

TB Epidemic

About one third of
AIDS patients in Africa have



Most HIV+ people who die, die from TB



- 22 countries considered TB high-burden
- SA is #4 for total number of TB patients
- SA has 3x higher TB than rest of Africa
- KZN also has highest # TB patients in SA
- KZN worst treatment success 64% (SA 70%)

NTP = National TB Program

AIMS

- Case detection rate 70% (40%)
- Cure rate 85% (KZN 45%)
- Treatment success over 85% (KZN 64%)

TB Basics

Basics of TB

Risks, transmission, signs & symptoms, seeking care

High risk for TB transmission

HIV+



Public transport

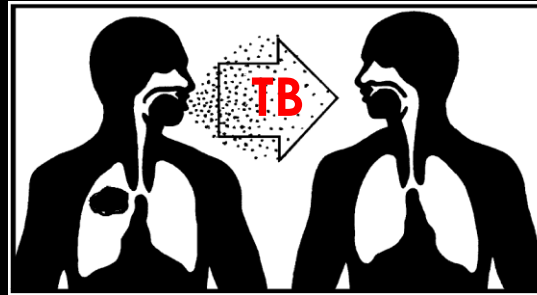


Crowded living conditions



Malnutrition

Living with TB patient



TB is an infection spread through the **AIR**, when an infected person is **coughing, sneezing, singing**. It is not spread on spoons, forks, plates, touch, bath, etc.

Signs & symptoms of pulmonary TB



Cough for 1 day or more

~ Plus ~

Weight loss



Night sweats



Fatigue



Fever

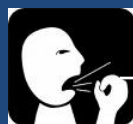
Local Clinic

Cough more than 24hrs



Go to local clinic in the morning

Not TB go home



Making sputum?

Yes



TB smear microscopy



POS

NEG

Give ABX

Improved?

YES

check X-ray

NO



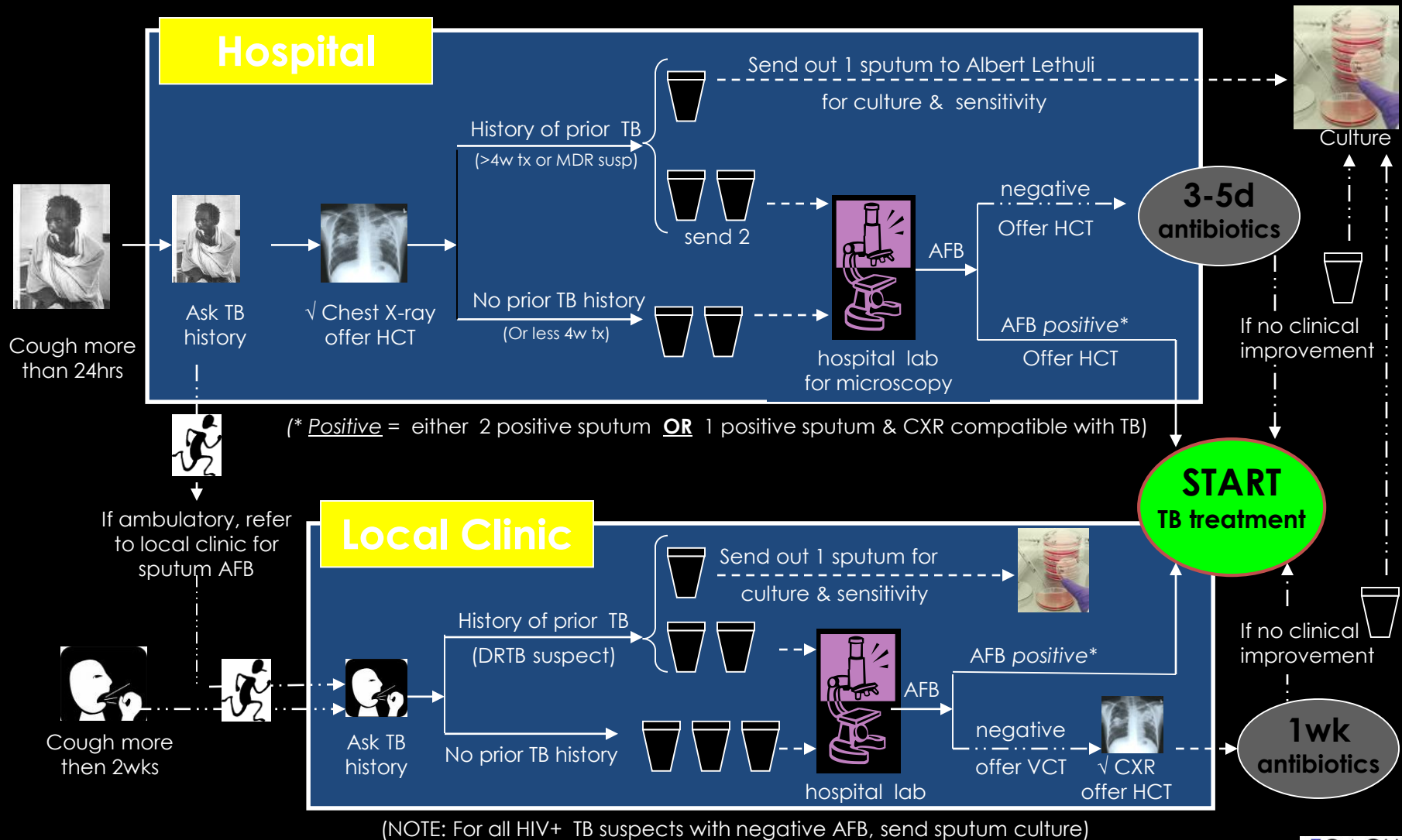
Looks like TB?

YES

6 mo treatment

TB diagnosis

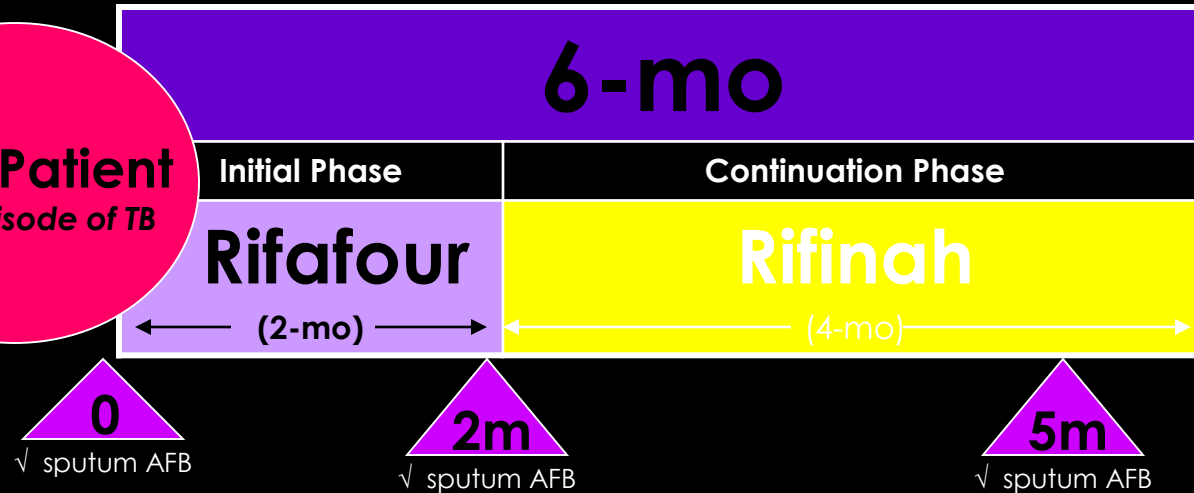
Inpatient & Primary care Diagnosis & Management



TB treatment

New & Re-treatment TB cases

New Patient
first episode of TB



RIFAFOUR (4-drug combo pill)

1. Isonisid (INH)
2. Rifapicin (Rif)
3. Pyrazidamide (PZA)
4. Ethambutal

RIFINAH (2-drug combo pill)

1. Isonisid (INH)
2. Rifapicin (Rif)

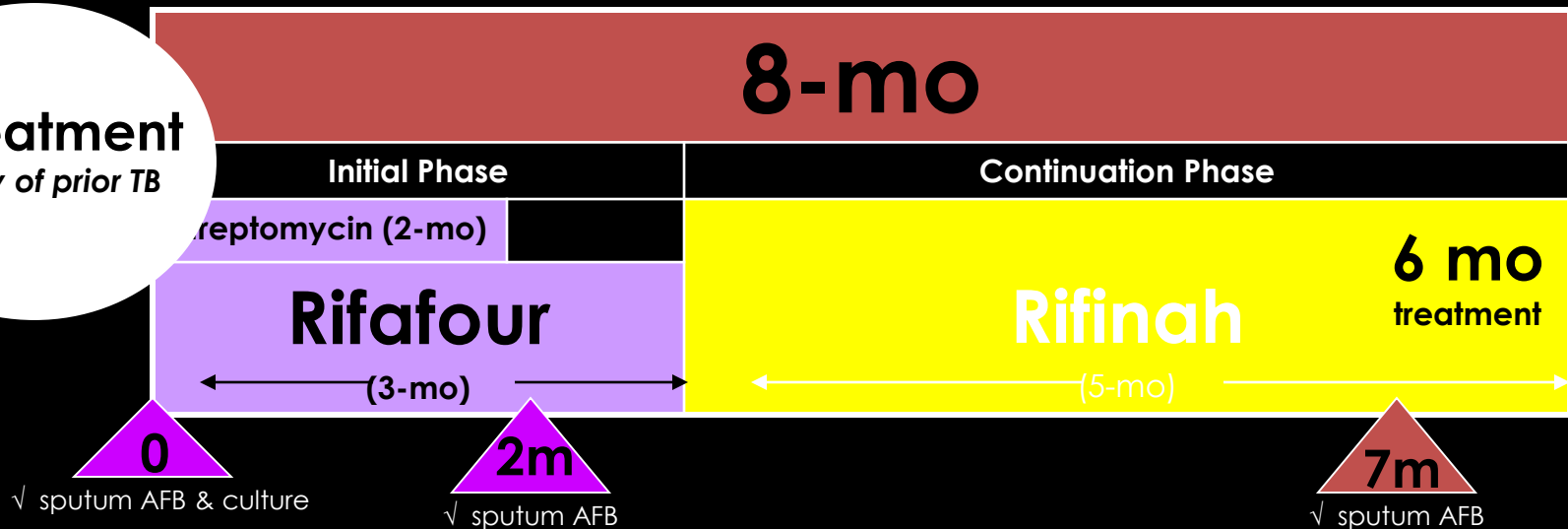
* Dosage or # pills by body weight

* Treatment taken 7-days/wk (M-F)

If smear-pos at 2mo, extend initiation phase x 1-mo, and re ✓ sputum

If smear-pos at 5m or 7m = MDR suspect. ✓ culture & sensitivity.

Retreatment
history of prior TB



TB & HIV basics

Transmission risk, co-treatment & side-effects

HIV makes you more vulnerable to TB

TB

40% risk every year for HIV+



TB

2-5 % risk every 2-yrs for HIV (-)

TB-HIV co-infection rates in SA are extremely high



Over 70% of TB patients in SA are HIV co-infected



Up to 90% of hospitalized patients in KZN are HIV+

TB makes you progress to AIDS more quickly

- more frequent OI's
- lowers CD4 count
- increases VL
- higher mortality



INITIATING TB & ARV CO-TREATMENT: Patients found to be TB co-infected will receive TB treatment for 2-months before starting ARVs – to decrease chance of IRS and diminish risk of drug side-effects. For patients with CD4 count <350, ARVs may be initiated sooner than 2-months because of the high mortality from TB in advanced AIDS.



LIVER TOXICITY: Watch for drug-induced hepatitis, especially during 1st 8wks of co-treatment. Most commonly due to NVP and/or Rifampicin. Consult specialist. May need to change NVP to Efavirenz. If severe, may need to discontinue treatment & re-challenge.

CO-TREATMENT

Challenges



Pill burden



Lack of food



No money for transport

Drug side-effects



Liver toxicity



Rash



Nausea

Isoniazid Preventive Therapy

IPT

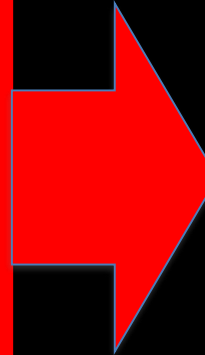


*‘Guidelines for
Tuberculosis Preventive
Therapy Among HIV
Infected Individuals in
South Africa’*

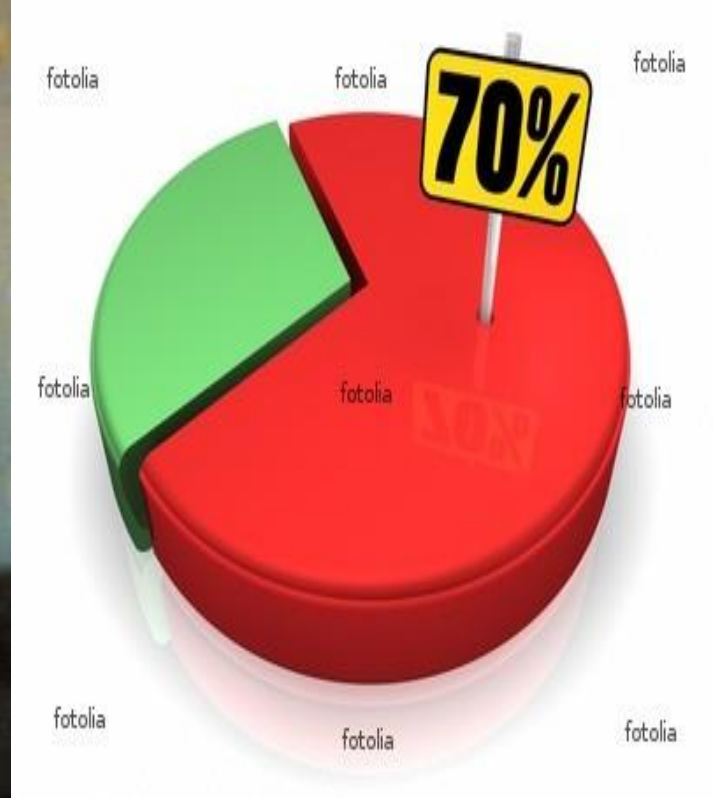
May 2010



HIV in South Africa



4-times TB



...of TB patients
in South Africa
are co-infected
with **HIV**



- 40% of deaths are due to TB
- TB #1 cause of death in HIV+ patients
- TB accelerates progression to AIDS
- **Critical to prevent TB in those most at risk**



health

REPUBLIC OF SOUTH AFRICA

TB preventive therapy is an intervention that should be part of the package of care for people living with HIV/AIDS. TB preventive therapy should be offered if the following prerequisites have been met:

1. High quality HCT is available
2. Patients can be screened for active TB disease before initiation of IPT
3. Patients on IPT can be followed-up and monitored monthly to encourage adherence, address side-effects and exclude active TB disease
4. The HIV/AIDS programme takes responsibility to implementing
5. There is strong collaboration between the HIV/AIDS and TB programmes at the site



HCWs in KZN 6-times more at risk

IPT

Isoniazid
Preventive
Therapy

Iphilisi elililodwa
ngosuku likuvikela
ekungenweni i-TB



2. Imininingwane nge IPT



Iphilisi elilodwa
nsukuzonke

300 mg Isoniazid

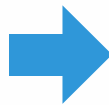


Uliphuza izinyanga
eziyisithupha



Lehlisa amathuba
okubasengcupheni
yokungenwa yi-TB

Kukhona ingcosana yabantu engase ingenwe i-TB
Nakuba belithatha leliphilisi le IPT



3. Ukuqala i-IPT

Qala i-Pyridoxine uma u-thatha
i-IPT, ukwehlisa ubuhlungu
bezinyawo (peripheral neuropathy)
obubangwa Isiniazid

IPT +



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