



An Introduction to Arizona's Infectious



Diseases



Table of Contents:

Coccidioidomycosis	p. 3
Rocky Mountain Spotted Fever	p. 4
Plague	p. 5
Tularemia	p. 6
Hantavirus Pulmonary Syndrome	p. 7
State Reporting Requirements	p. 8
Expedited Partner Therapy	p. 9

Diseases endemic to Arizona:

- ◆ Hantavirus Infection
- ◆ Plague
- ◆ Psittacosis
- ◆ Tularemia
- ◆ West Nile Virus
- ◆ Coccidioidomycosis (Valley Fever)
- ◆ Legionellosis (several serogroups)
- ◆ Primary Amebic Meningoencephalitis (PAM)
- ◆ Rocky Mountain Spotted Fever (RMSF)

Diseases not endemic* to Arizona:

- ∅ Lyme Disease
- ∅ Histoplasmosis

* Cases may be imported from endemic areas



Coccidioidomycosis (Valley Fever)

Why is this important to Arizona?

- **Causes 15%-29% of community acquired pneumonia (CAP) in Arizona**
- Over 7,000 cases reported each year
- The second most commonly reported disease in Arizona

When is this on my differential?

- Chronic cough, if not responsive to anti-reflux medications
- Community acquired pneumonia
- People who work outside or in dusty conditions
- People who pursue recreational activities in the desert (e.g. biking or driving ATVs)

What do I need to do?

CONSIDER cocci serologic testing for CAP and chronic cough cases

REASSURE patients that disease is not contagious person-to-person

TREAT confirmed cases with antifungals if severe or systemic infection

REPORT confirmed cases to your local health department

The Valley Fever Center of Excellence is available for medical consultation,
at (520) 626-6517

Rocky Mountain Spotted Fever



Why is this important in Arizona?

- RMSF has a 25% fatality rate if not treated within first 5 days of onset
- Tribal communities in Arizona have:
 - ◆ 300x higher incidence than U.S.
 - ◆ 15x higher fatality than U.S.

When is this on my differential?

- **Patients that live or visit tribal communities**
- Risk factors: exposure to tick infested dogs or tick infested areas
- Fever \geq 2 days and nonspecific sx
 - ◆ Headache
 - ◆ Myalgia
 - ◆ Abdominal Pain
 - ◆ N/V/D
 - ◆ Thrombocytopenia
 - ◆ Hypernatremia
 - ◆ Elevated LFTs



Rash is **not** present in most Arizona cases of RMSF.

What do I need to do?

TREAT patient with fever \geq 2 days from tribal lands empirically with doxycycline

CONTINUE doxycycline for 14 days, since most acute tests are negative; order a convalescent titer to confirm the diagnosis

REFER to CDC algorithm for treatment recommendations at Arizona Department of Health Services Website

REPORT suspect cases to local health department

<http://azdhs.gov/phs/oids/vector/rmsf/providers.htm>

Plague



Why is this important in Arizona?

- Endemic in Northern Arizona, Colorado, and New Mexico.
- Cases of bubonic and pneumonic plague have occurred in Arizona
- Pneumonic plague has been acquired from infected animals

When is this on my differential?

- Patients that report recent outdoor activities in Northern Arizona or other endemic areas
- Risk Factors: exposure to fleas, wild animals, rodent, or to blood or tissues of infected animals (e.g. prairie dogs, mountain lions, rabbits)
- Septic patients with non-descriptive infectious symptoms or lymphadenopathy and fever

What do I need to do?

ASK patient about recent travel history and flea or rodent exposure

REPORT suspected cases to your local health department **immediately**

TREAT confirmed patients with gentamicin as soon as possible

NOTIFY laboratory to ensure proper precautions during testing

<http://azdhs.gov/phs/oids/vector/plague/index.htm>

Tularemia



Why is this important in Arizona?

- Endemic cases have been found in rural Arizona and areas at or above 3,000 feet elevation
- Can be potential weapon of bioterrorism
- Hunters have higher risk of contracting Tularemia

When is this on my differential?

- Patients with travel to rural Arizona
- Patients with history of insect bite, skinning animals, or presenting with lymphadenopathy and fever
- Risk factors: exposure to ticks or flies, exposure to infected animal carcasses, eating or drinking contaminated food or water



What do I need to do?

TREAT confirmed patients with gentamicin as soon as possible

REFER specimen to Arizona State Public Health Laboratory for testing

REASSURE family and healthcare facility of lack of person to person transmission

REPORT immediately to local health department if tularemia is suspected

<http://azdhs.gov/phs/emergency-preparedness/bioterrorism/faqs/a-agents/index.php?pg=tularemia>

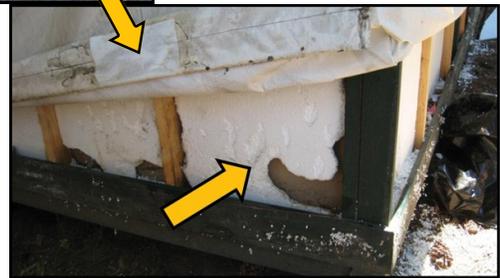
Hantavirus Infection

Why is this important in Arizona?

- Occurs year round, found all over Arizona
- > 40% fatality rate in Arizona
- Since 2002, there have been 35 confirmed cases in Arizona (14 deaths)

When is this on my differential?

- Patients exposed to abandoned buildings, rodent droppings, or rodents
- Febrile patient with bilateral interstitial infiltrates or ARDS and thrombocytopenia



Damage from rodents tunneling in the foam insulation of signature tent cabin

What do I need to do?

CONSIDER diagnosis if patient has respiratory symptoms and exposure to rodents

CONTINUE supportive care

PERFORM serial CBC and blood chemistries for early detection of fluid shift into the lungs

REPORT suspected cases to local health department

<http://azdhs.gov/phs/oids/vector/hantavirus/index.htm>

Legal Requirements

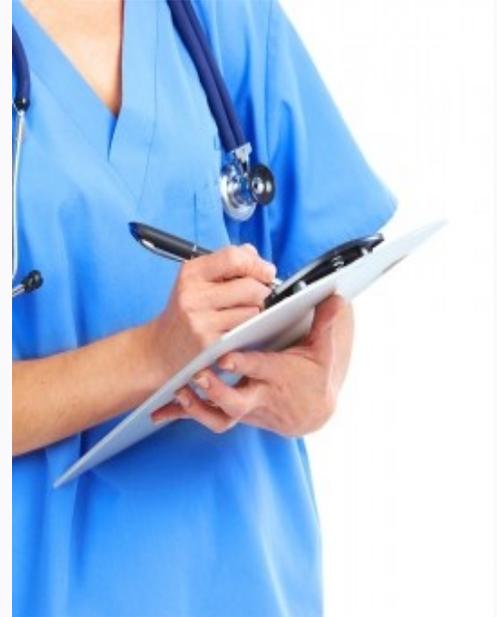
What should I report?

- There are 89 reportable conditions in Arizona.
- Print out the list at:
<http://azdhs.gov/phs/oids/pdf/rptlist.pdf>

Why should I report?

Reporting to Public Health enables us:

- To prevent further disease transmission
- To treat exposed contacts
- To locate and offer prophylaxis to exposed contacts
- To identify and contain outbreaks
- To ensure effective treatment and follow-up of cases
- To alert the health community



Reporting is required by R9-6-202.

How do I report?

Report to the local health agency by mail, electronically, telephone, or fax.

Disease Report Form: http://azdhs.gov/phs/oids/pdf/forms/cdr_form.pdf

Local Health Agencies: <http://azdhs.gov/phs/oids/contacts.htm#L>

For more information:

Call your local health agency or the Arizona Department of
Health Services at (602) 364-3676

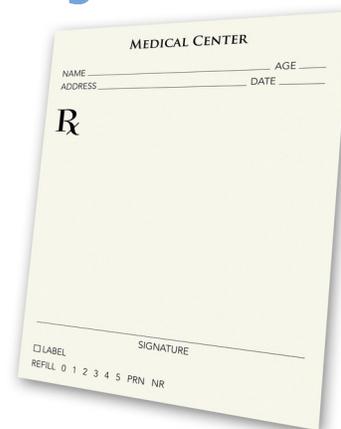
<http://azdhs.gov/phs/oids/reporting/providers.htm>

Expedited Partner Therapy

What does Arizona Law say?

Pursuant to A.R.S.§§ 32-1401.27 and 32-854:

allopathic, naturopathic, and osteopathic physicians or physicians assistants are allowed to dispense or prescribe antimicrobial medications to contacts of patients with communicable diseases without an intervening health assessment of the partner.



Recommendations for EPT

Expedited Partner Therapy (EPT) is the practice of providing an extra dose of medication or a prescription to a patient with a disease (e.g. chlamydia or gonorrhea) to deliver to an exposed partner(s).

In 2005, the Centers for Disease Control and Prevention (CDC) endorsed the use of EPT for partner treatment. In 2008, EPT became legal in Arizona (ARS § 32-1401 (27)(ss)(v)).

- Recommendations for treatment for Expedited Partner Therapy can be found at <http://www.azdhs.gov/phs/edc/odis/std/providers.htm>
- Costs of medications used for partner treatment cannot be charged to your patient's insurance. The cost of medication must be paid by the partner or your patient.



Office of Infectious Disease Services

150 N. 18th Avenue, Suite 140

Phoenix, AZ 85007-3237

Phone (602) 364-3676

Fax (602) 364-3199

azdhs.gov

