations of HZ can be diagnosed based on the patient history and examination for the characteristic appearance and distribution of the rash. The clinical presentation will vary depending on the person's age, general health and affected dermatome(s).

4.1. PRESENTING SIGNS AND SYMPTOMS

Prodromal symptoms

- Prodromal symptoms may be observed between 48-72 hours before the localised, characteristic vesicular rash becomes evident:
  - Localised nerve pain (usually described as stabbing, prickling, or burning)
  - Lethargy, fever, headache
  - Abnormal skin sensations such as burning, itching, hyperesthesia and/or paraesthesia
  - Photophobia (approximately 80% of cases)

Rash

- The HZ rash is typically unilateral with a dermatomal distribution and distinct anterior and posterior midline cut-offs, however some satellite lesions may also appear.
- New lesions will continue to erupt for 3 to 5 days within the locality of the affected nerve, becoming pustular, before scabbing and crusting over between 7 to 10 days.
- The most commonly affected areas are the chest, neck, forehead (ophthalmic) and lumbar/sacral sensory nerve supply regions.
- When the ophthalmic division of the trigeminal nerve is affected (herpes zoster ophthalmicus), the patient will present with a blistering rash around the eye/eyelid with associated pain, swelling and redness. Assessment within 24-48 hours by an ophthalmologist in the community or the Emergency Department at The Royal Victorian Eye and Ear Hospital is recommended. If availability or location is an issue, a review by an optometrist may be appropriate within the same timeframe.
- If the facial nerve is affected (herpes zoster oticus/Ramsay Hunt syndrome), symptoms include facial paralysis, ear pain, tinnitus. Additional symptoms that may be reported include hearing loss, blistering in and around the ear canal with or without facial paralysis, vertigo, change in taste sensation, dry eye, tearing, hyperacusis (reduced tolerance to sound), nasal obstruction, hoarseness or aspiration and dysarthria (weakness in muscles used for speech resulting in slowed or slurred speech).

4.2. COMPLICATIONS OF HZ

Complications occur in approximately 13-26% of patients with HZ (most prevalent in older people and those who are immunocompromised) and will require referral to a medical practitioner at presentation.

Postherpetic neuralgia

- Neuropathic pain that persists for at least 3 months beyond the duration of the rash and reoccurs (occurs in 10-50% of patients with the incidence increasing with age).
- Postherpetic pain may be sharp/shooting and intermittent, or described as constant burning, often with extreme sensitivity to touch (allodynia).

Herpes zoster ophthalmicus

- HZ affecting the ophthalmic branch of the trigeminal nerve with a high incidence of eye complications.
- It occurs in 10-25% of cases and commonly causes keratitis (approximately two thirds of cases) as well as conjunctivitis, uveitis, retinitis and glaucoma.
- Vesicles on the nose have been found to be predictive of eye involvement.
- Skin symptoms can include unilateral painful, red, vesicular rash on the forehead and upper eyelid.
- Ocular symptoms can also include pain, redness, watering, photophobia, blurred/decreased vision.

Herpes zoster oticus (Ramsay Hunt syndrome)

- HZ affecting the facial nerve resulting in ear pain, taste loss, facial weakness or paralysis, and other neurological symptoms.

Disseminated zoster (VZV dissemination)

- Whilst most individuals have some lesions external to the primary dermatome, disseminated zoster is defined as 20 lesions outside of the dermatome and may be clinically indistinguishable from varicella infection.
- Viral dissemination to the central nervous system and viscera (lungs, gut, liver, and brain) may occur.
- Occurs most frequently in immunocompromised patients, although rare overall.
- Disseminated zoster (or varicella pneumonia) can spread via the air. Airborne infection controls are required, and individuals should call ahead before attending a healthcare facility to ensure appropriate infection control measures.

Other complications

- Neurological complications such as meningoencephalitis and myelitis (particularly in the elderly)
- Secondary bacterial skin infections (referral to a medical practitioner for swab and skin culture is required)
- Scarring
- Pneumonia

HZ in pregnancy

- Pregnant women who are exposed to VZV (chicken pox or HZ) for the first time (no or uncertain history of previous chicken pox infection) may develop chicken pox which can have serious consequences, including maternal morbidity and mortality, fetal varicella syndrome and the associated abnormalities. *They must urgently be referred to a shared care medical practitioner (including an emergency service), treating obstetrician or pregnancy service immediately, as zoster immunoglobulin (ZIG) should be given to all seronegative women within 96 hours.*
- Unlike chicken pox, it is thought that reactivation of VZV during a healthy pregnancy is not associated with intrauterine infection or an increased fetal risk.

4.3. PATIENT HISTORY

Sufficient information must be obtained from the patient to assess the safety and appropriateness of any recommendations and medicines for the patient.

Consider:

- age
- pregnancy and lactation status (if applicable)
- nature, severity, and frequency of symptoms
- nature of rash (distribution, appearance, number of lesions)
- onset and duration of symptoms
- precipitating and relieving factors
- history of VZV infection
- co-existing and underlying medical conditions e.g., immunocompromise or auto-immune diseases including diabetes, rheumatoid arthritis, HIV, cancer, conditions treated with immune suppressants, or renal impairment
- current medications (including prescribed medicines, vitamins, herbs, other supplements, and over-the-counter medicines)
- drug allergies/adverse drug effects
- medication and other strategies tried to treat current symptoms
- immunisation status as per the Australian Immunisation Handbook (zoster and varicella vaccinations)

4.4. EXAMINATION

- Examination of the rash and documentation of its characteristics and location, as well as any signs of complications is important for the diagnosis of HZ and the exclusion of other conditions with similar presentations.
- Apply standard and contact infection precautions when examining patients.
- Laboratory confirmation is generally not required for typical presentations and uncomplicated cases of HZ. Confirmatory pathology testing (initiated by a medical practitioner) is required for cases where diagnosis is uncertain, or in cases of HZ in people who have been previously vaccinated against HZ.

Referral points – Summary

Pharmacists must refer the following patients to an appropriate medical practitioner (including immediate referral to emergency services if required). General health advice may be provided to these patients, but treatment should not be provided:

- Patient is under 18 years of age
- Diagnosis is unclear, including atypical cutaneous presentations
- Rash involving more than two dermatomes that crosses the body's midline
- Rash affecting genital area
- Patient presents with superinfection of HZ skin lesions including secondary bacterial skin infections
- Antiviral treatment is indicated but the patient is allergic to valaciclovir, famciclovir and/or aciclovir
- Patient is pregnant and does NOT have a past history of VZV (or known history)
- Rash is present for >72 hours
- Patient presents with other complications of HZ including:
  - Neurological complications such as meningoencephalitis and myelitis (particularly in the elderly)
  - Scarring
  - Pneumonia
  - Hearing loss, hyperacusis (reduced tolerance to sound), tinnitus (ringing in ears) or otalgia (ear pain) but no rash can be identified
  - Other symptoms suggesting Herpes Zoster Oticus (Ramsay Hunt syndrome)
- Patient is breastfeeding a neonate
- Patient complaining of ear pain, but no rash can be identified or early presentation with pain prior to onset of rash

Pharmacists can consider antiviral treatment (if appropriate and the criteria are met) and concurrently refer patient to a GP or other appropriate medical practitioner (including emergency services if required) for the following:

- Patient is immunocompromised
- Rash indicative of HZ affecting areas other than torso but excluding eye and ear (see above)
- Patient presents with complications of HZ including:
  - PHN
  - Disseminated zoster (VZV dissemination)
- Patient is requiring pain management for neuropathic pain or moderate to severe nociceptive pain associated with HZ or PHN
- Patient is pregnant and has a definite history of previous VZV
  - Refer to treating obstetrician or shared care GP (referral should recommend urgent serology if uncertain of history of previous VZV)
- Patient has been previously vaccinated against HZ
- Patient is breastfeeding a baby aged over one month
- Patient has vesicular rash in or around the ear that can be confirmed as HZ
- Patient has rash involving tip of the nose (Hutchinson's sign) or rash affecting the eye or other symptoms suggesting Herpes Zoster Ophthalmicus

5. Management and treatment plan

Antiviral treatment can reduce acute pain, duration of the rash, viral shedding, and ocular complications, if commenced within 72 hours of the first appearance of the rash but is not indicated in all patients.

Pharmacist management of HZ involves:

- Supportive management:
  - Education and advice regarding care for lesions (use of dressings, hydrogel, cleaning, and appropriate clothing)
  - Education and advice regarding transmission precautions in accordance with the advice from the Victorian Department of Health's webpage – Chickenpox and shingles (varicella/herpes zoster).
- Pharmacotherapy
  - Antiviral therapy in accordance with Shingles [published 2019 April; amended 2022 May]. In: *Therapeutic Guidelines*. Antiviral therapy is indicated for:
    - Immunocompetent adults who present within 72 hours of the onset of the rash
    - All immunocompromised patients (including those with a HIV infection) regardless of the time lapsed since rash onset
  - Analgesia for mild nociceptive HZ pain in accordance with Acute pain associated with shingles (herpes zoster) and Mild, acute nociceptive pain [2020 December]. In: *Therapeutic Guidelines* (i.e., oral paracetamol, nonsteroidal anti-inflammatory drugs (NSAIDs) or Lidocaine patch.
    - Patients reporting neuropathic pain or moderate to severe nociceptive pain must be referred to a medical practitioner.

Public health notification

HZ is a nationally notifiable disease and as such, pharmacists are required to notify cases to the Victorian Department of Health within 5 days of seeing the patient, completing an online form available at: https://forms.business.gov.au/smartforms/servlet/SmartForm.html?formCode=cd_routine2022

Note that while this form is directed at medical practitioners and laboratories, for the purposes of the pilot, pharmacists are to use the same form. Where the form requests "Identifier Type", change the dropdown field to: "DHHS Notifier Reference". The pharmacist must then enter their AHPRA registration number: ***PHA0000XXXXXX****.*

5.1. CONFIRM MANAGEMENT IS APPROPRIATE

Pharmacists must consult *Therapeutic Guidelines*, Australian Medicines Handbook and other relevant references to confirm the treatment recommendation is appropriate, including for:

- Contraindications and precautions
- Drug interactions
- Pregnancy and lactation

5.2. COMMUNICATE AGREED MANAGEMENT PLAN

Comprehensive advice and counselling (including supporting written information when required) as per the Australian Medicines Handbook and other relevant references should be provided to the patient regarding:

- Medicine use e.g. dosing
- How to manage adverse effects
- Infection control advice/outbreak measures
- Recommendations for vaccination against HZ
- When to seek further care and/or treatment, including recognising superinfection and HZ complications
- When to return to the pharmacist for clinical review

It is the pharmacist's responsibility to ensure the suitability and accuracy of any resources and information provided to patients, and to ensure compliance with all copyright conditions.

5.2.1 General advice

- Where appropriate, individuals may be provided with additional resources to support self-management of HZ. Factsheets and other information suitable for patients on HZ include:
  - The Victorian Government's Better Health Channel information on Shingles:
    - https://www.betterhealth.vic.gov.au/health/conditionsandtreatments/shingles
  - HealthDirect:
    - https://www.healthdirect.gov.au/shingles
- All patients should be advised to contact a medical practitioner if:
  - They are not responding to treatment; and/or
  - Their condition worsens; and/or
  - They are experiencing complications (as soon as the complications become evident) such as:
    - Secondary bacterial infections
    - Pain not relieved by non-prescription analgesia
    - Rash begins to affect areas other than torso including eye(s), ear(s) or forehead
- The incubation period of VZV ranges between 10 and 21 days (14 to 16 days on average).
- Skin lesions usually heal within 2-4 weeks although it may take longer, particularly for those that are immunocompromised or those with severe disease.
- As the rash resolves, the pain and systemic symptoms (e.g., fever, headache and fatigue) also subside with recovery complete in 2 to 4 weeks in most cases.

Preventing transmission

- The patient should be advised to inform any high-risk contacts (pregnant patients, patients who are breastfeeding a neonate, neonates in first month of life and immunocompromised individuals) who have had significant exposure to a person with active VZV (household contacts or where there has been direct face-to-face contact for 5 minutes or being within the same room for at least an hour) to seek medical care as soon as possible.
- People with HZ are infectious from 1-2 days prior to the onset of the rash, until vesicles have dried and scabbed (usually 5 days after the onset of the rash).
  - Rashes should be covered with appropriate dressings until the person is no longer infectious and contact with pregnant women and immunocompromised people must be avoided.

5.2.2 Zoster vaccination

- Vaccination against HZ is the best way to prevent HZ and reduce the risk of complications but is not indicated during an acute HZ episode or to treat PHN.
- People with a history of HZ can be vaccinated against a recurrence. Refer to the Australian Immunisation Handbook for appropriate vaccination timing after an acute episode, although generally immunocompetent patients should wait 12 months after an episode of HZ before they receive an HZ vaccine, while immunocompromised patients can receive Shingrix from 3 months after experiencing an HZ episode.
- From 1 November 2023, Shringrix replaced Zostavax on the NIP schedule for the prevention of shingles and PHN.
- The optimal age to be vaccinated against HZ will vary depending on the person's immune status and the individual's choice.
- In accordance with the Australian Immunisation Handbook and the National Centre for Immunisation Research and Surveillance (NCIRS), zoster vaccines are recommended for (unless contraindicated):
  - Immunocompetent people ≥ 50 years
  - Immunocompromised people ≥ 18 years
  - People aged ≥ 50 years who are household contacts of an immunocompromised person
  - Before administering a zoster vaccine, the pharmacist must consult the Australian Immunisation Handbook – Zoster and the NCIRS Zoster vaccines for Australian adults factsheet.

6. Follow-up/clinical review

Clinical review with the pharmacist should occur in line with recommendations in *Therapeutic Guidelines* and other relevant guidelines. Clinical review is recommended 48-72 hours after the initial presentation to assess for:

- Progression of the rash (particularly if the patient presented with prodromal symptoms prior to rash onset)
- Worsening of clinical signs and symptoms including neuropathic pain
- Screening for complications of HZ
- Adverse effects

During any follow up consultation with the patient, the pharmacist should provide advice regarding vaccination against further HZ infections. Noting for immunocompetent patients, this should occur at least 12 months after the infection and from 3 months for immunocompromised patients.

Where subsequent HZ vaccination has been administered, pharmacist immunisers should also provide follow up advice to patients. Refer to 'After vaccination' guidance in the Australian Immunisation Handbook.

7. Medicines

The Pilot authorises the supply of the antiviral medicines valaciclovir, famciclovir and aciclovir for the treatment of HZ where these are indicated.

Offer analgesia, including paracetamol and/or ibuprofen, to patients with symptoms of acute mild nociceptive pain associated with HZ. The combination of paracetamol and an NSAID is synergistic, and improved pain relief is achieved compared with either drug alone. If paracetamol alone is unlikely to provide adequate analgesia (e.g., pain with an inflammatory component), paracetamol and NSAIDs may be used together.

Treatment of acute, mild nociceptive pain

Analgesia: Paracetamol and/or non-steroidal anti-inflammatory drugs (e.g., ibuprofen)

- Paracetamol: 1g orally, every 4-6 hours as required. Maximum dose of 4g in 24 hours, OR
- Ibuprofen: 200-400mg orally, every 6-8 hours as required. Maximum daily dose of 2.4g in 24 hours; OR
- Lidocaine 5% patch: up to 3 patches applied at the same time to the painful area (after shingles has healed). Wear for up to 12 hours, followed by a patch-free interval*

Empirical antiviral therapy where indicated†

Antiviral	Dose	Contraindications
Valaciclovir (1st line)	1 g orally, 8-hourly for 7 days	Previous serious adverse reaction to valaciclovir or its active metabolite aciclovir
Famciclovir (1st line)	500 mg orally, 8-hourly for 7 days. For immunocompromised patients, duration is 10 days	Previous serious adverse reaction to famciclovir or its active metabolite penciclovir
Aciclovir (2nd line)	800 mg orally, 5 times daily (during waking hours) for 7 days	Previous serious adverse reaction to aciclovir Renal impairment Treatment with other nephrotoxic drugs

* A patch-free interval is recommended to help maintain skin integrity. Patients may wear lidocaine patches for longer than 12 hours if they experience pain during the 12-hour patch-free interval and skin integrity is maintained; however, avoid continuous use.

† If the rash has been present for less than 72 hours, antiviral treatment reduces acute pain, duration of the rash, viral shedding, and ocular complications.

Pregnancy:[1]

- Aciclovir: Preferred as there is more clinical experience and greater number of published studies available.
- Famiciclovir: Limited information.
- Valaciclovir: Metabolised rapidly to aciclovir. Limited information available.

Breastfeeding:[1]

- Aciclovir: Breastfed infants unlikely to experience adverse effects following maternal use, as the amount of aciclovir reaching the infant is <1% of the treat dose used for the infant. Safe to use during breastfeeding.
- Valaciclovir: Metabolised rapidly to aciclovir. Small amounts are excreted into breast milk, but these amounts are unlikely to pose harm to the breastfed infant. Considered safe to use during breastfeeding.
- Famiciclovir: No published reports describing the use of famiciclovir during breastfeeding and effects of famciclovir in breastfed infants is unknown. Consider alternative, such as aciclovir during breastfeeding.

1 The Royal Women's Hospital Pregnancy and Breastfeeding Medicines Guide, 2023; accessed 18 October 2023. https://thewomenspbmg.org.au/

8. Resources for pharmacists

Therapeutic Guidelines: Antibiotic [digital] – Antibiotic [published 2019 April; amended 2022 May]. In: *Therapeutic Guidelines*. Melbourne: Therapeutic Guidelines Limited; accessed November 2023. https://www.tg.org.au Relevant topics are Shingles and Herpes zoster ophthalmicus.

Therapeutic Guidelines: Pain and Analgesia [digital] – Pain and Analgesia [2020 December]. In: Therapeutic Guidelines. Melbourne: *Therapeutic Guidelines* Limited; accessed November 2023. https://www.tg.org.au Relevant topics are Pain associated with shingles (herpes zoster), Postherpetic neuralgia and Mild, acute nociceptive pain.

Australian Medicines Handbook:

- Antivirals (Guanine analogues)
- Zoster vaccines

Australian Immunisation Handbook - Zoster (herpes zoster)

MSD Manual (Professional version) – Herpes Zoster

DermNet NZ:

- Herpes Zoster
- Herpes Zoster images
- Blistering skin conditions
- Dermatomes

Mayo Clinic – slide show: common skin rashes

Victorian Department of Health - Chickenpox and shingles (varicella / herpes zoster)

The Royal Victorian Eye and Ear Hospital Clinical Practice Guideline: Herpes Zoster Opthalmicus

Professional Practice Standards

https://www.psa.org.au/practice-support-industry/pps/

Patient information

Better Health Channel 'Shingles':

- Shingles – Better Health Channel

Health Direct:

- https://www.healthdirect.gov.au/shingles

ACKNOWLEDGEMENT

This protocol has been adapted from the draft Herpes Zoster (Shingles) Clinical Practice Guideline from Queensland Health and the NHS Scotland National Patient Group Direction for Supply of aciclovir tablets (Version 1.0).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