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# AUSTRALIA & NEW ZEALAND

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LIVER TRANSPLANT REGISTRY



From the Combined Registries  
of the Australian and New Zealand  
Liver Transplant Centres

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DATA from 1 July - 31 December 2002

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## INTRODUCTION

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This Interim Report of the Australia and New Zealand Liver Transplant Registry contains data collected from the liver transplant units in Australia and New Zealand from the date of the 14<sup>th</sup> Report (30<sup>th</sup> June 2002) to the 31<sup>st</sup> December 2002.

Demographic data is presented together with analyses of primary diseases and the changing trends in adult disease. The impact of changes in surgical procedures is also highlighted.

Outcome analyses will be performed on the complete data base after data from 1<sup>st</sup> January 2003 to 30<sup>th</sup> June 2003 are collated. The full results will be published in the 15<sup>th</sup> Annual Report by 31<sup>st</sup> August 2003.

## SUMMARY POINTS

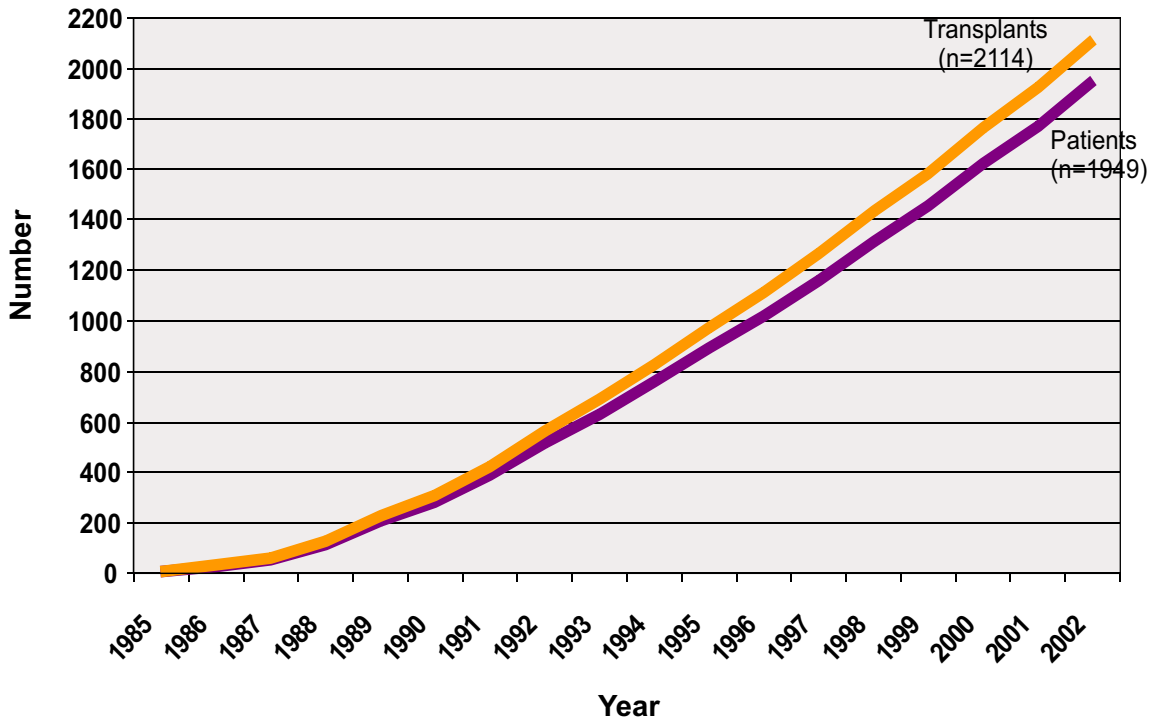
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- ▶ A record number of new patients were transplanted in 2002.
- ▶ The increasing burden of patients presenting for transplantation due to chronic viral hepatitis is again seen in the primary disease of new adult transplant recipients.
- ▶ The introduction of innovative surgical techniques is contributing to maximising the usage of available donor organs.



From 1 July 2003 to 31 December 109 transplants were performed in 103 patients (5 x second grafts and 1 third graft). A total number of 191 transplants were performed in 179 patients in 2002. The cumulative number of patients and transplants are shown below.

### Cumulative Number of Patients & Transplants



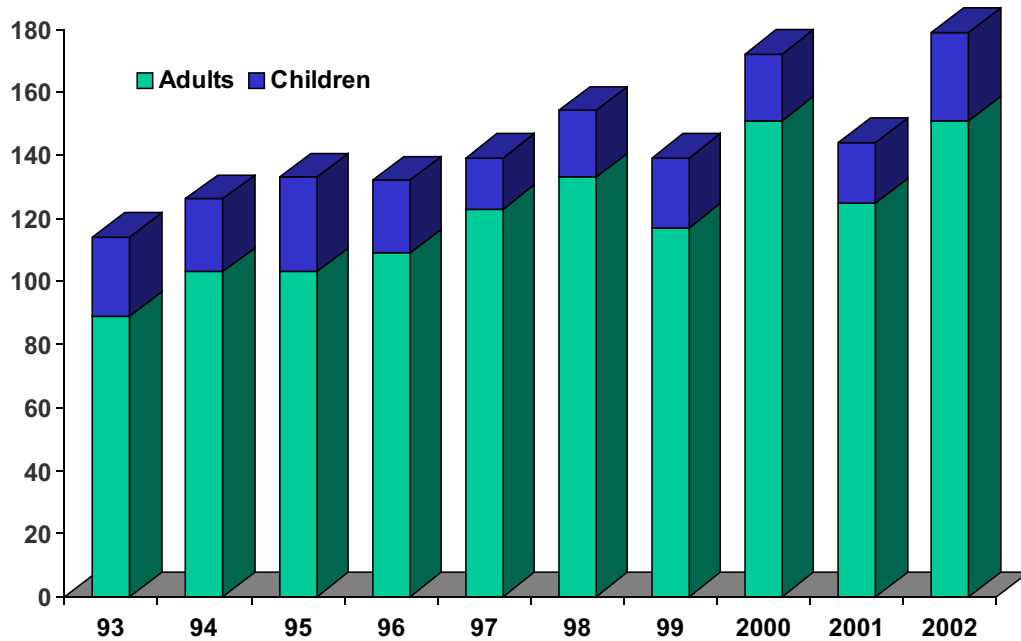
Demographic data of the new patients transplanted are listed in following table.

<b>Data 1-Jul – 31-Dec 2002</b>	<b>103 Primary transplants</b>
	<b>19 children [7 M (37%), 12 F]</b>
	<b>median age 3.6y (0.5 – 9.8y)</b>
	<b>84 adults [59 M (70%), 25 F]</b>
	<b>median age 51.4y (18.2 – 68.3y)</b>

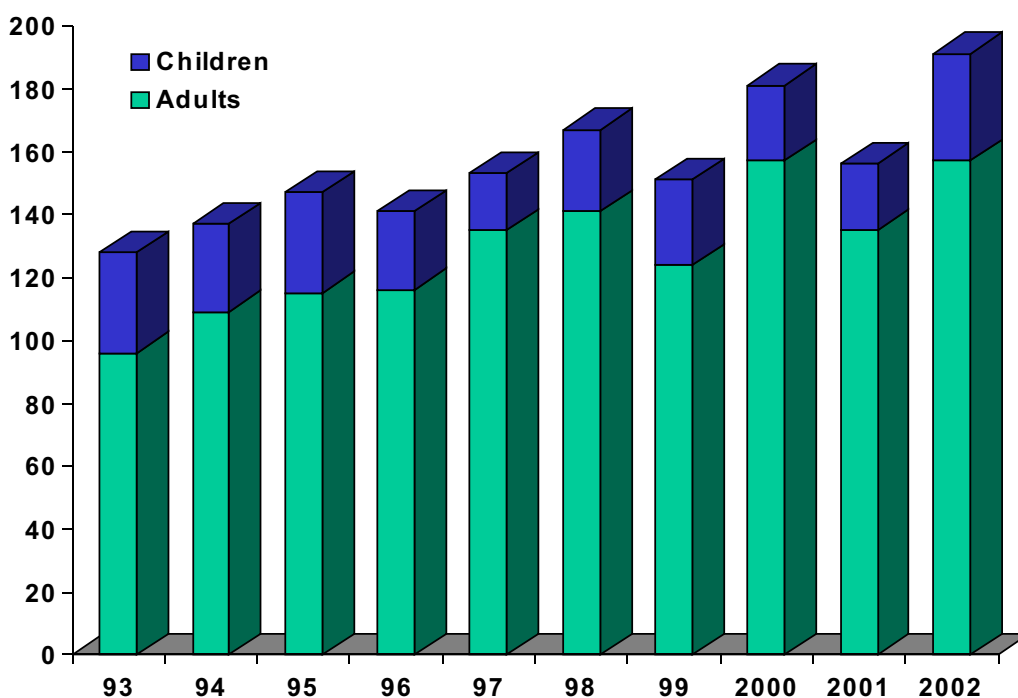


The number of new patients transplanted and the number of transplants performed increased again in 2002 after a decline in 2001 and represented the highest number in a calendar year since the beginning of liver transplantation in Australia in 1985.

### Number of New Patients by Year



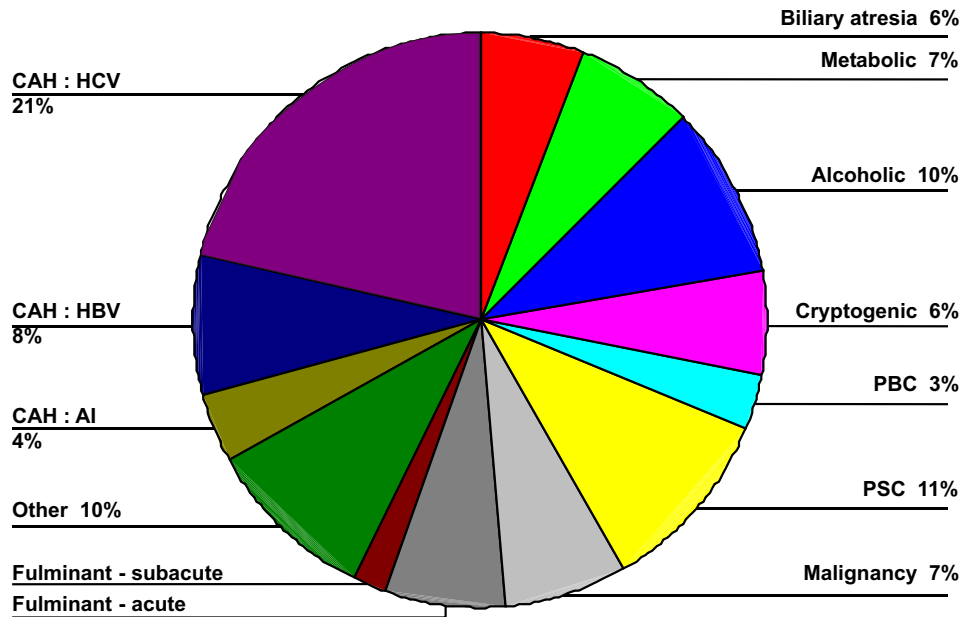
### Number of Transplants by Year



The primary diseases of recipients were similar to that of the historical data from the 14<sup>th</sup> Report and are shown below.

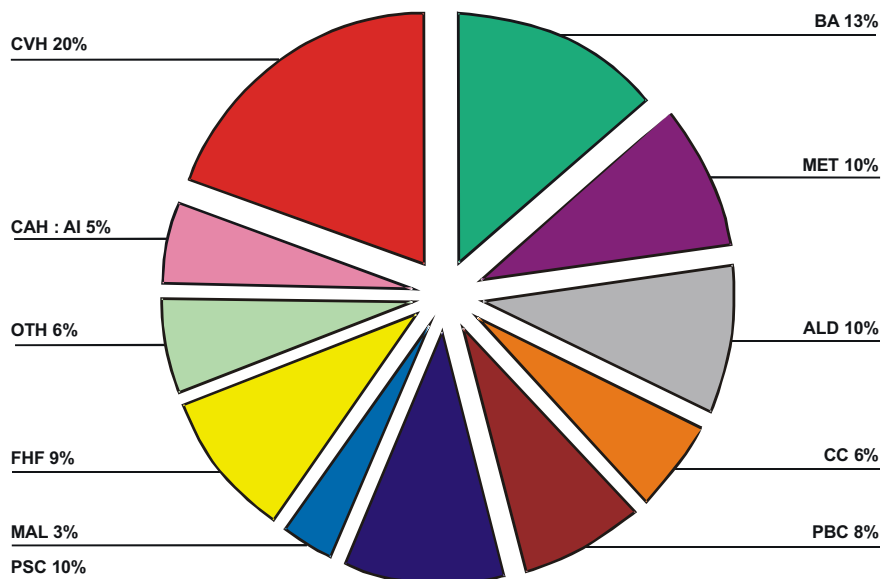
**Data 1-July – 31-December 2002**

**Primary Diseases**



**Data 14th Report (January -85 - June 2002)**

**Primary Diseases**



Primary diseases by age sub groups are listed

## PRIMARY DISEASES Children (n= 19)

Biliary atresia	6
Metabolic (2 x <i>a-1-AT</i> , 1 x <i>OTC</i> )	3
Fulminant hepatic failure acute ( <i>unspecified</i> )	4
Cryptogenic cirrhosis	1
Other (3 x <i>PFIC</i> , 1 x <i>bile transport defect</i> , 1 x <i>histiocytosis X</i> )	5
<b>TOTAL</b>	<b>19</b>

-1-AT - -1- antitrypsin deficiency  
 OTC - ornithine transcarbamylase deficiency  
 PFIC - progressive fibrosing intrahepatic cholestasis

## DISEASES - Adults (n=84)

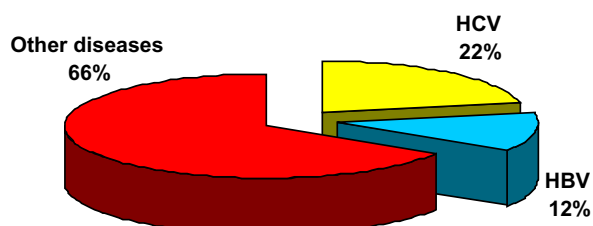
Primary Disease	No	Secondary disease
Fulminant hepatic failure - acute ( <i>HBV</i> , 2x?)	3	
- subacute ( <i>HBV</i> , drug)	2	
Primary sclerosing cholangitis	11	
Primary biliary cirrhosis	3	
Metabolic diseases (2 x <i>a-1-AT</i> , 1x <i>FAP</i> , <i>CF</i> )	4	
Cryptogenic cirrhosis	5	1 x HCC
Alcoholic cirrhosis (ALD)	10	1 x HCC
CAH : autoimmune	4	
CAH : hepatitis C (HCV)	27	10 x HCC, 2 x HBV, 4 x ALD
CAH : hepatitis B (HBV)	9	2 x HCC
Other (2x <i>NASH</i> , 1x <i>polycystic</i> , <i>secondary biliary cirrhosis</i> , <i>ductopenia</i> )	5	
Hepatocellular carcinoma (HCC)	1	
<b>TOTAL</b>	<b>84</b>	

*FAP* - familial amyloid polyneuropathy  
*CF* - cystic fibrosis  
*NASH* - non-alcoholic steatotic hepatitis

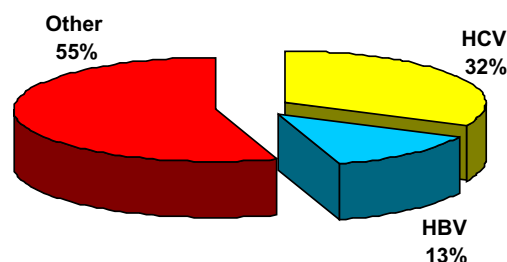
In many adult patients more than one disease contributes to end stage liver failure which requires transplantation. This can be seen from the secondary diagnoses listed in the table above. Overall 27 (32%) of 84 adult patients had hepatitis C and 11 (13%) of 84 hepatitis B; 9 were chronic and 2 acute infections. Though this is a small subgroup of the adult recipient population, it reflects the increasing numbers of patients with chronic viral hepatitis being referred to liver units for transplantation

## ADULT RECIPIENTS

Jan 2000 - Jun 2002  
(n=343)



Jul 2002 - Dec 2002  
(n=84)



The rate of organ donation has remained static in Australia in 2002. In an attempt to meet the increasing demand for organs for transplantation, all units have introduced innovative surgical techniques. Split liver transplantation, in which a donor liver can be surgically reduced to two viable liver grafts, is now widely applied where an appropriate donor is available. This technique results in a right liver graft of suitable size for an adult recipient and a left liver graft of suitable size for a child recipient. Where a suitable recipient for one of these grafts is not available in the splitting unit, that graft is entered into the rotation for use by another unit thus maximising the graft availability. This is reflected in the number of such grafts transplanted between July and December 2003. Two patients also received grafts from living donors.

<b>Type of graft (n=109)</b>			
<b>Whole liver (n=85)</b>	- adults	76	
	- children	9	
<b>Reduced size graft</b>	- adults	10	- split 9 - living donor 1
	- children	14	- split 9 - left segment 4 - living donor 1

Type of Graft by Year – children

Type of Graft by Year – adults

