The discovery of the bacillus of tuberculosis in 1882 by Dr. Koch was hailed enthusiastically by the medical world as a tremendous breakthrough in eliminating this ancient scourge as a major public health hazard. For this Dr. Koch was feted and honoured by many countries. Why then, after 100 years, is the number of tuberculosis cases in the world on the increase rather than on the decline? Highly effective drugs and vaccine, making TB a preventable and curable disease, have been available to all countries for more than 30 years yet the disease continues to be highly prevalent in many. According to Dr. H. Mahler, Director General of the World Health Organisation, progress has been agonizingly slow. In the majority of developing countries, he says, there has been little or no improvement in the epidemiological situation. Between four and five million highly infectious cases emerge each year and the disease brings death to at least three million persons annually. Even in countries with highly developed health care, TB remains a serious risk for disadvantaged groups.

What causes TB? The answer is a combination of socio-economic as well as biological factors. Undernutrition, inadequate housing, poor hygiene, lack of clean water, the debilitating effects of acute infections and diarrhoea coupled with ignorance and apathy all contribute directly or indirectly.

In Zimbabwe, TB control became a major Ministry of Health programme in the 1950s when it was observed that the incidence of tuberculosis was increasing annually reaching 120 per 100,000 of the population in 1959. The introduction of TB control reduced this figure by half in the following ten years but the success of the system was partially disrupted in the 1970s because of the war situation.

Since Independence in 1980, every effort has been made by the Ministry of Health to regain lost ground. TB specialists have been appointed in each of the five provinces co-ordinating the prevention and treatment of the disease which previously was carried out independently by many different hospitals attached to missions, mines and government.

TB control is a three-pronged attack:
   a)      B.C.G. vaccination,
   b)      case finding and
   c)      efficient treatment and rehabilitation.

The attack has been most successful and it is now policy for maternity units to B.C.G. all newborn babies. An expanded programme of immunisation is now under way in Zimbabwe which will reach older children and adults and this will use the intradermal vaccination technique. TB patients in Zimbabwe receive free travel warrants to attend reviews and all treatment is provided free of charge.

Another organisation in Zimbabwe that does much to further the fight against TB is R.A.P.T. (Rehabilitation and Prevention of Tuberculosis). This has been in existence since 1954 and is largely supported by public donations. R.A.P.T. has been instrumental in keeping the fight against TB well advertised and was responsible for funding a Tuberculosis Reference Library which plays...
a key role in the diagnosis of tuberculosis and tuberculosis research. Its National Headquarters are in Bulawayo.

The target of the World Health Organisation is to completely eliminate TB as a major health problem by the year 2000. This goal is fully attainable but requires a better understanding by all of the true causes of the genesis and spread of the disease. It also requires the full support of all governments, particularly those in the Third World countries, if the W.H.O. is to achieve its ultimate aim.

Dr. Robert Koch was born in 1843 in the town of Clausthal in the Harz mountain area of Germany and took his medical degree at the Georgia-Augusta University in Gottingen in 1866. At that time, bacteriology was an unknown subject and it was not until 1870 that Koch began his research into microbiology using guinea pigs, rabbits and even apes for his experiments. His laboratory, adjoining his consulting room, was extremely rudimentary. In it, he installed an incubator, a sink, a work bench and a small dark room. A tiled stove was his autopsy table! In these primitive surroundings and equipped with only a microscope, Koch began his studies on anthrax — a disease that was rampant in the Wollstein area and which was in the scope of his Administrative concern. His success in isolating the anthrax bacilli came only after many painstaking experiments and by 1876 he felt that the major problems regarding the aetiology of anthrax had been solved.

In August 1881, Koch decided to study tuberculosis and his work in this sphere was conducted at a feverish pace, so much so, that in May 1882 he was able to present a preliminary report. His audience was left spellbound and Paul Ehrlick stated that "all who were present were deeply moved and that evening has remained my greatest experience in science".

In addition to anthrax and tuberculosis, Koch also made successful studies into the causes of rinderpest, malaria, bubonic plague, cholera and trypanosomiasis and in the course of these studies he visited Africa on a number of occasions. On his 60th birthday in 1902 he visited Zimbabwe (then Rhodesia) combining business with pleasure and mixing an archaeological trip with microbiology.

For his magnificent contribution to medical science he was honoured in 1905 when he was awarded the Nobel Prize for medicine.

Dr. Robert Koch was an extremely modest man and without any affectations. On the 27th May, 1910 he died suddenly of a heart attack leaving humanity with an immense inheritance. His discoveries and achievements represent the greatest progress in medicine of the 19th century and place him among the greatest benefactors of mankind.
The Stamps

Catalogue listings

<table>
<thead>
<tr>
<th>SG</th>
<th>ZSC</th>
<th>Value</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>620</td>
<td>43</td>
<td>11c</td>
<td>Dr Robert Koch</td>
</tr>
<tr>
<td>621</td>
<td>44</td>
<td>30c</td>
<td>Lab technician and virus</td>
</tr>
</tbody>
</table>

Technical details

Stamp size: 42 x 28 mm

Sheet Size: 50 stamps (10 rows of 5 stamps), two panes per printed sheet

Artist: Rose Martin,

Paper: ZSC paper type C – paper known as "Postmaster", manufactured and converted by Smith & McLaurin Ltd, Scotland. The coating is not as fluorescent as the previous papers and the gum is described as 'particle gummed'. It is a very different adhesive from PVA as it has a matt, non-reflective appearance. It is what is known as 'dry gum'.

Print colours: All values – cyan, yellow, magenta & black

Perforations: SG 14½, ZSC 14¼
Top margin: Perforated through
Other margins: Imperforate

Printer: Mardon Printers (Pvt) Ltd., Harare, Zimbabwe

Printer’s Imprint: Bottom margin below columns 2 to 4. Imprint printed in black

Cylinder numbers: Cyls. 1A & 1B bottom margin above R5/5, colours reading across from left – yellow, cyan, magenta, black

Colour register: Type TL 4 – round boxed - right margin opposite R5/5, colours reading down – black, magenta, cyan, yellow

Sheet Value: Top margin, below R5/1, all printed in black
Sheet Number: Type SN 4a with ‘PTC’ prefix, left margin opposite R5/1, reading upwards.

Print numbers: 11c 750,000 30c 750,000


Withdrawal from sale: 16th February, 1983

Demonetarisation: 31st January, 1994

Listed varieties

No listed varieties are available for inclusion, if lists have been produced please forward

Unlisted varieties

There are numerous small dots and specks in the printing of these stamps, particularly in the backgrounds. Some dots and specks shown below are a bit more distinctive, some may be constant.

<table>
<thead>
<tr>
<th>11c: cyan mark on forehead, R5/1</th>
<th>11c: white line on forehead</th>
</tr>
</thead>
<tbody>
<tr>
<td>30c: red dot below ‘3’ of value</td>
<td>30c Red mark between lab technician and microscope R2/1</td>
</tr>
</tbody>
</table>
First Day Covers

The cover numbering comes from the catalogue produced by Geoff Brakspear.

A special first day of issue canceller was produced for this issued and was used by the Philatelic Bureau. Other first day cover cancellers continued to be used at the main post offices.

ZW009-1 (PTC)
162 x 114 mm

Related Material

Publicity sheetlet prepared by Mardon

RAPT labels

The first Christmas seals went on sale in Denmark in 1904 and since then the idea has spread worldwide. From the beginning the proceeds have been used particularly in the campaign against tuberculosis, although it was not until 1927 that the sale of seals was officially adopted as a means of fund raising and educating people against the disease.

The Rhodesian Association for the Prevention of Tuberculosis grew out of a special committee of the British Red Cross Society which was set up in Bulawayo in 1952, Two years later this Committee and other anti-tuberculosis organisations came together to form a national association.
In 1955 part of the money from the sale of an issue of 200,000 seals prepared by the British Red Cross Society was donated to the R.A.P.T. The cost of production was borne by Rotary. Printed in red and green, the design incorporated the British Red Cross Society badge over a section of the globe and the upturned face of a nurse. Unlike all the seals issued by the R.A.P.T. itself, the red Cross of Lorraine, used as a symbol by tuberculosis associations in many countries, was not included. Instead, the words "FOR RELIEF OF SUFFERING" were inscribed across the top.

The first R.A.P.T. seal appeared in 1956 and sales have been the Association's major source of income ever since. Printed by Rhodesian Litho Limited, of Salisbury, this issue set the style for all the R.A.P.T. seals until Mardon Printers took over production.

Between 1956 and 1965 the size was a standard 23 x 35 mm and the seals were always rouletted. The format was vertical, with the single exception of the 1959 issue when a horizontal format was considered more suitable for the bushmen's paintings on which that year's seals were based. As well as the red Cross of Lorraine, every subsequent issue except those of 1963 and 1964 included the year and "R.A.P.T."

For the first five years there was only one design for each year, this was to increase in subsequent years. From 1961 to 1965 there were multiple images in se-tenant strips of six, all rouletted and printed by Rhodesian Litho Ltd. The issues were:

- 1961 Six labels featuring big game animals
- 1962 Six labels featuring African birds
- 1963 Six labels featuring African flowers
- 1964 Two strips of six labels featuring indigenous tribes (there were six designs with a different background colour on each row)
- 1965 Two strips of six with twelve African butterflies
From 1966 the printing was taken over by Mardon Printers, who used the same size stamps (42 x 28 mm) and perforations as the postage stamps. From 1966 to 1969, the were 120 labels per sheet, after decimalisations sheets were reduced to 100 labels. The 1966 issue consisted of a block of 6 labels (2 columns by 3 rows) of small mammals.

For the remainder of the Rhodesian era, the sheets of 100 consisted of 60 or 50 se-tenant designs, as follows:

1967  ‘Aspects of Rhodesian Life’
1968  Minerals of Rhodesia
1969  Insects of the Rhodesian Veld
1970  Rhodesian Farming
1971  Rhodesian Wild Flowers
1972  Rhodesian Birds
1973  ‘Waterfolk’
1974  Aloes and Succulents
1975  Trees of Rhodesia
1976  Places of Interest
1977  Wild Animals of Rhodesia
1978  Snakes and Lizards

In 1979, the 25th Anniversary of RAPT, which celebrated this by including one label for each year in the sheet. This year could have seen the labels with the country name of “Zimbabwe Rhodesia”, but this was resisted in the labels but was used in the margins for RAPT’s address. Prior to Zimbabwe’s Independence, the organisation was renamed “Rehabilitation and Prevention of Tuberculosis”, and thus retaining the of RAPT.

From 1980 to 1985, the labels continued to be produced in sheets of 100 with 50 se-tenant labels, these were:

1980  Indigenous Fruits of Zimbabwe
1981  Butterflies of Zimbabwe
1982  Armorial Bearings
1983  Uncommon and Endangered Birds of Zimbabwe
1984  Fishes of Central Africa
1985  Orchids of Zimbabwe
From 1986 to 1993, labels were produced in single sheets with 25 se-tenant designs, these being

1986  Picturesque Scenes of Zimbabwe
1987  Victoria Falls and Environ
1988  Some Endangered Species of Zimbabwe
1989  Butterflies and Flowers of Zimbabwe
1990  Birds of Zimbabwe
1991  Zimbabwe – Diverse and Enchanting
1992  Mushrooms of Zimbabwe
1993  Proteas of Southern Africa

From 1994 to 2001 and in 2003, sheetlets of 15 with se-tenant labels were produced, these being

1994  A Centenary of Travel – Bulawayo Centenary 1894 – 1994
1995  Raptors of Zimbabwe
1996  Portraits of Zimbabwe
1997  Bees and Wasps of Southern Africa
1998  Small Carnivores of Zimbabwe
1999  Waterfowl of Zimbabwe
2000  Succulents of Zimbabwe
2001  Common African Mosquitoes
2003  Tortoises of Southern Africa

Sadly, with the cost of production escalating and sales declining RAPT had to cease producing these attractive labels. In all there were 870 different labels produced over the course of 48 years, giving a splendid range of thematic material.

A more detailed catalogue of the RAPT issues can be found on the RSC website.

Bibliography: