

# Hepatitis C

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This presentation was made in conjunction with the publication  
“Hepatitis C – A Guide for Drug Users and Their Families”  
which is available to download from [www.addictionireland.ie](http://www.addictionireland.ie)  
or by calling The Drug Treatment Centre Board 01 6488600



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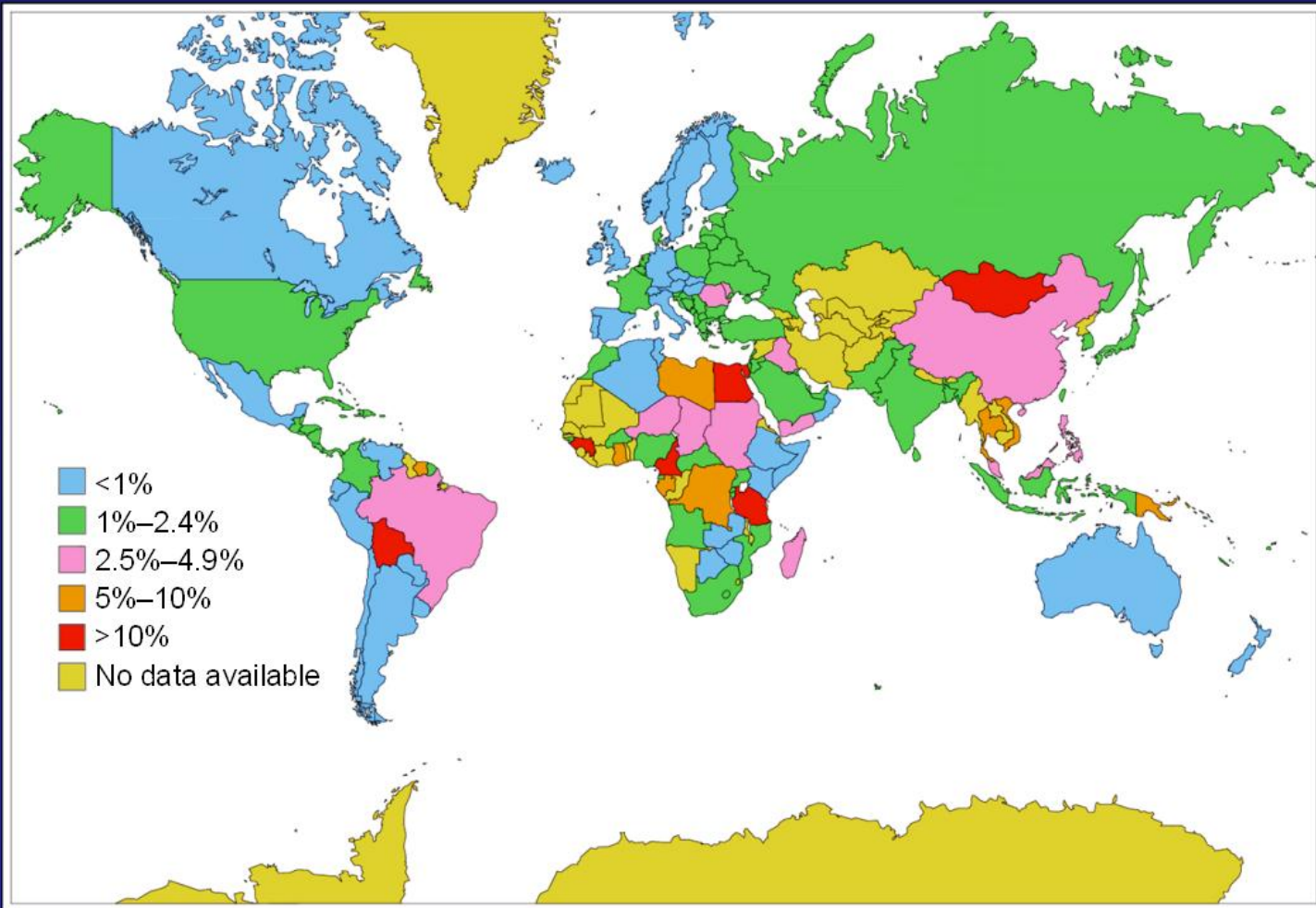
# Hepatitis

- Inflammation of the liver
- This can be caused by:
  - Viruses - a range of hepatitis viruses (A,B,C,D & E) & others
  - Drugs - notably alcohol
  - Auto-immune disease
  - Unknown causes

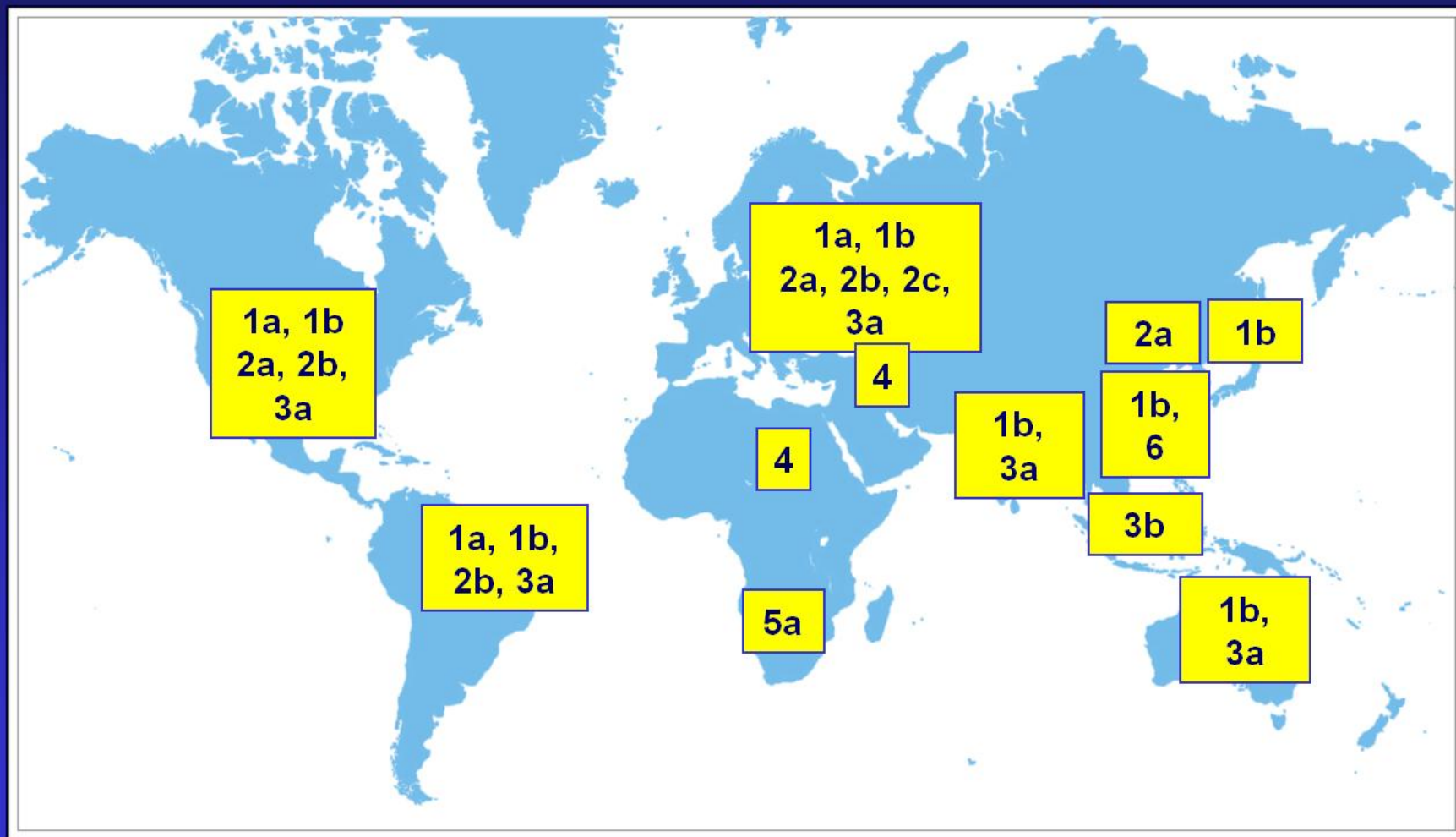
# Background

- First identified in 1989
- WHO – 170 million people infected
- 80% of IVDUs in the Dublin area (approximately 10,000)
- Without treatment, 20% will develop liver cirrhosis in 20years – 6% liver Ca.
- 6 genotypes world-wide

# HCV Infection: Worldwide Prevalence



# HCV Infection: Worldwide Genotype Distribution



# The Hepatitis C virus- Transmission

- **Injecting drug use** - the majority of new cases
- Snorting cocaine
- Mother to baby ~5%
- Sexual transmission - <1%
- Needle stick injury ~3%
- Body piercing, tattooing, electrolysis & acupuncture (if contaminated equipment or supplies used)
- Previously blood transfusion & blood products

# Factors Relating to Poor Outcomes

- Alcohol consumption
- Co-infection with HIV or Hepatitis B
- Age at which the infection was acquired
- Male gender
- Obesity

# Tests for Hepatitis C

## *Blood Tests*

- Anti-hepatitis C Virus Antibody Test
- Polymerase Chain Reaction (PCR) Test
- Liver Function Tests (LFTs / ALT)

## *Liver Biopsy*



# Role of Liver biopsy

- Assess the severity of damage
- Evaluate possible concomitant disease process, eg. Alcoholic liver disease
- Assess therapeutic intervention

# Immunisation

- No vaccine is available for Hepatitis C
- Immunisation against hepatitis A and B should be actively promoted among drug users

# Pre-Test Counseling

- Positive test result
- Social and financial implications
- The patient's understanding
- Supports available
- Treatment available

# Hepatitis C Antibody Negative

- Meaning of a negative result
- Ways of avoiding further exposure
- Further test if indicated
- Immunise against hepatitis A and B

# Management of Hepatitis C

- Optimise social support
- Refer to a specialist
- Minimise the risk of transmission to others
- Advise about alcohol
- Provide immunisation against hepatitis A and B & advise on testing for HIV & HBV

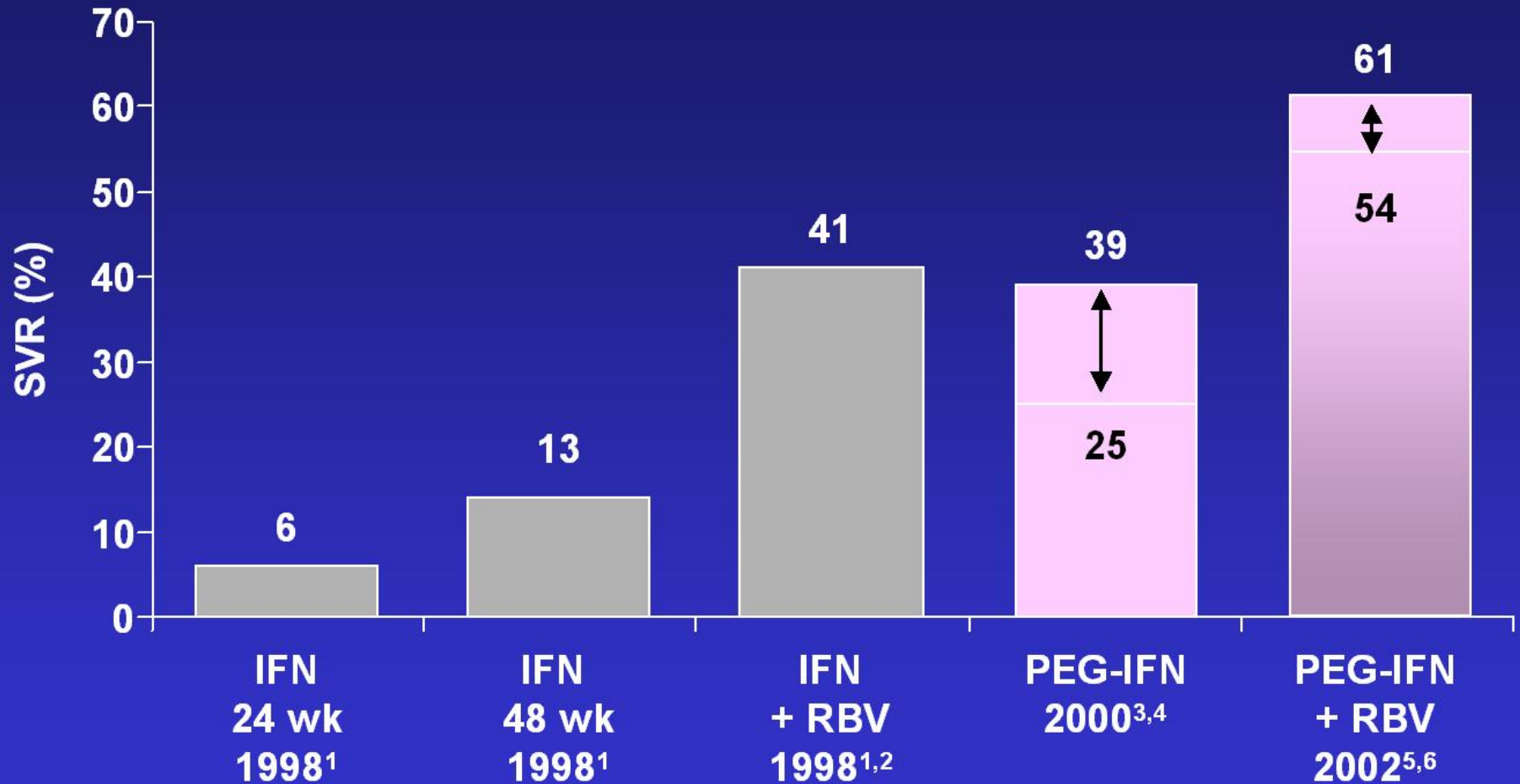
# Combined Therapy for Hepatitis C

- Current guidance - combination therapy of pegylated interferon alpha & ribavirin in appropriately selected patients
- S.C. pegylated interferon once a week, and ribavirin taken orally, for 24 or 48 weeks
- Biopsy genotype 1

# Goals of Treatment

- Viral clearance
- Slow or reverse the disease progression
- Reduce the risk of hepatocellular carcinoma
- Improve health related quality of life

# Results of HCV Therapy: Overall SVR\*



\*ITT analysis.

1. McHutchison et al. *N Engl J Med.* 1998; 2. Poynard et al. *Lancet.* 1998; 3. Zeuzem et al. *N Engl J Med.* 2000; 4. Lindsay et al. *Hepatology.* 2001; 5. Manns et al. *Lancet.* 2001; 6. Hadziyannis. *EASL* 2002.



# Side Effects of Interferon Treatment

- Flu-like symptoms
- Nausea
- Anorexia
- Diarrhoea
- Psychiatric symptoms – depression/insomnia
- Alopecia
- Leucopenia/thrombocytopenia
- Thyroiditis

# Side Effects of Ribavirin Treatment

- Haemolytic anaemia
- Teratogenicity
- Cough
- Rash and pruritis
- Insomnia
- Anorexia

# Treating Hepatitis C Positive Drug Users

- Many too unstable
- Many DNA out-patient hospital appointments
- Adherence to treatment is often poor
- Retention in treatment can be poor
- Relapse into active addiction

# On-site Hepatitis C Treatment at the DTCB

- Rationale: *'To treat the patients with hepatitis C in the same location in which they receive their methadone with a view to retaining the patients in treatment'*
- Regular medical review
- Regular psychiatric review

# On-site Hepatitis C Treatment 'Pilot Study'

- Pilot study of nine patients
- Directly observed therapy initiated at DTCB in liaison with Dr. Colm Bergin at St. James's hospital
- Regular psychiatric review by Dr. Jacinta O'Shea, registrar to Dr. Eamon Keenan

# Pilot Study

- Not to show that the treatment works

## But

- A *proof of concept* – that patient retention in treatment can be improved if therapy is initiated in a specialist drug treatment setting with directly observed therapy and with appropriate medical and psychiatric support on site.

# The Hepatitis C Treatment Team

- Medical Officer
  - *Direct liaison with Dr. Colm Bergin*
- Psychiatric Registrar
  - *Under the guidance of Dr. Eamon Keenan*
- Nurse
  - *Ms. Anne Bolger, Hepatitis C Liaison Nurse, DTCB*
- Counsellor
  - *Mr. Alan Furlong. Senior Counsellor, DTCB*

# Pilot Study Findings

- 8 of 9 - finished programme
- Efficacy is comparable to hospital based setting
- 5 of 9 - haematological difficulties
- 5 of 9 - significant depressive symptoms
- 3 of 9 relapsed briefly into active addiction



# Conclusion: Key Messages for Drug Users

- Hepatitis C is a serious disease
- Stabilise and request treatment
- Do not start injecting
- If currently injecting then stop
- If unable to stop the reduce harm

# Thank You Dr. Shay Keating

