

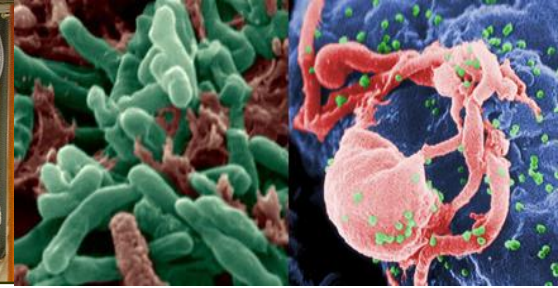
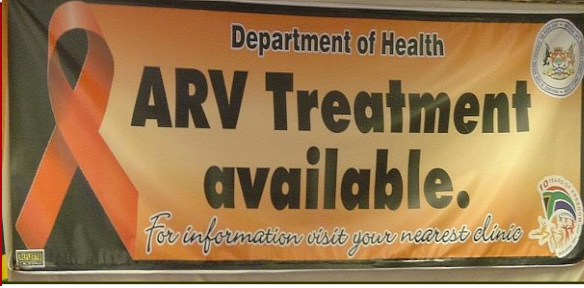
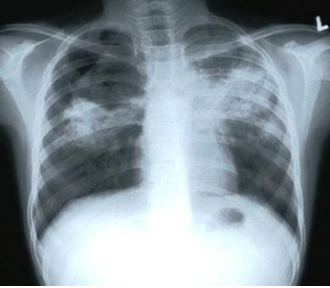
Northern Cape Department of Health

Presentation to NCOP

IMPACT OF LOADSHEDDING ON HEALTH CARE SERVICE DELIVERY

21 FEBRUARY 2023

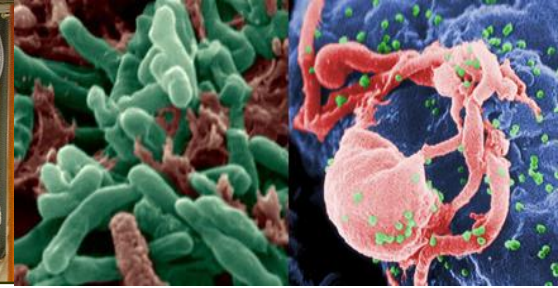
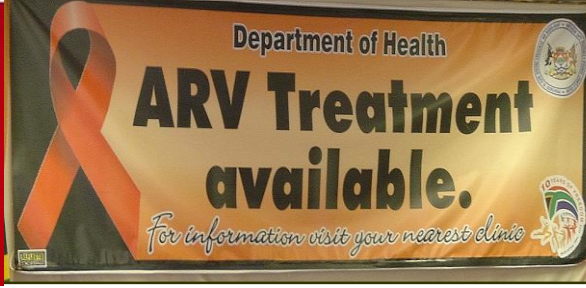
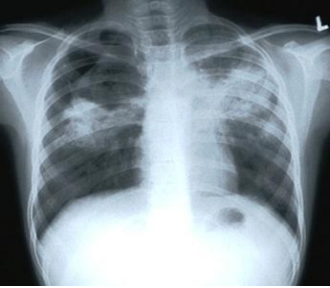




The increase in loadshedding had a detrimental effect on the delivery of healthcare to the communities of the Northern Cape.

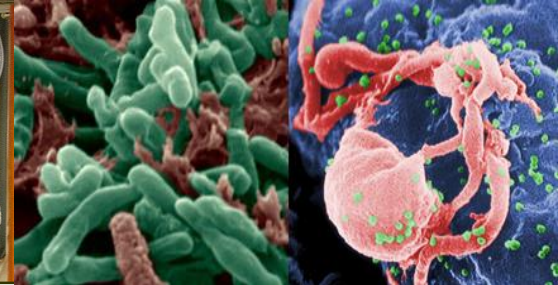
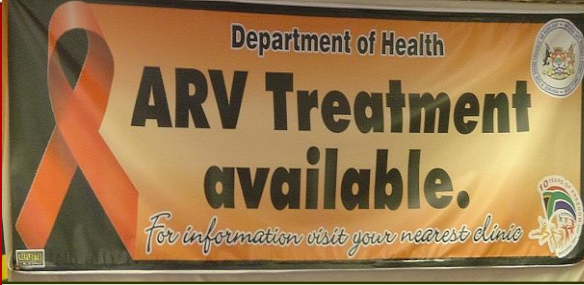
One of our facilities have reported an average cost of diesel to be now around R250 000 per month

We will illustrate it in the next few slides as a summary of this...



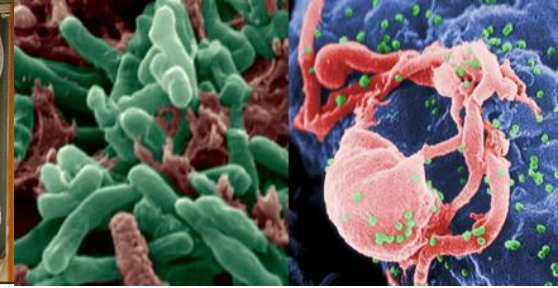
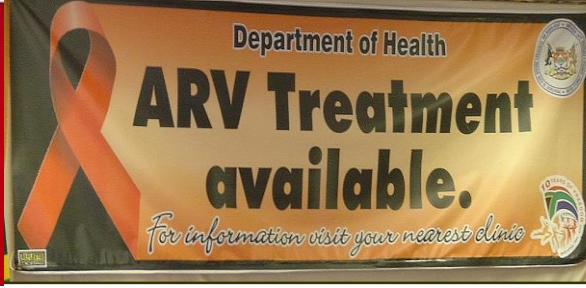
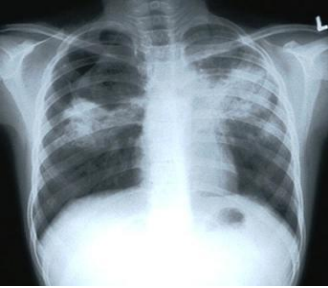
We have noted the following areas of increased pressures:

1. Increased patient loads
2. Impact on Infection prevention and control as well as hygiene
3. Control of the environment - temperature
4. Cold storage and medication
5. Clinical Equipment
6. Diagnostic services
7. Communication and administrative services
8. Financial Implications
9. Psychological implications



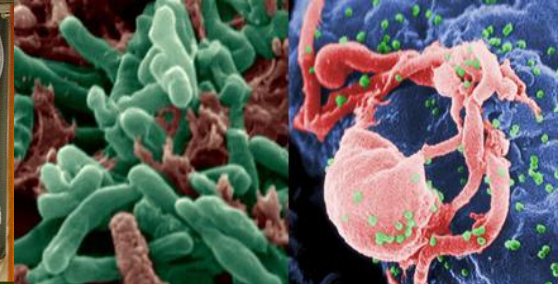
1. Increased patient loads

- More than 1,1 million persons of the Northern Cape relies on our services - about 87%
- There has been an increase of the number of patients and cases
- One example is the increase of patients with burn wounds due to accidents with paraffin and other flammable materials
- Due to systemic challenges caused by loadshedding - we see an increase of patients in our emergency departments, patients remain longer in our care which prevents another patient from accessing the services.
- There is an increase in overtime of staff for example due to artisans' extended hours due to interruptions, clinical staff are required to remain longer with patients (delayed transfers)
- Some clinics have to be closed due to water interruptions - especially those who are dependent on electricity propelled systems. Our water supplies in most municipalities have to be pumped to certain points including our facilities



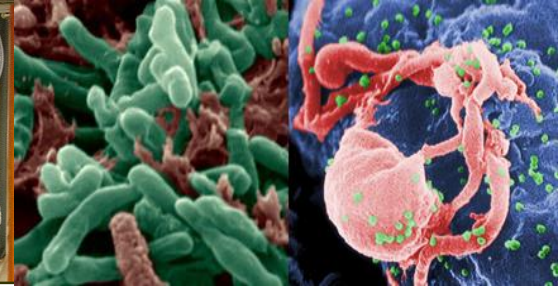
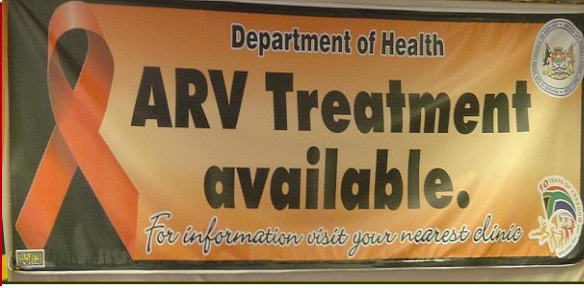
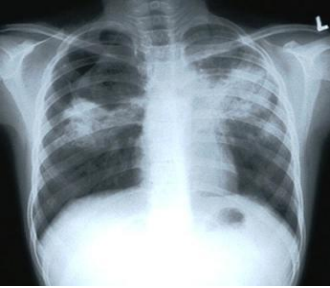
1. Increased patient loads

- We have to prioritise emergency procedures as loadshedding is forcing facilities to reschedule elective surgical procedures
- Interruptions of the VULA app as well as other digital applications are delaying referrals and telemedicine for patients
- Out patients dependent on home oxygen are forced to visit hospitals increasing our bed occupancy, workload at the Emergency Departments as well as our average length of stay (ALS) and Patient Day Expenditure (PDE)
- Emergency flight requests are adversely affected - delaying transfers since telephone communications are disrupted
- Difficult to interact with doctors on call due to unavailable networks - most of the towers of cellphone networks in our province are without battery backup for the length of time



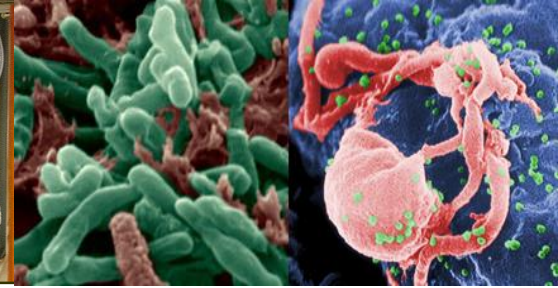
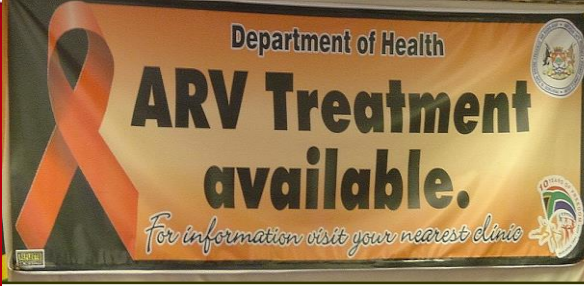
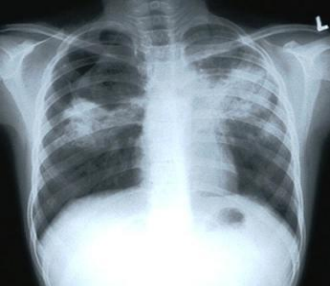
2. Impact on Infection prevention and control as well as hygiene

- Water supply to the facilities are affected by the loadshedding and impacts on the cleanliness and infection control of our facilities
- Our backup water supplies are not able to refill in time for the next loadshedding period - thus some reservoirs or tanks run dry
- In some facilities the sewage systems are also affected - sewage pumps
- Due to lack of water, sterilisation of equipment, washing of laundry and others cause a delay in care as well as interrupting the procedures to be conducted - e.g. theatre cases
- In some areas we have ultraviolet devices to sanitise the air and due to loadshedding can affect these devices.
- Higher temperatures in buildings increase risk of infections - especially post-op surgical procedures.



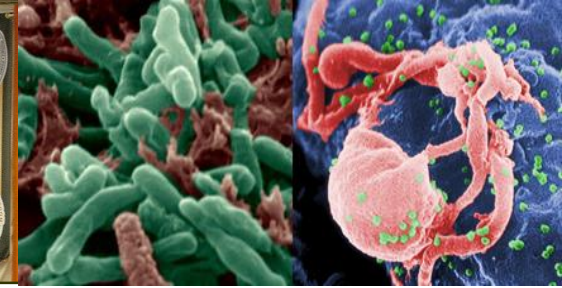
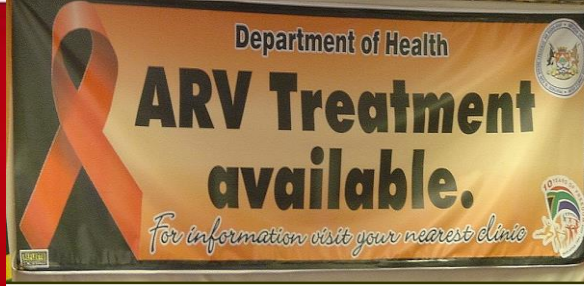
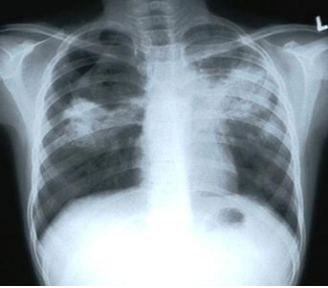
3. Control of the environment - temperature

- Our Cold Chain equipment can only maintain the temperature for a short period of time and needs additional standby generators to prevent loss of medication due to loadshedding
- Plant engineering equipment is negatively affected leading to increased maintenance & repair costs - we had more of our HVAC (Airconditioning systems) in need of repairs - it affects theatres and wards - Projected costs are R54 million for all facilities
- There is an increased risk of infections especially after surgical procedures



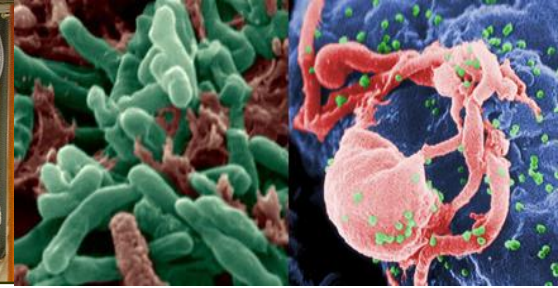
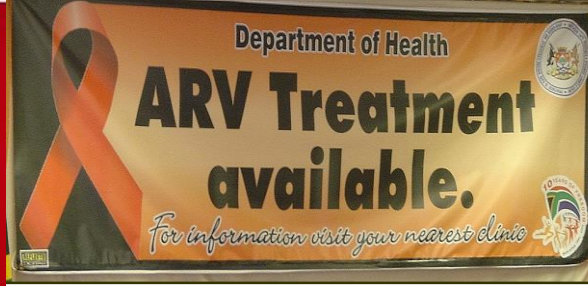
4. Cold storage and medication

- Most of our medication fridges and freezers adhered to the minimum requirements in the event that there is a power outage
- With the current situation, our equipment are not able to maintain the correct temperatures to ensure the proper storage of vaccines.
- Increased temperatures in our facilities affects the medication storage
- This means that we cannot provide the normal supplies, but have to keep stock in a central area where there is proper refrigeration, but then have to deliver more often to facilities depending on their need. This results in increased costs
- Our mortuaries are also affected, we had to replace a number of newly installed fridges. We cant store bodies for extended periods and thus there is an increase in transportation to mortuaries with such capabilities



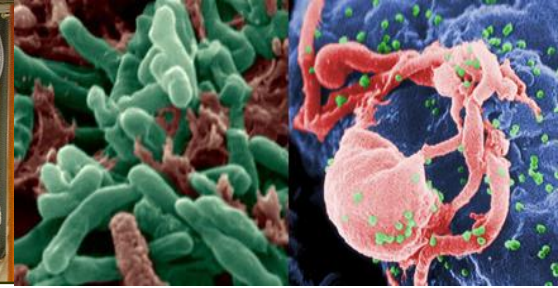
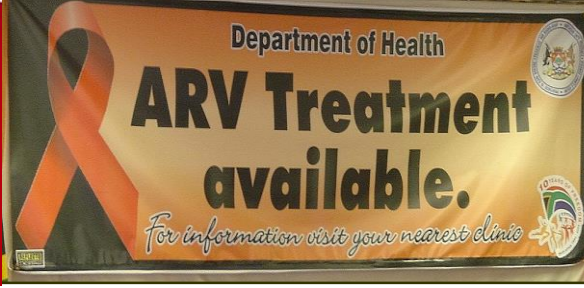
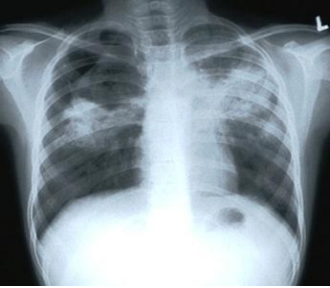
5. Clinical Equipment

- The surges in the electricity are causing damage to Health Technology equipment - this requires additional repairs or replacement of such equipment
- Electricity cut-outs leave the healthcare facilities without power supply into the essential electronic clinical equipment during the provision of health services to the patients.
- Damages are experienced on clinical and non-clinical electronic equipment resulting from voltage fluctuations into and out of the distribution boxes. Repairs and replacement of equipment are exceeding R5 million to date.
- In some cases where devices fail unexpectedly, staff have to manually work on patients - meaning that there are less attention to other patients
- In some cases the oxygen supply are affected and we now have to install backup electricity to these systems.
- Elevators are also affected which then impacts on the provision of services and increased costs



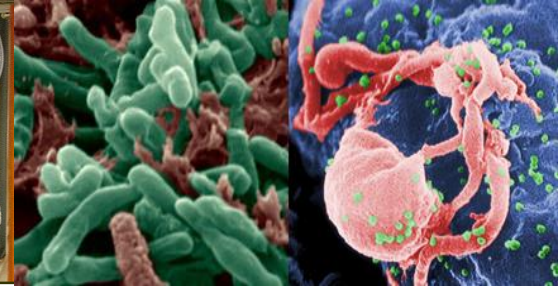
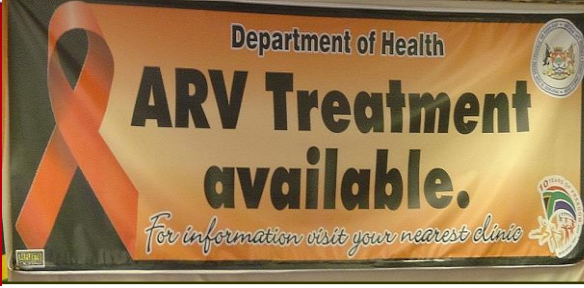
6. Diagnostic Equipment

- In some areas our pathological services and especially radiological services are affected.
- This leads to delay in care and longer waiting times.
- The surges in the electricity are causing damage to Health Technology equipment - this requires additional repairs or replacement of such equipment
- Electricity cut-outs leave the healthcare facilities without power supply into the essential electronic clinical equipment during the provision of health services to the patients.
- Damages are experienced on clinical and non-clinical electronic equipment resulting from voltage fluctuations into and out of the distribution boxes. Repairs and replacement of equipment are exceeding R5 million to date.



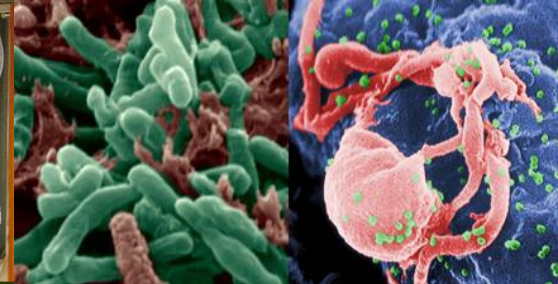
7. Communication and administrative services

- Communication and Data systems, network and ordering consumables are negatively affected since our systems are live and relies on continuous electricity
- Revenue are affected because our PAAB (Patient Administration and Billing) system loses patients - to date we received 20% less revenue compared to previous periods
- Patient waiting times are also affected because digital systems are dependant on availability of electricity which delays patient files
- Clinical support and other referral systems are negatively affected - this causes delays to the proper management of patients
- As mentioned earlier, the cell phone networks are also affected.
- Patients and members of the public are struggling to contact health care services which leads to preventable complications.
- Patient medication have to dispensed manually which leads to stock outs and challenges with reports when the Auditor General conduct audits on our stock and medication.



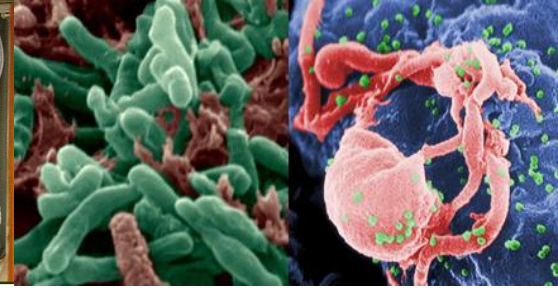
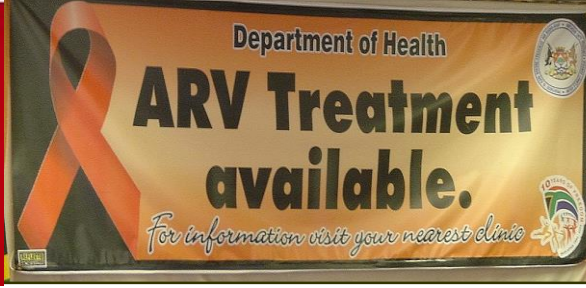
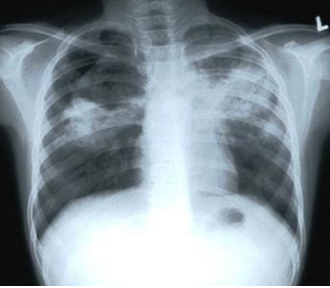
8. Financial Implications

- There are a limited number of suppliers in the Northern Cape who supply diesel on a wholesale basis.
- Diesel expensive and unavailable at certain outlets due to high demand in general
- There is an increase in the running costs of the services due to changes that we have to bring in which affects the efficiency of the services.
- This includes unplanned expenditure such as the provision of water for back-up availability, diesel for generators, procurement of equipment which are adaptable to other sources of energy (electricity)
- There is an increase in theft and vandalism because Facilities that do not have back up power supply remains vulnerable during load shedding at night.



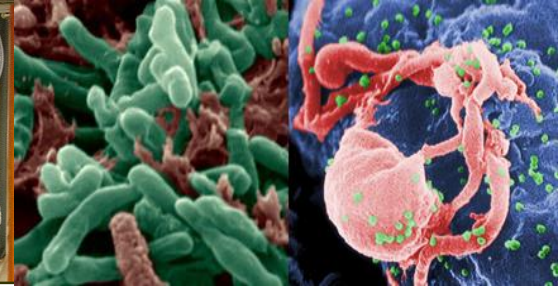
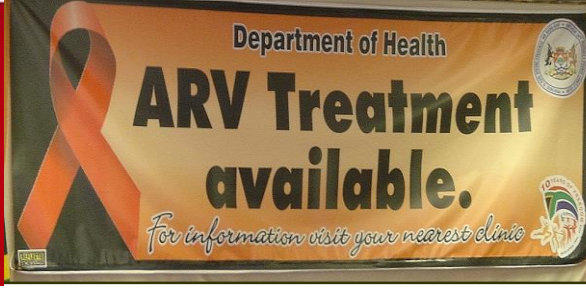
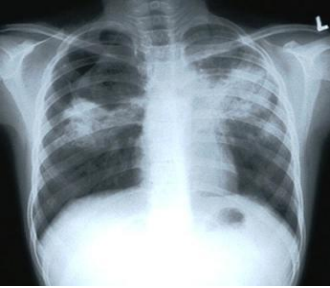
BUDGET PRESSURE ON INCREASED PROCUREMENT - Diesel only

Service Area	2021/2022	2022/2023
Provincial Offices	142 209,55	41 813,50
District Offices	1 357 125,74	755 038,58
Community Health Clinics	406 067,82	870 405,18
Community Health Centres	2 223 020,58	8 505 098,72
District Hospitals	2 497 432,57	10 113 555,00
Provincial Hospital Services	8 553 955,81	9 077 582,89
Provincial Tertiary Hospital	567 354,84	675 000,00
Pharmaceutical Depot	-	74 000,00
Total	15 747 166,91	30 112 493,87



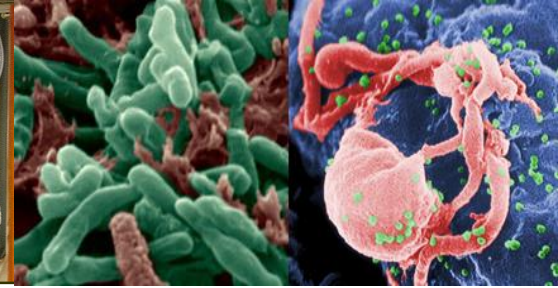
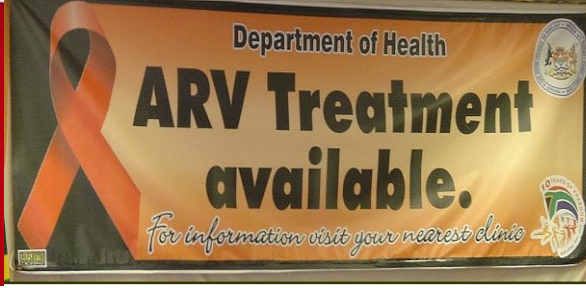
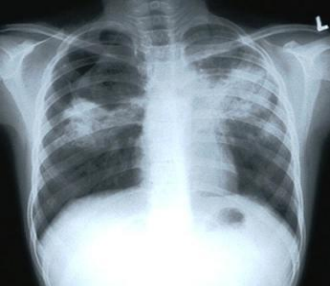
9. Psychological and Social effects on the services and staff

- There is an increase in the absenteeism and late arrival of personnel on duty due to unavailable alternatives at the homes of staff
- This affects the morale of staff whom are a precious resource in short supply
- Safety of patients and personnel are at risk during load shedding in the evenings as criminals target facilities at night.
- Therefore we have to look to increase our security to address this.



10. Other impacts on our services

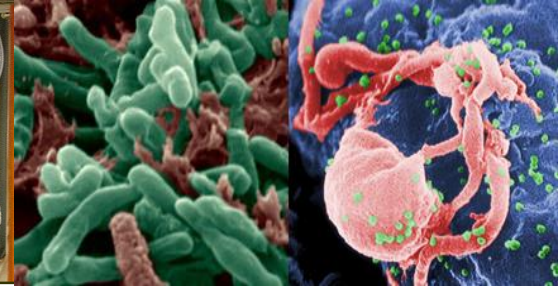
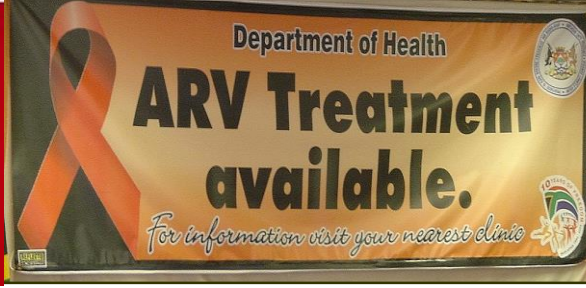
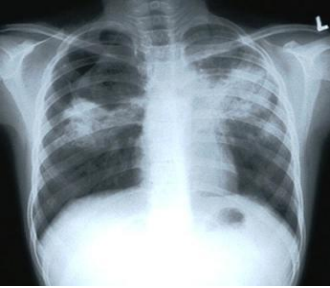
- Several mini-substations at our facilities or supplying our facilities have been observed to have oil leakages since load shedding has intensified which poses a major risk to the electricity supply into a healthcare facility. The cost of replacement is about R30 million
- The Biggest obstacle is to try and isolate Hospitals, Community Health Centres and Clinics from loadshedding, however it is not possible since most facilities are deeply embedded into the municipal electricity grid.



Interventions

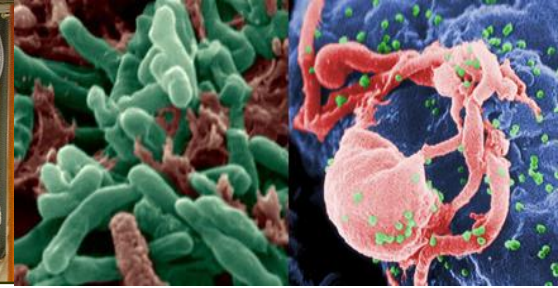
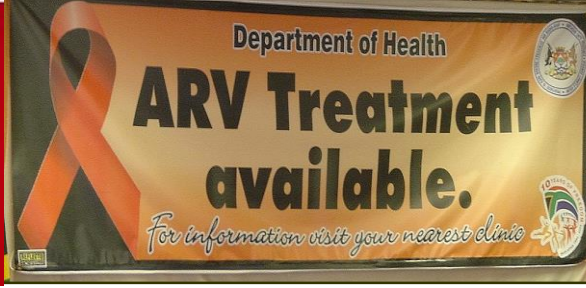
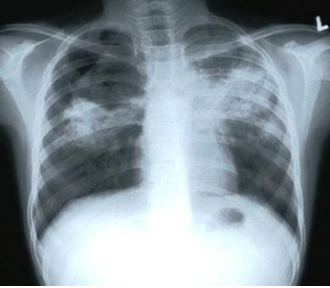
- Procuring more diesel including tankers to store and supply diesel and water to health facilities in need
- Strengthen clinical health technology unit to repair and maintain equipment out of warranty - recruiting staff - R8 million
- Procuring more spare parts for equipment especially out of warranty
- Analysis of facilities to determine their needs for solar and back-up batteries though challenge is unavailability of suitable suppliers in the province
- Psychological support to staff
- Possible investment to strengthen communication and referrals
- Procure additional equipment to ensure a library of equipment to replace the faulty ones
- Possible redirection of funds to maintenance - planned and unplanned (emergency)





Summary

- The impact of loadshedding is quite significant because it doesn't only affect the delivery of care, but the budget allocations of health will be affected because of the affect on the economy and the subsequent allocation of budget to the Health Sector



- **DANKIE**
- **ENKOSI**
- **KE A LEBOGA**
- **THANK YOU**