RTD(79)17

# EXPENDITURE REVIEW REPORT - BLOOD TRANSFUSION SERVICE

The attached expenditure report on the NBTS for 1976 /77 was prepared by one of the Department's Finance Branches which is charged with the review of ongoing expenditure and the study of cost-effectiveness in the NHS.

Unless otherwise stated the information used in the report, and in reaching the conclusions, was obtained from statistical returns completed by Regional Health Authorities.

It is expected that the report will be scrutinized by the Exchequer and Audit Department, but it was thought appropriate first that Directors should be given an opportunity to examine sections 1-5 and to offer comments and explanations on the conclusions which have been drawn on the various aspects of expenditure in Transfusion Centres.

It would be appreciated if Directors could prepare their comments in time for the meeting on 12 December.

A Member of the Department's Finance Branch, Mr E R Martin, will be present to discuss any points Directors might wish to raise.

DHSS November 1979

FB4: EXPENDITURE REVIEW REPORT

2/1978

#### BLOOD TRANSFUSION SERVICE

#### 1. INTRODUCTION

- 1.1 In 1976/77, the expenditure incurred by the regional blood transfusion centres in England was £17.0 million. Approximately £11 million of this expenditure was in respect of salaries and wages and over 3,000 staff were employed.
- 1.2 In addition, there are three central laboratories, the Blood Group Reference Laboratory, the Blood Products Laboratory and the Plasma Fractionation Laboratory which are administered under the direction of the Department. These laboratories employed approximately 150 staff and incurred expenditure of £1.18 million in 1976/77.
- 1.3 The service has grown steadily since 1948:-

#### ENGLAND AND WALES

Year	Effective civilian blood donors (thousands)	Number of blood donations (thousands)
1949	369	457
1959	784	958
1969	1,365	1,484
ø 1974	1,494	1,725
ø 1975	1,780	1,769
ø 1976	1,962	1,844

(  $\phi$  The figures for 1975 and 1976, although comparable with each other, are not comparable with earlier years due to changes in definitions.)

The demand for blood products and hence blood continues to rise and Regional Transfusion Centres are making efforts to increase the output of blood products in order to reduce NHS dependence on commercial supplies.

## 2. DEPARTMENTAL RESPONSIBILITY

HS2A(1) has responsibility for policy matters relating to the Blood Transfusion Service.

FB2C - liaises with HS2.

MED SM4 is concerned with the medical and scientific aspects of the Blood Transfusion Service.

NUR provides professional advice on the nursing aspects of the Blood Transfusion Service.

#### BACKGROUND

3.1 Each of the 14 Regional Health Authorities in England is responsible for meeting the transfusion requirements of its hospitals and, with the exception of South East Thames, (which is covered by South West Thames RHA and Lambeth, Southwark and Lewisham AHA(T) see paragraph 3.3.1) each region has its own transfusion centre.

47/551.

- 3.2 Each Regional Transfusion Centre is under the control of a Consultant Medical Director appointed by the Regional Health Authority. The functions of Regional Transfusion Centres and the central laboratories are listed in Appendix A.
  - 3.3 In addition to the regional centres, a blood transfusion service is provided by:-
    - 3.3.1 Lambeth, Southwark and Lewisham AHA(T)

This service is small; the expenditure was £194,000 in 1976/77.

3.3.2 The Greater London Red Cross Blood Transfusion Service

This independent organisation maintains a panel of blood donors willing to give their blood at short notice to any hospital or institution in the Greater London area. Health Authorities using the service pay a charge, which now totals approximately £12,000 per annum, as a contribution to the costs of the organisation.

#### 4. CURRENT POLICY

4.1 In 1973, the Standing Medical Advisory Committee recommended the setting up of a committee 'to consider whether any change should be made in the present organisation of the blood transfusion services in England and Wales and to make recommendations.' A committee was set up and presented its report in May 1974. The report recommended that a Central Committee for the National Blood Transfusion Service be set up to advise the Department and the Welsh Office, with the following terms of reference:-

"To keep under review the operation of the National Blood Transfusion Service, including the Blood Products Laboratory and Blood Group Reference Laboratory, in England and Wales and to advise the Department of Health and Social Security and the Welsh Office on the development of the service."

The report was accepted by the Department, the committee held its first meeting in June 1975, and has continued to meet regularly.

- 4.2 Circular HC(78)12 refers to the report of the Working Group on Trends in the Demand for Blood Products 'which may have implications affecting the whole of the National Blood Transfusion Service'. This report is under consideration.
- 4.3 Although new methods of collecting additional blood are being considered, eg more frequent bleeding of donors at convenient centres, care is being taken not to discourage the present voluntary nature of the Service or the wide network of donors. As little is known about relative costs of blood collection even the crude comparison of cost per bottle collected at the various centres/sessions is not available for assessing cost effectiveness although, by virtue of the extra non-productive journey time, travelling and subsistence collection in rural areas is likely to be more expensive than collection at urban centres. With the present level of information it would not be practicable for HS2A to assess the cost effectiveness of any new policy.

4.4 HS2A have not taken up the Departmental responsibility for monitoring the cost of Blood Transfusion Service and is able to undertake only a limited monitoring of Regional performance and in any event has little information with which to undertake that task. The branch is a small one and at present it is almost exclusively pre-occupied with the work of the Blood Products Laboratories for which the Department now has direct responsibility. In this connexion, FB2C are presently discussing possible changes in finance procedures for the Blood Products Laboratories as these have now grown from centres of research activity into a major processing unit for blood products.

#### 5. GENERAL APPRAISAL

5.1 In 1976/77, the expenditure incurred by the regional blood transfusion centres in England was £16.976 million and can be identified as follows:-

	£ (thou- sands)	% of total expen- diture		£ (thou- sands)	% of total expen- diture
Medical Staff	1,159	6.8	Blood Collection	7,337	43.2
Nursing Staff	2,267	13.4	Blood distribution	861	5.1
Professional &			Laboratory	4,328	25.5
Technical Staff and Laboratory			Administration	3,011	17,.7
Assistants	3,286	19.3	Other	1,439	8.5
Administration	2,954	17.4			
Transport	1,343	7.9			
Medical & Surgical Equipment	3,287	19.4			
Other Expenditure	2,680	15.8			
				46.076	100.0
	16,976	100.0		16,976	100.0

Expenditure on transport has been apportioned on the basis of the number of miles travelled on each activity, shown on Forms Cost 84, (see paragraph 5.9).

5.2 Since the reorganisation of the National Health Service, the increase in the expenditure of the regional centres has been greater than that of the health service as a whole:-

	Expenditure - Revenue and Capital (£000)	Increase	Regional Centres (£000)	Increase
1974/75 1975/76 1976/77	3,335,200 4,300,002 4,866,501	28 <b>.</b> 9 13.2	10,614 14,209 16,976	33•8 19•5
	Increase in the two year period	45•9		59•9

and has increased as a proportion of the total health service expenditure from 0.32% in 1974/75 to 0.35% in 1976/77, a rise of 10%.

The number of bottles of blood collected rose by 8.8 per cent in the period 1974/75 to 1976/77. Over the same period there has been a considerable increase in the quantities of blood products prepared by Regional Transfusion Centres. In the last quarter of 1974 centres produced few platelet preparations (none are shown in the official returns) but by the same quarter of 1977, 45,000 platelet preparations were produced, the number of red cell preparations went up from 72,000 to 183,000 and fast frezen plasma from 14,000 units to 81,000 units.

5.3 In order to standardise the expenditure data, the unit costs at the Thames regional centres have been adjusted to eliminate the effects of London Weighting.

The expenditure at regional centres per bottle of blood collected in 1976/77 ranged from £12.65 at North Western RHA to £7.59 at West Midlands RHA, with an average in England of £9.37 (see Appendix B). A simple comparison of costs cannot be made due to a number of factors. Some centres carry out specialised work, eg South Western RHA, which provides a national tissue typing service, and West Midlands RHA which provides an antenatal serology service but both centres had low costs in 1975/76 and 1976/77.

North Western RHA had the highest costs in both years. In 1976/77, the cost per bottle of blood collected exceeded the average cost in England by 35 per cent (and by 36 per cent in 1975/76) which represents 'excess' expenditure of more than £500,000 per annum. The major items of this 'excess' expenditure were:-

	£
Professional and Technical Staff and	
Laboratory Assistants	124,000
Drugs and Dressings	112,000
Administration	93,000 (see para 5.8)
Estate Management	61,000
Transport	54,000 (see para 5.6)
Nursing Staff	35,000
	·
	479,000

North Western RHA has two centres. The main centre, which is located in Manchester, had higher costs than the sub-centre at Lancaster. Audit Branch (FB4) have discussed the high costs of these centres with the officers of the Regional Health Authority and the results of a review by the RHA are awaited.

5.4 Details of the numbers of staff employed in the regional centres are available from two sources:-

HS2A - data supplied to the Department by regional centres

SR1 - data included in staffing returns prepared by Regional Health Authorities.

Staff in post (wte):-

	HS2A		SI	<u>R1</u>
	1.1.75	31.12.76	30.9.75	30.9.76
Medical	120	85	77.3	53.4
Nursing	795	861.5	828.2	877.7
Prof & Tech	794	705	673.3	685.8
Admin & Clerical	647.5	703	545.9	603.3
Ancillary	651.75	756.5	497.5	615.4
TOTAL	3008.25	3111	2622.2	2835.6
Increase		3.4%		8.1%
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The staffing data provided by HS2 Division and SR Division appeared to be inconsistent and when combined with financial data produced some unlikely results. For example, the number of medical staff in post is reported to have fallen from 120 (1.1.75) to 53.4 (30.9.76) in a 21 month period and to have risen to 85 within a further three months. In 1976/77, the data provided by SR Division produced a cost per medical staff which exceeded £25,000 at 7 of the 13 centres and which ranged from £89,869 at Mersey RHA to £8,709 at Northern RHA. The staffing data provided by HS2 Division, which has a closer relationship with the financial data than the SR data, has been used in this report.

#### 5.5 MEDICAL STAFF

In England, the expenditure on medical staff salaries and wages in the regional centres was £1.159 million in 1976/77, 6.8 per cent of the total expenditure at regional centres, and was allocated as follows:-

	£ (thousands)	oj Ja
Blood collection	765	(66%)
Laboratory	394	( 34%)
	1,159	100%

47/555

The cost of medical staff per bottle of blood collected ranged from £0.85 at Mersey RHA to £0.42 at South West Thames RHA, with an average of £0.64 in England, (see Appendix B).

In England, the medical staff in post was reported as having fallen from 120 (1 January 1975) to 85 (31 December 1976), a fall of 29%, and ranged from an increase of 26% at North West Thames RHA to a fall of 62% at Northern RHA. In 1976/77, the cost per staff member ranged from £31,551 at Yorkshire RHA to £7,808 at North West Thames RHA with an average of £13,470 in England (see Appendix D). This staffing data appears to be inconsistent with the financial data at many of the centres (see paragraph 5.4) and no reliable conclusions can be drawn.

#### 5.6 NURSING STAFF

In England, the expenditure on nursing staff salaries and wages in the regional centres was £2.267 million in 1976/77, 13.4 per cent of the total expenditure at regional centres. All of this expenditure has been allocated to the blood collection function. The cost of nursing staff per bottle of blood collected ranged from £1.51 at Yorkshire RHA to £1.01 at North West Thames RHA, with an average of £1.22 in England, (see Appendix B). When the expenditure for 1976/77 was divided by the staffing data for 31 December 1976, it produced an average staff cost of £2,523 and ranged from £2,779 at North Western RHA to £2,236 at Yorkshire RHA, (see Appendix D).

The staffing data provided by HS2 Division gave a total of  $861\frac{1}{2}$  staff in post in England at 31 December 1976, an increase of  $66\frac{1}{2}$  wte ( $8\frac{1}{2}$  per cent) over 1 January 1975. The number of bottles of blood collected in England rose by 8.8 per cent in the period 1974/75 to 1976/77.

However, the number of nurses were reported as having increased by a substantial margin at three centres:-

	Increase in Number of Nurses	_	Increase in Number of Bottles
Centre	1.1.75 - 31.12.76	Increase	1974/75 - 1976/77
N Western S W Thames W Midlands	24 21.5 15	% 41.4 27.4 19.2	% 4.1 4.7 15.0
	60.5		

The staffing return for North Western RHA for 1 January 1975 is inconsistent with activity and financial data and this may account for the apparent large increase in nursing staff.

The numbers of nursing staff at 31 December 1976 per 1,000 bottles of blood collected in 1976/77 ranged from 0.67 at Yorkshire RHA to 0.40 at North West Thames RHA, with an average in England of 0.48, (see Appendix C).

47/556.

The numbers and cost of nurses employed at Yorkshire RHA and North Western RHA appear to warrant investigation. The nurse staffing returns from these two centres were as follows:-

Yorkshire RHA		Establishment	31.12.76	WTE
Head Nurses and Deputies		4		3
Team Leaders		8		7
Donor Attendants		71		76
Totals		83		86
North Western RHA				
Head Nurses and Deputies		6		2
Team Leaders		13		12
Donor Altendants		68		68
Totals		87		82
Source of Data	HS2 Division			

Yorkshire RHA had 76 wte donor attendants in post at 31 December 1976, an excess over the establishment of 5 wte and had the highest ratio of donor attendants to team leaders (10.9:1) and the highest staff to bottles collected ratio; this suggests that the teams may be too large. Abstract of Efficiency Study number 176 (1977) suggests that a conventional blood collecting team using two vehicles has a donor attendant/team leader ratio of 7:1 which can be reduced to 3:1 by the purchase of self contained blood collection vehicles.

5.7 The expenditure on professional and technical staff and laboratory assistants at regional centres in 19/6/77 was as follows:-

	Prof & Tech	Lab Assts £	Total £	%
Blood collection	87,518	129,944	217,462	( 7)
Blood distribution	128,165	32,530	160,695	(5)
Laboratory	2,541,187	366,943	2,908,130	(88)
	2,756,870	529,417	3,286,287	(100)
•				
Percentage of total expenditure at regional centres	16.2%	3.1%	19.3%	

47/557

Expenditure on driver/laboratory assistants (shown on forms Cost 81 and 82) has been included with expenditure on laboratory assistants. The costs of laboratory assistants per bottle collected showed a much greater variation about the average than the other categories of expenditure in Appendix B.

The cost of professional and technical staff per bottle of blood collected ranged from £2.29 at East Anglia RHA to £1.00 at South West Thames RHA with an average of £1.51 in England, (see Appendix B).

When the expenditure for 1976/77 was divided by the staffing data for 31 December 1976 provided by HS2 Division, it produced an average staff cost of £3,818 and ranged from £5,051 at North West Thames RHA\* to £3,177 at Oxford RHA, (see Appendix D).

#### \*See footnote

The numbers of professional and technical staff which were reported as having fallen from 794 at 1 January 1975 to 705 at 31 December 1976, (a reduction of 11 per cent), were divided by the number of bottles of blood collected in 1975/76 and 1976/77 respectively and this revealed:-

	Regional Centre	Rank Order	Staff per 1,000 bottles collected
1975/76	North Western RHA	1	0.71
	West Midlands RHA	13	0.33
	ENGLAND AVERAGE		0.46
1976/77	East Anglia RHA	1	0.62
	North West Thames*	13	0.23
	ENGLAND AVERAGE		0.39

(see Appendix C)

## 5.8 ADMINISTRATION

Expenditure on the administration of regional centres including the salaries and wages of administration and clerical staff is identified on Form Cost 85. The administrative expenditure in 1976/77 was £2.954 million, 17.4 per cent of the total expenditure at regional centres.

The cost of administration per bottle of blood collected ranged from £2.24 at North Western RHA to £1.11 at West Midlands RHA with an average in England of £1.65, (see Appendix B).

The expenditure of the Thames Regions has not been adjusted to eliminate the effect of London Weighting as the administration expenditure is not exclusively salaries and wages and this expenditure cannot readily be identified.

\*The number of staff at the North West Thames centre was reported as having fallen from 72 (1.1.75) to  $39\frac{1}{2}$  (31.12.76), and this fall is dissimilar from the pattern at other centres.

471558

The staffing data provided by HS2 Division gave a total of 703 in post in England at 31 December 1976, an increase of  $55\frac{1}{2}$  ( $8\frac{1}{2}$  per cent) since 1 January 1975. The numbers of administrative and clerical staff at 1 January 1975 and 31 December 1976 were divided by the number of bottles of blood collected in 1975/76 and 1976/77 respectively and this revealed:-

	Regional Centre	Rank Order	Staff per 1,000 Bottles collected
1975/76	Trent	1	0.57
	North West Thames	13	0.25
	ENGLAND AVERAGE		0.38
1976/77	North Western	1	0.57
	North East Thames	13	0.29
	ENGLAND AVERAGE		0.39

(see Appendix C)

The number of administrative and clerical staff employed at North Western RHA appears to warrant investigation. The number of staff was reported as having increased from  $58\frac{1}{2}$  (1.1.75) to 90 (31.12.76) and this rise was significantly different from the general pattern.

Staff at 31 December 1976	Establishment	WTE
Donor Organisers and Deputies	8	8
Administrative Officers	5	5
Transport Officer	. 1	1
Clerical Grades	79	76
	93	90

(Source HS2 Division)

Computer systems were introduced at three centres:-

North Western - April 1969

North East Thames - June 1971

West Midlands - October 1971

Only at West Midlands is the whole of the doner panel on computer. In North East Thames the factory panels are still organised clerically and at North Western only donors on the permanent city centre panel are on computer files. These systems have been evaluated: one was inconclusive because of inadequate data and the results of the others showed higher running costs, which may be justified by benefits noted, but difficult to evaluate. After discussion at Regional Transfusion Directors meetings, a feasibility study is being undertaken in North East Thames region to consider the value of computer systems in relation to:-

Donor Registration and call-up,

Blood Stock Control,

Ante-natal Serology,

Any other aspects of the BTS in which interest is expressed.

The study will assess the benefits which may accrue from the use of computers, consider existing computer-based systems and recommend suitable equipment.

There is a commitment by NE Thames to consult with other regions and to provide them with the opportunity to make a contribution to the production of a flexible system which could be adopted by them and adapted to their particular needs.

It is expected that the report on this feasibility study will be produced by 1 January 1979.

#### 5.9 TRANSPORT

The expenditure on transport at regional centres in 1976/77 shown on Forms Cost 81 and 84 was £1.343 million, 7.9 per cent of the total expenditure at regional centres and was identified as follows:-

	£	%		£	%
Drivers - salaries	875,025	( 65)	Blood collection	665,548	(50)
and wages Maintenance	875,025	( 65)	Blood distribution	599,665	( 45)
expenditure	161,699	(12)	Administration	64,865	( 5)
Petrol	152,563	(11)	Other	13,724	( 1)
Other	154,515	(12)			
	1,343,802	(100)		1,343,802	(100)

A total of 4,074,051 miles were travelled at an average cost of 32.98p per mile. The cost of transport at three regional centres, (Mersey, North Western and NW Thames), exceeded 40p per mile and costs ranged from 50.01p at Mersey RHA to 25.00p at South Western RHA (see Appendix E).

47/560.

# 5.9.1 Drivers - Salaries and wages

The cost of drivers' salaries and wages per mile ranged from 29.82p at Mersey RHA to 12.47p at South Thames RHA with an average of 20.51p in England, (see Appendix E).

The cost of drivers' salaries and wages per bottle of blood collected ranged from £0.74 at North Western RHA to £0.26 at South West Thames RHA with an average of £0.47 in England, (see Appendix B).

Audit Branch (FB4) commented in January 1977 on the lack of control of the incentive bonus scheme for drivers at North Western RHA.

#### 5.9.2 Maintenance Expenditure

The cost per mile of vehicle maintenance ranged from 7.57p at Mersey RHA to 1.79p at West Midlands RHA with an average in England of 3.97p (see Appendix E). The four centres which did not employ maintenance staff had very low maintenance costs.

#### 5.9.3 Petrol

The cost of petrol per vehicle mile ranged from 4.80p at South West Thames RHA to 2.53p at West Midlands RHA with an average of 3.74p in England, (see Appendix E).

### 5.10 MEDICAL AND SURGICAL EQUIPMENT

The expenditure on medical and surgical equipment in 1976/77 was £3.287 million, 19.4 per cent of the total expenditure at regional centres, and was allocated as follows:-

	£ (thousands)	%
Blood collection	2,452	( 75)
Laboratory	835	(25)
	3,287	100

Most of the above expenditure allocated to blood collection was in respect of cryoprecipitate bags.

Whereas the total expenditure of regional centres rose by 59.9 per cent in the two year period 1974/75 to 1976/77 (see paragraph 5.2) the expenditure on medical and surgical equipment in England rose by 124.2 per cent in this period, the rises ranging from 278 per cent at Northern RHA to 54 per cent at West Midlands RHA (see Appendix F). Medical and surgical equipment expenditure increased as a proportion of the total expenditure at regional centres from 13.8% in 1974/75 to 19.4% in 1976/77.

In 1976/77, the cost of medical and surgical equipment allocated to 'Blood Collection' was £1.37 per bottle of blood collected in England and ranged from £2.06 at Northern RHA to £0.55 at West Midlands RHA, with an average of £1.37 in England, (see Appendix F). Only 42% of the West Midlands expenditure was allocated to the 'Blood Collection' function whereas at least 65% of the expenditure of every other centre was allocated to 'Blood Collection'. However, when the total medical and surgical equipment expenditure was divided by the number of bottles of blood collected, costs ranged from £2.41 at Northern RHA to £1.31 at West Midlands RHA with an average of £1.84 in England.

#### 5.11 OTHER EXPENDITURE

'Other' expenditure in 1976/77 amounted to £2.680 million, 15.8 per cent of the total expenditure and the major items were:

	£ (thousands)	%
Estate Management	839	(31)
Staff-travelling and subsistence	573	( 21)
Drugs and Dressings	302	(11)
Domestic Cleaning	211	(8)
Other	755	(28)
	2,680	(100)

# 5.12 BLOOD COLLECTION

£7.34 million or 43.2 per cent of the total expenditure at regional centres in 1976/77 was in respect of blood collection, (paragraph 5.1).

The main elements of this expenditure were:-

	£ (thousands)	%	
Medical and surgical equipment	2,452	( 33)	(para 5.10)
Nursing Staff	2,267	(31)	(para 5.6)
Medical Staff	765	(10)	(para 5.5)
Transport	666	(9)	(para 5.9)
Other	1,186	(16)	
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	7,336	(100)	

Blood collection costs in 1976/77 ranged from £4.89 per bottle of blood collected at North East Thames RHA to £3.16 at Trent RHA with an average in England of £4.10, (see Appendix G).

In both 1975/76 and 1976/77, the centres with the highest and lowest 'blood collection rates' were:-

Bottles of blood collected per thousand population (aged 18-65 years)

	1975/76	1976/77
South Western RHA	84.3	87.4
Wessex RHA England	46.2 62 <b>.</b> 4	49.4 64 <b>.</b> 9
(see Appendix G)		

In England, there was an increase of 4.0 per cent in the number of bottles collected and the number of miles travelled to collect this blood increased by 6.3 per cent in the period.

# 6. MATTERS FOR CONSIDERATION (BY THE DEPARTY ENT)

- 6.1 In view of the inconsistencies in the data collected, is the Department satisfied that it is adequate for its planning and monitoring function? (Paragraphs 4.4, 5.4, 5.5, 5.6, 5.7)
- 6.2 Is there a need for staffing data to be collected independently by two Divisions? (paragraph 5.4)
- 6.3 Should arrangements be made to regularly monitor the costs of the NBTS and by whom should this be done? In particular should the high overall cost at North Western RHA (paragraphs 5.3, 5.6, 5.8, 5.9) and the costs of the following functions;

Nursing - Yorkshire RHA (para 5.6)

Transport - Mersey RHA
North West Thames RHA (para 5.9)

Medical and
Surgical Equipment - Northern RHA (para 5.10)

Blood Collection - Northern RHA
Wessex RHA (para 5.11)

be investigated.

- 6.4 Should the arrangements for the maintenance of vehicles and the supply of petrol be reviewed in conjunction with the arrangements in the Health Service as a whole? (paragraphs 5.9.2, 5.9.3)
- 6.5 Is the right balance being struck between the encouragement of the national voluntary effort on behalf of the BTS and the cost effectiveness of blood collection? (paragraph 4.3)

#### BLOOD TRANSFUSION SERVICE

# 1. FUNCTIONS OF REGIONAL TRANSFUSION CENTRES

The principal functions of RTCs are:-

- 1. to recruit voluntary blood donors, to maintain panels of them at appropriate strength and to organise their attendance at blood donor sessions;
- 2. to collect from donors, usually by means of mobile teams, sufficient blood to meet the needs of the Region and the requirements of the Central Laboratories;
- 3. to test blood for its safety (eg hepatitis B antigen, syphilis); to perform blood grouping and cross-matching and, in most centres, tissue typing; (some centres also perform histocompatability testing);
- 4. to maintain a regional blood bank and blood banks in hospitals with pathology laboratories;
- 5. to prepare and distribute blood components (eg concentrated red cells, platelets, anti-haemophilic cryoprecipitate) and certain grouping sera;
- 6. to organise and provide an antenatal blood grouping and antibody testing service;
- 7. to maintain a regional panel of donors belonging to rare blood types;
- 8. to provide plasma and serum for the preparation of plasma fractions and grouping serum at the Central Laboratories; these functions may involve the performance of plasmapheresis and the recruitment of special volunteers who may be asked to undergo deliberate immunisation.
- 9. to distribute grouping serum and certain plasma fractions (Fibrinogen, albumin, plasma protein fraction and anti-D immunoglobulin) prepared at the Central Laboratories;
- 10. to provide a consultant reference service for all transfusion problems, both clinical and laboratory;
- 11. to give instruction in blood transfusion at the RTC and in medical schools to doctors, nurses and laboratory technicians;
- 12. to undertake research with the object of increasing the safety and scope of transfusion.

### 2. FUNCTIONS OF THE CENTRAL LABORATORIES

- 2.1 The BPL prepares plasma fractions, operates a freeze-drying plant and undertakes research into the preparation and uses of plasma fractions and plasma substitutes. The PFL prepares plasma fractions for the treatment of haemophilia and related diseases and undertakes research into the preparation and use of such fractions.
- 2.2 The BGRL is the national reference laboratory for blood group serology; it also acts as the WHO International Blood Group Reference Laboratory. It prepares and distributes all types of blood grouping sera and accepts samples from RTCs for the identification of unusual blood group antibodies. It maintains the National and International Panels of Donors of Rare Blood Types.

The salaries and wages expenditure of the Thames Regions has been adjusted to eliminate the effect of London Weighting

Source of Data: Expen	England	W Midlands Hersey N Western	N E Theses S w Insues Wessex	Northern Yorkchire Trent E Anglis N W Thames	KEGION	•		England	West Midlands Nersey North Vestern	N E Thames S W Thames Wessex Oxford South Western	Northern Yorkshire Trent Tast Anglia N W Thames	NOISEE	
Expenditure - As	0.64	0.85	0.42 0.42 0.76 0.68	0.74	(£)  R & R  HEDICAL	1976/77	*******	0.63	0.63	0.43 0.43 0.65	0.50 0.66 0.56 0.83	S & W (£)	1975/76
per Fo		7 - 19	10 × 10 × 10 × 10 × 10 × 10 × 10 × 10 ×	35 13 12 12 12 12 12 12 12 12 12 12 12 12 12	RAHK ORDER				∞ W4	٠ ٠ ١ ١ ١	12062	PANK ORDER	
As per Forms Cost 81-85	1.22	1.29 1.29 1.44	1.17 1.02 1.09 1.44 1.08	1.15 1.51 1.28 1.24 1.01	NURSING S & V (£)	15		1.04	1.10 1.08 1.30	1.00 0.80 0.93 1.26 0.94	0.98 1.15 0.88	NURSING S&V (£)	
81-85		10 A &	るだなでた	77619	RANK OKDER				NOV	3w 1t &	177419	RANK ORDER	
Bottle	1.51	1.17 1.40 2.08	1.59 1.57 1.57	1.46 2.09 2.29 1.18	PROF & TECH S & V			1.40	1.10 1.20 1.96	1.33 0.99 1.48 1.11	1.94 1.32 2.09 2.14	TECH S & W S & W	Ì
Eottles collected -		ក់ខេស	25000	12004	RANK OZDEZ				V & 7.	93536	12 12 7 #	RANK ONDER	
octed -	0.29	0.37	0.22 0.10 0.12 0.39 0.40	0.47 0.47 0.45 0.22	LAB ASST S & V (£)			0.23	0.48	0.14	0.43	ASST ASST S & W (£)	
As per NBIS 47	<del></del>	<u> </u>	5 6 11 2 9	70 + 27	RANK				U100	#700°	3101	PANK OEDER	
NEIS 47	0.47	0.56 0.57 0.74	0.37 0.26 0.54 0.52 0.41	0.55 0.31 0.40 0.57 0.46	DRIVERS S & W (£)			0.43	0.55 0.46 0.70	0.38 0.24 0.61 0.45	0.48 0.28 0.39 0.53 0.40	DRIVERS. S&W (£)	
		<b>→</b> 10 ←	57627	๛หถ่กับ	RANK ORDER				-3 OV.M	17227	๛๛๛ฌีษ	PANK ORDER	
	1.65	1.11 1.59 2.24	1.54 1.75 1.43 1.71	1.97 1.82 2.12 2.05 1.25	(3)			1.45	1.15 1.35 2.00	1.25 2.25 2.25 2.25 2.25 2.25 2.25 2.25	1.22 1.67 2.11 1.72 1.07	ADMINISTRATION (£)	
·		- &J	27200	ユマスト こ	RANK				271	.ฉีออนอ	だひったる	RAIK ORDEZ	
	1.84	5.5.5 5.5 5.5 5.5 5.5 5.5 5.5 5.5 5.5 5.5 5.5 5.5 5.5 5.5 5.5 5.5	1.70 1.70 1.52 1.65	2.45 2.45 2.45 2.45 2.45 2.45 3.45 3.45 3.45 3.45 3.45 3.45 3.45 3	SURGICAL C			1.€	1.11 1.09 1.67	1.67 0.58 1.65 1.20	1.53 1.67 1.45 2.01	SUEGICAL EXULD	1
		ひつび	97+00	น ก กี อี ฉ	RANK ORDER				w 13	45 200	N-1778	DANK OPDER	
	1.77	1.21 2.11 2.92	2.12 2.12 2.12 2.13 2.13 2.13 2.13 2.13	1.43 1.71 1.99 2.02	CIHER (2)			1.55	1.12 1.66 2.37	71.374 7.367 7.367	1.63 1.50 1.97 1.90 0.95	(E)	
		. 2 12	4~~50	はいかっこ	RANK OLDER				<b>3</b> 6 7	すだいらの	roonutio ·	STICE OFFICE OFFICE OFFI OFFI OFFI OFFI OFFI OFFI OFFI OFF	_
	9.37	7.59 12.65	89979 8378	7.28 2.28 2.28	TOTAL CE)			: œ	7.04	770000	840 E	(5)	
	4.0	-2 VI VI	र ५० व	2000E	SECEO ZVVZ				ــ بر <u>ــ</u>	င်တယ် န	- ถึกดอ	SECTION SECTIO	

STATING AT 1 JANCHER 1975	ו שאניותוני	157,5		·		u1	TAFF PE	STAFF PER 1,000 BOTFLES		COLLECTED						•		
Region	Kedicel	Par 1,000 pottles collected	Pank Order	Nursieg	Per 1,000 bottles collected	Ronk Order	Prof and Tech	Per 1,000 bottles collected	Rank Ordor	Adain and Clerical	Per 1,000 bottles collected	Rark Order .	Ancillary and Others	Per 1,000 bottles collected	Ra-k Order	Totel Staff	Per 1,000 bottles collected	2020; S7417
Northern Yengebûre	స్టాల	0.10 0.04 0.05	12 10	46 83 68	£5°0 29°0 64°0		35.33	0.50 0.59 0.69	40° 5	22.22	0.44	70/0 -	41 754 70	0.52	0 - u	25.5 25.5 25.5 25.5 25.5 25.5 25.5 25.5	င့် ရှင် ရှိလို့ ရှိ	ב- אין י
म मार्गाहर	公2	0.00	nφ	37.4	0.51	v±	25 25	0.66	no	37± 42	0.25	uħ	12.7	0.24	4 tJ	2.25	13.	2 21
M E Thanes S W Thanes Voscex Onford S Festern	6 5 5 0 0 5 E	2.00 2.00 2.00 2.00 2.00 2.00 3.00 3.00	25,000	38,529	25.00 25.00 26.00 27.00 27.00	~ \ti \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	25225	0.47 0.33 0.46 0.45 0.25	24.00	£5223	0.27 0.35 0.50 0.48 0.23	ñ 2 √4 £	25.25.25 25.25.25 25 25.25 25 25 25 25 25 25 25 25 25 25 25 25 2	88888	~ = 0.00 W	00000 00000	38.5.5.	<u>စက်ီက လုပ်</u>
Widlands Mercey Western	7 <sup>77</sup> 5	0.02 0.03 0.07	£48	2528	0.47 0.52 0.37	82 4 G	4252	0.33	50-	28.33	0.32 0.38 0.53	586	45 57 60	0.27	5 W 0	8037 8037 8037	2.02	m-4*0
रूपश्रद्धम <u>र</u>	120	0.0		795	94.0		794	94.0	<del></del>	647.5	0.38		651.75	0.38	•	3,006;	1.75	

1976 אינה באודיבה 1975 אינה באודיבאוני

Rank Grass	6-1010-11 E	စဉ်းကဆင်	ពិភ-	
Per 1,000 bottles collected	2.78 2.13 2.13 1.45	1.58	1.41 1.89 2.29	
Total	250 260 200 200 200 200 200 200 200 200 20	2834 266 169 169 237	263.	2,111
Rank Order	1- wwo e	v 12 - 6 w	Ú4 V	
Per 1,000 bottles collected	0.53 0.57 0.57 0.45	0.39 0.25 0.33 0.33	0.26	24.0
Other	52848	చ్చిక్షాగ్ల	47 60 99	250
Rank Order	40NU0	だなって	5∞-	
Per 1,000 bottlas collacted	44.0 0.45 0.50 0.50 0.50	0.29 0.31 0.43 0.42 0.31	0.33	66.0
Admin end Clerical Staff	8%2%3	325 524 54 54 54	5 88°	60)
Rank Order	400-5	2 5 5 5 C 5	50 u	
Per 1,000 bottles collected	0.51 0.36 0.53 0.62 0.23	0.43 0.28 0.45 0.43 0.31	0.29	0,39
P & T Staff	3452	2778	573 472 888	ζη/ ·
Rank Order	8-605	51005	να <b></b>	
Per 1,000 bottles collected	74.0 0.4.0 0.50 0.50	0.42	0.52	2
Mursing Staff	61 86 57 57 69	<u>2022</u> 88	93 52 82 11,8	2100
Rank Order	85vr-	W4,001	చ్ళ 6	
Per 1,000 bettles collected	42.0 20.0 20.0 42.0 51.0	0.05	0000 0	60.0
Madioal Staff	250002	20 mm	17 4 9 W	5
Peston	Correspondence of the	S TO S	Windlands Winesy Weeren	P-0-5-3

Source of Data: Staff in Post. - Data supplied to ES2A by Regional Centres Bottlee collected - is per NED3 47

# COST PER MEMBER OF STAFF

STAFF 1 JANUARY 1975/COST 1975/76

13014

REGION	Medical Staff WTE	COST PER STAFF MEMBER (£)	nursing Staff WTE	COST PER STAFF MEMBER (£)	PROF & TECH STAFF WTE	COST PER STAFF MEMBER (£)
NORTHERN YORKSHIRE TRENT E ANGLIA N W THAMES	13	5,003	64	1,976	65	3,869
	5	16,448	83	1,995	45	3,668
	8	8,666	66	2,159	86	3,009
	7	8,674	37 <del>2</del>	2,051	48	3,253
	13½	6,343	66	2,154	72	2,416
n e thames	10	13,685	66	2,125	65	2,859
s w thames	12	8,224	78 <del>½</del>	2,303	75	2,993
wessex	6	8,191	32	2,028	32	3,214
oxford	9	6,545	50	2,286	41	2,446
s western	12	7,229	62	2,295	53	3,279
W MIDLANDS	4	26,356	78	2,339	54	3,378
MERSEY	9½	8,243	54	2,071	50	2,487
N WESTERN	11	9,955	58	3,428	108	2,787
ENGLAND	120	9,055	795	2,251	794	3,023
STAFF 31 DECE	MBER 1976/0	OST 1976/77				
NORTHERN YORKSHIRE TRENT E ANGLIA N W THAMES	5 3 6 3 17	11,497 31,551 10,782 18,655 7,808	61 86 65 37 8	2,429 2,236 2,695 2,491 2,474	66 46 73 46 39 <del>2</del> 39 <del>2</del>	3,721 4,048 3,935 3,720 5,051
N E THAMES S W THAMES WESSEX OXFORD S WESTERN	9	12,579	59년	2,761	60	3,722
	12	8,115	100	2,389	66	3,529
	3	19,045	33년	2,456	34	3,463
	7	9,277	50	2,754	41	3,177
	6	15,574	70	2,439	50	4,138
W MIDLANDS	4	28,970	93	2,535	53	4,011
MERSEY	4	22,467	55	2,476	42	3,513
N WESTERN	6	17,923	82	2,779	88	3,740
ENGLAND	85	13,470	861 <del>ਡ</del> ੍ਹੇ	2,523	705	3,818

Source of Data: Staff in Post - Data supplied to HS2A by Regional Centres.

Expenditure - Forms Cost 81-85

The salaries and wages expenditure of the Thames Regions has been adjusted to eliminate the effect of London Weighting

•	•		•				
स्वत्रहेत् स्वत्रहेत्	1050Ea	พดรมัน	0 t- 10		⇒ 600 E W	១៩៩ភូទ្រ	Ø ← VI
Co 3t Per 100 Miles	4.28.28.28 4.28.28.28	26868 26868	23.53 40.03 37.85	33.65	248863 24886	88444 68448	29.08 11.35 22.35 8.35
Total Transjort Expenditure (Actual)	52,52, 52,53, 52,63, 85,65, 85,65, 73,011	55,224 54,522 54,532 54	112,390 75,129 147,937	3,189,786	122,466 27,463 92,673 75,239 117,505	63,732 153,631 26,759 66,047 115,455	122,302 101,351 173,654 1,345,602
Other Transport Expenditure	7, 919 2, 1, 2, 2, 2, 2, 2, 2, 2, 2, 2, 2, 2, 2, 2,	17,382 33,759 5,613 716 14,791	2,533 12,998 2,104,5	140,677	22,099 1,294,08 10,832 16,564 6,129	6,911 37,156 6,900 1,066 16,268	2,565 17,073 12,096 154,515
Rank Order	N4456	য়৽য়৽৽	1 × 1		NW4 120	७० घ घ ८	<u>ئ</u> 1
Cost. Per 100 Vehicle Hiles	3.20 4.92 6.28 2.17 3.01	1.84 7.59 1.71 2.42 2.76	7.95 5.34 6.61	3.59	4.38 6.65 6.48 2.30	2.70 2.63 2.10 3.42	1.79 7.57 6.70 3.97
Total Maintenance Expenditure	12,426 9,651 17,342 5,765 8,420	5,621 16,134 2,542 5,458 11,833	7,536 10,555 25,849	139,232	14,145 15,169 17,882 6,373 7,892	7,949 18,045 3,457 6,039 15,773	7,530 15,351 23,044 161,699
Contract Servicos Expanditure	623 1,238 238 531 6,034	2447. 224.00 224.00	5,309 648 1,855	51,485	626 830 364 813 7,892	1,007 4,004 7,424 6,035 6,035	6,659 2,604 295 33,215
Spare Farts Expenditure	2,859 1,629 3,211 1,512 416	3,182 3,182 3,190	2,277 1,218 6,213	26,462	2,972 2,623 2,558 2,499	2,354 3,435 33 53 6 4,272	871 2,270 10,352 34,265
Maintononce Staff Salurios end Wagos	8,944 6,734 13,893 3,722	4,273 9,619 - 7,530	8,689	81,235	10,547 9,746 14,960 5,051	4,538 10,516 - - 8,137	10,277 17,367 89,159
Rank Order	พนิยนะ	်ပြကည်ဆက	£ 4'9		42001	ဖ- <sup>င်</sup> ဘ≄	ひとら
Cost Per 100 Vehicle Hiles	3.44 2.49 3.31 51.7	2.5.5 2.5.5 5.0.5 5.0.5 5.0.5	2.71 3.51 5.51	3.41	4.65 3.40 3.40 3.40 3.20 3.20	3-72 4-60 3-35 5-50 5-93	2.53 4.20 3.50 3.74
Patrol Expanditure L	11,265 4,890 8,2+9 8,814 14,395	9,105 17,337 3,644 6,830 16,850	10,496 6,933 12,923	132,201	15,016 6,027 9,397 10,092 9,618	10,966 23,852 5,566 8,844 18,161	10,662 8,515 15,507 152,563
Renk Order	000EV	55- 23	w <del>+</del> 0		27001	5 22 4 10 5	
Cost Per 100 Vehicle Hiles	19.00 17.34 14.52 24.15	17.17 12.09 18.51 12.51	23.66	19.11	25.03 19.59 15.51 26.53	19.72 12.47 24.90 19.92 14.11	24.13 29.32 27.95 20.51
Drivers - Salaries and Vagns	62,153 75,055 47,850 23,655 67,492	52,43 42,63,43 43,63,43 53,73 125,73	91,755 47,643 105,751	741,335	23,236 23,535 45,512 51,512 503,77	52,02 67,03 65,03 65,03 85,03	101,565 60,442 117,007 335,687
Region	Northern Tract Fract B. Anglia	N E Thames S F Chames Wedlex Outland	W Widleds Moreef W Welear	England	Northern Topichiro Front E Anglia	N D Thomes S W Thomes Wessex Outlind S Western	W Midlands Mercey N Western England
Ωξ	57/2521	15			1976/77	rs.	

Source of Data - Expenditury - As per Form Cost 84 - Hilesce - As per Form NEDS 47

The Frivers' calaries and wages expenditure has been adjusted to eliminate the effect of London Weighting \$\overline{\pi}\$ The expenditure for H D Themes EEA includes the dimer/elonks included in Form Cost 31

MEDICAL AND SURGICAL EQUIPMENT COSTS

			Expend	Expenditure 1976/77							
Region	Blood Collection	Cost per 100 Bottles Collected	Rank Order	Laboratory	Total Expenditure	Cost per 100 Bottles Collected	Rank Order	Expenditure in 1974/75	Expenditure Increase in 1976/77 c.f 1974/75	Increase in Expenditure	Ram's Order
	(+)			· to	· 10	ጥ		19	ţo	પ્ર	
	610 TYC	505-60	1	45,903	310.820	241.22	1	82,318	228,502	277.6	
Yorkshire	157,824	123.79	10	49,951	207,775	162.96	10	87,540	119,835	100	0
Prest	142,817	104.08	12	61,274	204,091	148-73	12	81,005	123,036		
East Anglia	129,343	171.38	W	49,914	179,257	237-51	2	68,460	110,777	161.0	1
N W Thames	241,463	142.76	7	123,173	369,636	218.53	Ų	183,598	186,038	101-5	ō
N 3 Thames	226,499	161.51	+	59,544	285,843	203.83	6	129,503	156,555	120.7	)
S W Thunes	342,289	146.34	\s	55, 234	397, 523	169-94	- 00	118,262	275,250	100	N C
Meusex	140,714	187.12	·. N	20,790	161,504	214.77	+	77,744	000		,,,(
Oxford	115,760	120.78	11	29,603	145,563	151-66		50,002	76,501	-	· .
South Western	218,897	137.82	و	44,138	263,035	165.61	9	153,757	105,270	• .	-
West Midlends	100.770	55.26	ಚ	137,306	238,076	130.55	13	155,020	83,056	53.6	ı Gì
Mersey	152,403	144.62	0	1,5,905	198,313	188.17	7	67,934	150,575	6-161	٠,
North Western,	218,737	138.07	œ	107,416	326,153	205.87	Vi	191,557	154,596	,,,	7
Figland	2,452,438	137.13		834,951	3,287,389	183.82		1,465,935	1,821,403	124-2	

Source of Data: Expenditure - As per Forms Cost 81/Cost 83

Bottles Collected - As per Form NETS 47

ARRESTORY F

## BLOOD COLLECTION COSTS

			<del></del>	<del></del>	<del></del>	(in the company between the company of the Article	Section of Properties
REGION	BOTTLES COLLECTED	POPULATION AGED 18-65 YEARS (THOUSANDS)	BOTTLES COLLECTED PER 1,000 FOPULATION	RANK ORDER	BLOCD COLLECTION EXPENDITURE £	COST PER BOTTLE COLLECTED £	RAUK ORDER
1. 1975/76							
Northern Yorkshire Trent E Anglia NW Thames	129,540 124,593 123,939 72,823 167,076	1,833.8 2,070.1 2,667.0 1,026.9 2,122.2	70.6 60.2 46.5 70.9 78.7	10 5 2 11 12	464,158 416,628 375,220 279,498 572,177	3.58 3.34 3.03 3.84 3.42	6 9 11 2 8
NE Thames SW Thames Wessex Oxford S Western	139,646 227,262 69,671 90,442 151,997	2,202.2 3,756.5 1,507.9 1,295.3 1,803.4	63.4 60.5 46.2 69.8 84.3	7 6 1 9	591,296 678,222 260,076 315,255 561,356	4.23 2.98 3.73 3.49 3.69	1 12 3 7 5
W Midlands Mersey N Western	1.66,146 103,302 153,457	3,062,5 1,849,5 2,361.1	54.3 55.9 65.0	3 4 8	477,865 329,689 571,864	2.89 3.19 3.73	13 10 4
England	1,719,894	27,558.4	62.4		5,893,304	3.43	
2. 1976/77							
Northern Yorkshire Trent E Anglia NW Thames	128,851 127,493 137,216 75,473 169,144	1,839.4 2,074.0 2,673.6 1,038.9 2,115.2	70.0 61.5 51.3 72.6 80.0	9 5 2 10 2	615,314 548,135 433,297 329,203 649,344	4.78 4.30 3.16 4.36 3.84	. 6 13 4 11
NE Thames SW Thames Wessex Oxford S Western	140,235 233,906 75,198 95,843 158,827	2,195.6 3,757.2 1,521.0 1,311.1 1,816.6	63.9 62.3 49.4 73.1 87.4	7 6 1 11 13	685,282 970,874 341,538 384,556 649.820	4.89 4.15 4.54 4.01 4.09	1 8. 3 10 9
W Midlands Mersey W Western	182,354 105,385 158,420	3,063.0 1,802.9 2,358.3	59.5 58.5 67.2	4 3 8	597,324 446,516 685,135	3.28 4.24 4.32	12 7 5
England	1,788,345	27,566.8	64.9		7,336,338	4.10	

# Source of Data

<sup>&#</sup>x27;Eottles Collected' - NBTS 47 'Population' - Home Population Provisional Estimates for Mid 1975 and Hld 1976.

<sup>-</sup> The catchment area of Mersey BTC includes the repulation of Clwyd and Gwynedd Area Health Authorities.
- Blood denors are aged between 18 and 65 years.

Expenditure - Forms Cost 81 and 84

Miles Travelled - Form Cost 84

## RTD(79)20

HEALTH AND SAFETY COMMISSION: DANGEROUS PATHOGENS DRAFT REGULATIONS AND DRAFT GUIDANCE NOTES

The Health and Safety Commission has published a Consultative Document relating to draft regulations concerning the notification of work with dangerous pathogens.

The HSC has gone beyond the pathogens classed by the Dangerous Pathogens Advisory Group as Category A pathogens. In these draft regulations, Category A pathogens are designated as Schedule 1 pathogens. There is also a list of Schedule 2 pathogens (attached) in which Directors should note the inclusion of 'serum hepatitis virus'. Beneath this list, Directors will find the particulars relating to the handling of Schedule 2 pathogens which will require statutory notification to the HSE.

Directors are asked to comment on these draft requirements in relation to the hepatitis testing at RTCs.

#### SCHEDULE 2 Regulation 3(1)(b)

List of certain other pathogens the keeping or handling of which is to be notified, and the particulars to be notified.

Part 1: List of pathogens for which the particulars in Part II are required

- VIRUSES
  - Arboviruses (other than those named in Schedule 1, those listed below, and Semliki
  - . Forest, Uganda S, Langat and Sindbis viruses)
  - Contagious Pustular Dermatitis virus
  - Japanese B virus
  - Kyanasur Forest Disease virus
  - Lymphocytic Choriomeningitis virus
  - Saint Louis virus
  - Serum Hepatitis virus
  - Western Encephalitis virus
  - Wesselbron virus
  - Eastern Encephalitis virus
  - Rift Valley Fever virus
  - Tick-borne Encephalitis virus
  - Yellow Fever virus
- (b) BACTERIA
  - Bacillus anthracis
  - Bartonella species
  - Brucella species
  - Clostridium botulinum
  - Corynebacterium diphtheriae
  - Francisella tularensis
  - Legionella pneumophila
  - Leptospira species

- Listeria monocytogenes Mycobacterium tuberculosis (and other species of pathogenic mycobacteria) Pseudomonas mallei Pseudomonas pseudomallei
- Salmonella choleraesuis
- Salmonella sendai
- Salmonella typhi
- Salmonella paratyphi A, B & C
- RICKETTSIAE Coxiella burneti (and other pathogenic rickettsiae)
- **CHLAMYDIA** Chlamydia psittaci (and other species)
- FUNGI (e) Coccidiodes immitis Cryptoccoccus neoformans Blastomyces dermatitidis Histoplasma capsulatum (and related species) Paracoccidioides brasiliensis

Part II: Particulars to be included in the notice relating to pathogens listed in Part I of this Schedule

The particulars to be included in the notice mentioned in Regulation 3(1)(b) are -

- (a) the name of the person who will keep or handle the pathogens;
- the address of the premises where the pathogens will be kept or handled;
- (c) the location within those premises where the pathogens will be kept or handled;
- the name including, where relevant, the strain of the pathogens to be kept or handled.

#### SCHEDULE 3 Regulation 4

Particulars to be notified in respect of diagnostic laboratories

- 1 Where the work involves the identification of organisms suspected of being or containing a pathogen specified in Schedule 1, the following particulars shall be included in the notice mentioned in Regulation 4 -
- (a) the name of the person carrying out the work;
- the address of the premises where the work will be carried out;
- the location or locations within those premises where the work will be carried out;
- the pathogens with which it is intended to work; *(d)*
- the name, qualification and relevant experience of -
  - (i) the individual who will be directly in charge of the work,
  - (ii) any other individual who will be personally supervising the work,
  - (iii) any other individual who will be directly involved in the work.