Headline: From the bin to the burn: How COVID vaccines are destroyed

Blurb: Follow the final days of an expired COVID vaccine as they await their turn in the incinerator.

Bullets:
- Clinics and hospitals have a strict, colour-coded system to organise different types of waste before a company comes to collect it.
- When vaccines expire, they’re put in green bins and quarantined away from other waste such as blood or tissue.
- It doesn’t cost much to destroy vaccines. The bigger issue is the money wasted on purchasing the jabs and the high price tag that comes with falling very ill with COVID when it could have been prevented.

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Vaccines are a bit like tinned food.

They can sit in the cupboard unopened for a long time, but they don’t last forever.

Once they’re past their expiry date they have to be thrown away.

What happens then?

The government has an app that lets health workers monitor how much medicine or equipment is available. They also log changes in stock here every day.

So, when a batch of vaccines expires, it’s logged on this system too.

That way, health workers know it’s time to separate the expired vials from the rest of the stock.

Here’s a closer look at the final days of a vaccine’s life.

STEP ONE: The bin
Clinics and hospitals have a colour-coded system to dispose of equipment and medicines used to treat patients. It’s kept separate from everyday rubbish such as coke cans and chips packets.

Expired medicine vials are put into green bins. Only unusable medicines go in these containers.

Other medical waste such as needles go in yellow containers. Blood and organs go in red bins.

STEP 2: The wait

The green bins (with expired vials) are locked away until they’re collected by a waste management company.

It’s up to provincial health departments to set up contracts with such companies.

STEP 3: The pick up

The company picks up the material from the facility and takes it to their storage site, where it’s kept under lock and key.

STEP 4: The final trip

Once there’s about 3 to 4 tons of waste, it’s all taken to an incineration facility. This can be a mix of different types of medical waste, not just pharmaceutical waste.

STEP 5: The fire

The waste is burnt at 850°C.

A pharmacist has to supervise the process.

Any ash that’s left behind is taken to a landfill.

STEP 6: The death certificate

The destroyed vaccines then get a certificate of destruction that’s sent back to the clinic as proof the destruction process was completed.
A second document accompanies the expired vaccines all through the journey. It’s called a “waste manifest”.

Each person in the chain has to sign this sheet to confirm that they have done their part.

What does all this cost?

It costs about 2 cents to burn a dose.

There are also transport, storage and admin costs.

The largest cost is really the price paid for a jab that will now go to waste.

About R160 per dose.

There’s also the cost of looking after somebody who falls very ill or dies of COVID.

These bills and heartache could all be avoided if the vaccines were used in time.

*This story was produced by the Bhekisisa Centre for Health Journalism. Sign up for the newsletter.*