

There are two serious blood transmissible conditions that a health worker may come in contact with: Acquired Immunodeficiency Syndrome (AIDS) and Hepatitis B.

**AIDS in Malta
– the epidemiological situation**

The Acquired Immunodeficiency syndrome (AIDS) is caused by a retrovirus known as the Human Immunodeficiency Virus (HIV).

The following statistics refer to persons who have suffered from AIDS. Further to these, there are an estimated 50 to 100 Maltese residents who carry the HIV virus but have not (so far) developed AIDS.

By the end of 1991, 22 cases of AIDS had occurred in Maltese

residents; all the persons who developed the disease before 1991 have died.

Sex distribution (Figure 2)

Of the 22 cases by the end of 1991, 21 were males, while 1 was female. The reason for the male preponderance is explained by the routes by which the disease has been transmitted.

Distribution by transmission category (Figure 3)

A number of Maltese haemophiliacs were accidentally infected with the HIV when they received blood products that were essential for the treatment of their haemophilia. This happened at a time when no one recognised the

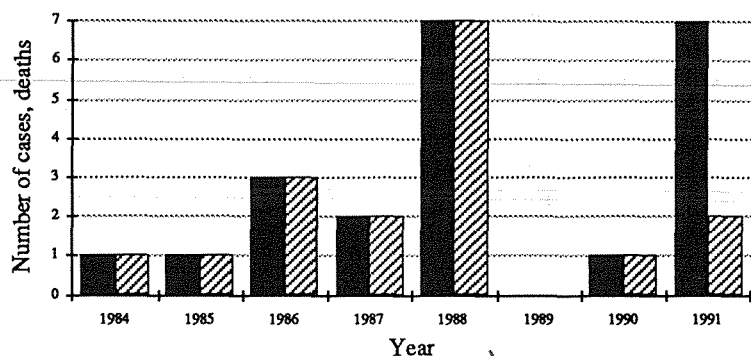
existence of the HIV. This route of transmission is now completely blocked.

In practically all the other cases of AIDS, the HIV was transmitted sexually. In 12 cases this was the result of a male homosexual relationship.

There have been no cases of AIDS in intravenous drug users (IDUs). If IDUs share needles there is a risk of rapid spread of HIV within this group of persons, and those who have sexual contact with them.

If IDUs develop AIDS, one may also expect to have cases of transmission of HIV from mother to child (transplacental or “vertical” transmission). This would eventually lead to babies and young children developing AIDS.

Figure 1 - AIDS IN MALTA
Incidence and mortality

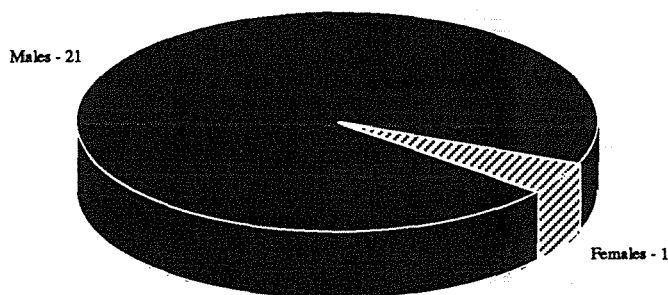


Situation as at 31.12.91

The age distribution of AIDS cases reflects the way HIV was transmitted:

Age group (yrs)	Number
10-14	1
15-19	2
20-24	0
25-29	7
30-34	2
35-39	5
40-49	5

Figure 2 - AIDS IN MALTA
Sex Distribution



Situation as at 31.12.91

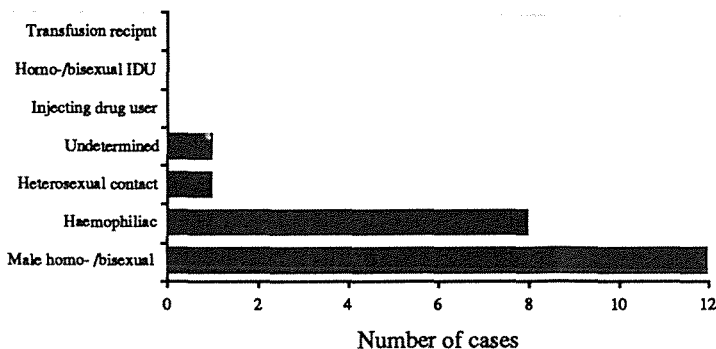
1992 update

So far (4th February 1992), there has been one new case of AIDS reported this year. It is not possible to release more details at this stage, other than to say that the person is male.

Hepatitis B in Malta - the epidemiological situation

The annual incidence of "infectious hepatitis" has been published in the Malta Demographic Review since 1967 (Figure 4). This figure appears to cover viral hepatitis A, B and non-A non-B. The spike in 1975 was almost certainly due to an outbreak of Hepatitis A.

Figure 3 - AIDS IN MALTA
Transmission Category



Situation as at 31.12.91

Number of cases

It is only since 1987 that separate statistics are kept for cases of Hepatitis B infection, and that a clear distinction has been made in records between Hepatitis B infection and Hepatitis B virus positivity. The number of reported cases of Hepatitis B infection has tended to increase in the past five years. (Figure 5).

Regional distribution of cases

It has been suggested in the past that there is a preponderance of Hepatitis B infection in the south of Malta. The available figures were analysed by the three Medical Officers of Health (MOH) regions. It was found that, although there is a slight excess of cases in the Southern region, there is no statistical difference from the incidence in the Central and Northern regions (Figure 6). The number of cases, however, is small, so it cannot be excluded that a significant difference could emerge with greater numbers.

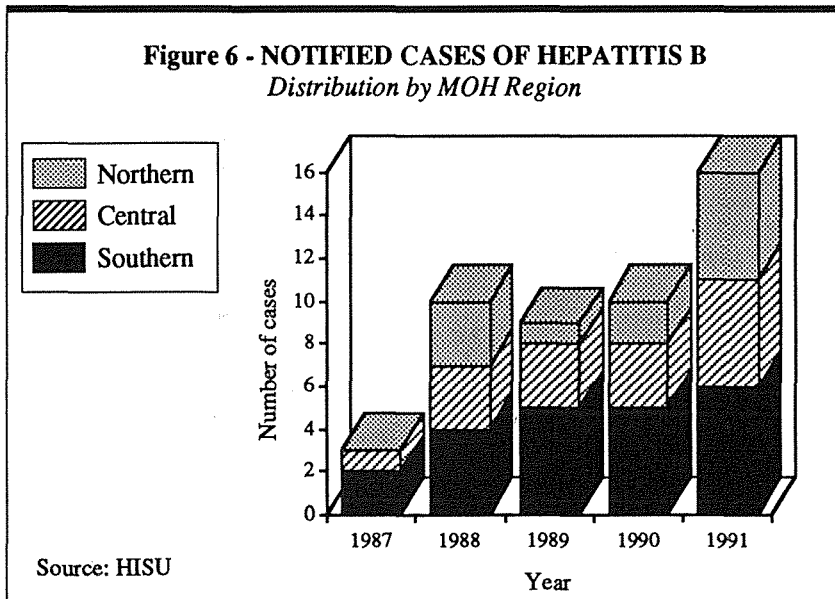
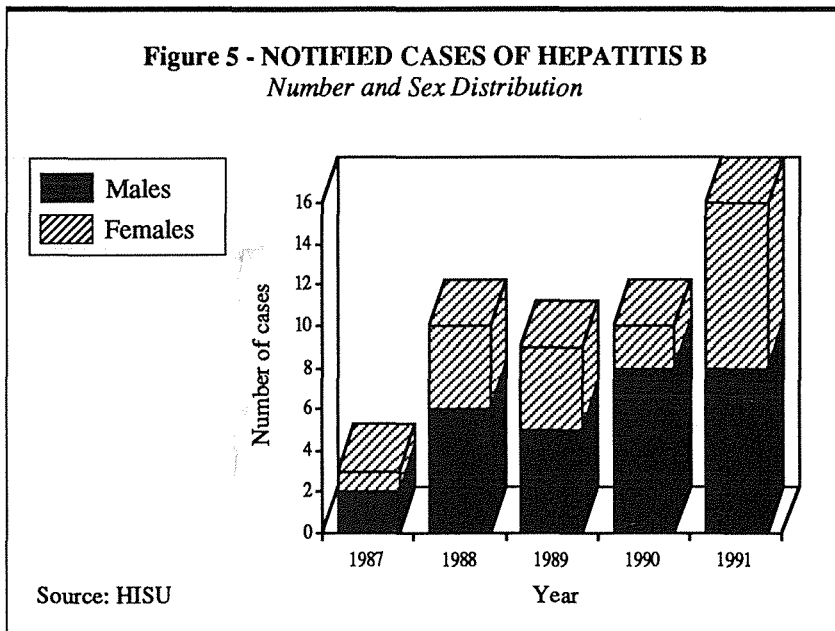
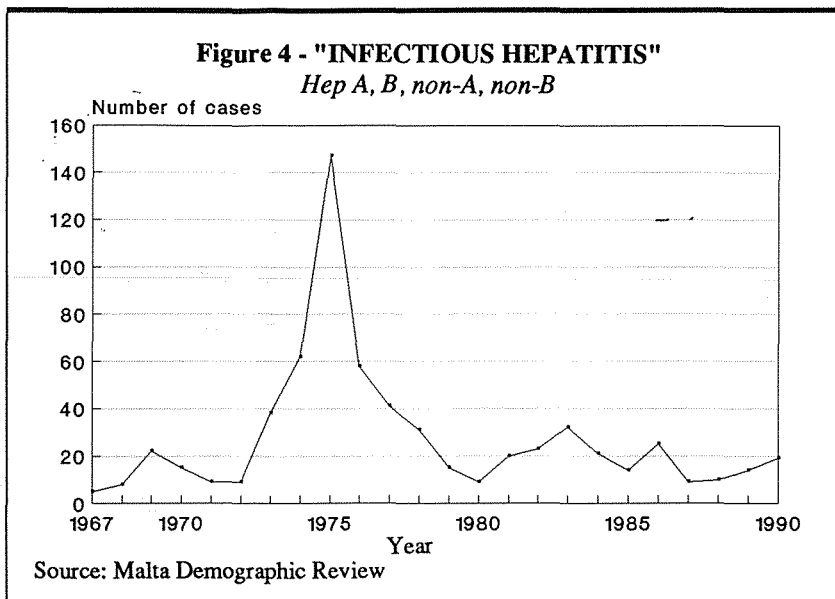
HBV positivity

Information on HBV positivity is scarce. Moreover, little research has been carried out on the modes of HBV transmission in Malta. Recently (January 1992) medical staff at the Health Information Systems Unit studied a random sample of 23 records relating to investigated cases of HBV positivity. The suspected transmission categories are depicted in Figure 7. In almost half of the cases, no mode of transmission could be indicated. Sexual activity, stick injuries, tattoos, shaver sharing, blood transfusion, and perinatal body fluid contact were considered to be the likely risk factors in the rest. The factor in this list which is relevant to health care delivery is, of course, stick injury.

Transmission of HBV and HIV from patient to health-care worker

Hepatitis B virus (HBV) spread

The spread of HBV is proportional to the degree of blood exposure. For highly exposed workers, e.g. surgeons and laboratory personnel, the lifetime risk of HBV infection reaches 30 to 50 percent.



Human immunodeficiency virus (HIV) spread

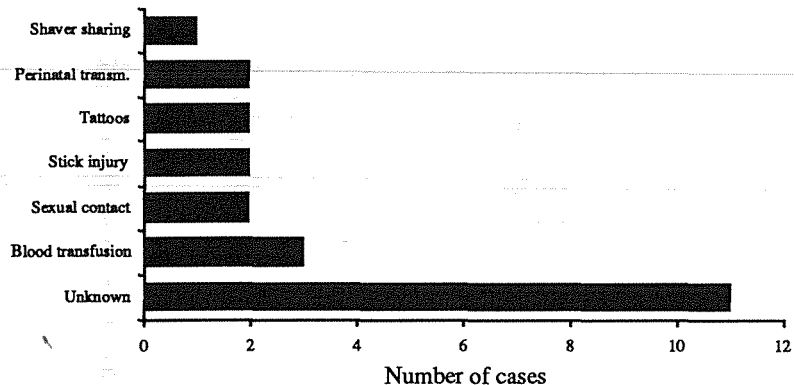
HIV circulates in the blood at much lower concentrations than HBV, and is not able to survive as well as HBV outside the body. It is therefore uncommon that HIV infection is acquired through health care.

Immunization and Universal Precautions.

Nowadays, health care workers can be immunized against HBV, and therefore no longer need to run the risk of having Hepatitis B.

“Universal precautions”, i.e. precautions that are taken at all times, are the cornerstone of the prevention of blood transmissible disease in general. They are particularly important for the prevention of AIDS, as immunization against HIV is not available. Universal precautions are based on the assumption that all blood is potentially infectious, regardless of its source, and of results of tests on it.

Figure 7 - HBV POSITIVITY
Risk Factors for transmission
(A sample of 23 cases)



Source: HISU

Components include:

- Handwashing
- Careful handling of sharps
- Proper sterilization, disinfection or disposal of instruments after use
- Appropriate use of gloves, masks, gowns, etc.

Readers are referred to the “Report on the Consultation on Prevention of HBV/HIV Transmission in the Health Care Setting”, published by WHO (Geneva), which includes specific