ITALY
CAN ELIMINATE HEPATITIS
NATIONAL HEPATITIS ELIMINATION PROFILE

UPDATED JUNE 21 2022

COALITION FOR GLOBAL HEPATITIS ELIMINATION

Hepatitis B virus (HBV)

Action Plan

HBV elimination goal:
Goals planned for in upcoming action plan [1]

Elimination of HBV mother to child transmission goal: [1]

Italy achieved the 2020 interim goal for prevention of perinatal HBV transmission

Hepatitis C virus (HCV)

Action Plan

In 2019, Italy was one of only nine countries on track to eliminate HCV by 2030 [2]

HCV elimination goal:
Goals planned for in upcoming action plan. National HCV screening program for elimination in place. [1]

Draft national guidelines on diagnosis and treatment for hepatitis C virus infection released as part of forthcoming national plan [40]

THE HEALTH BURDEN OF VIRAL HEPATITIS

~1%

Prevalence of HBsAg, 2020 [10]

Modelled estimate

Prevalence of HBsAg among Italian-born persons less than 42 years of age is very low due to vaccine protection. The majority of Italian-born carriers are in their fifth decade of life who acquired infection when younger.

Prevalence

PREVALENCE IN EU/EEA:
HBSAG: 0.9%
ANTI-HCV: 1.1%

0.68% (0.54–0.82%)

Prevalence of chronic HCV, 2020 [5]

Modelled estimate

Regional prevalence of HCV chronic active infection (HCV RNA positive), 2020 [5]
North: 0.47% to 0.67%
Central: 0.74% to 1.04%
South: 0.64% to 1.01%
Isles regions: 0.66% to 0.76%
Modelled estimate

Prevalence of anti-HCV, Persons who inject drugs (PWID), 2019, 62% [6]

Prevalence of anti-HCV, Persons who are incarcerated, 10-14% [33]

A large number of HCV infections occurred in the 1950s and 1960s via iatrogenic transmission due to the use of unsterilized tools/materials (e.g., glass syringes used for vaccinations and injecting antibiotics and vitamins and dental tools). This was followed by a second wave of infection in the period 1980-1990 associated with injection drug use. Today, the blood supply is screened and is very safe. [9]

0.18

HBV cases per 100,000 persons, 2021 [13]

SEIEVA underestimates incidence because only tracks symptomatic disease

Incidence

0.05

HCV cases per 100,000 persons, 2021 [13]

Based on Integrated Epidemiologic System of Acute Hepatitis

SEIEVA underestimates incidence because only tracks symptomatic disease

1,714 (1,517-1,927)

HBV-related deaths, 2019 [4]

Modelled estimate from Global Burden of Disease Study 2019

2.84 (2.52-3.19)
Deaths per 100,000, 2019 [4]

Mortality

8,050 (7,096 -8,856)

HCV-related deaths, 2019 [4]

Modelled estimate from Global Burden of Disease Study 2019

13.3 (11.80-14.70)
Deaths per 100,000, 2019 [4]

PROGRESS TOWARDS 2020 WHO ELIMINATION GOALS

PREVENTION OF NEW INFECTIONS AND MORTALITY

HBV Percentage change in new infections, 2015-2020 [13]

-67% ↓
WHO 2020 Target -30%

HBV Percentage change in deaths, 2015-2019

-4% ↓
WHO 2020 Target -10% [4]

HCV Percentage change in new infections, 2015-2020 [13]

-75% ↓
WHO 2020 Target -30%

HCV Percentage change in deaths, 2015-2019

-3% ↓
WHO 2020 Target -10% [4]

Prevalence of HBsAg in children < 5 years (%)
Modelled estimate

0.03 (0.02-0.03)
SDG 2020 Target 1% [4]

Due to the extensive roll-out in treatment since 2015, a 65% reduction in liver-related death is forecasted in Italy by 2022–2025 [19]

ACCESS TO RECOMMENDED VACCINATION, TESTING AND TREATMENT

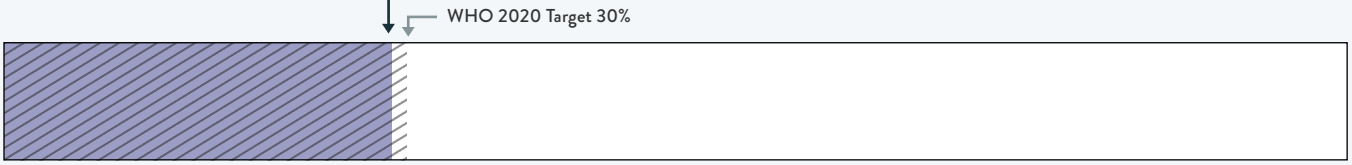
Hepatitis B vaccination coverage for newborns

WHO 2020 Target 50%

94% HepB 3 dose vaccine coverage for infants, 2020 [8]

WHO 2020 Target 90%

29% Proportion of persons living with **HBV** diagnosed, 2016 [10]



NO DATA

HBV

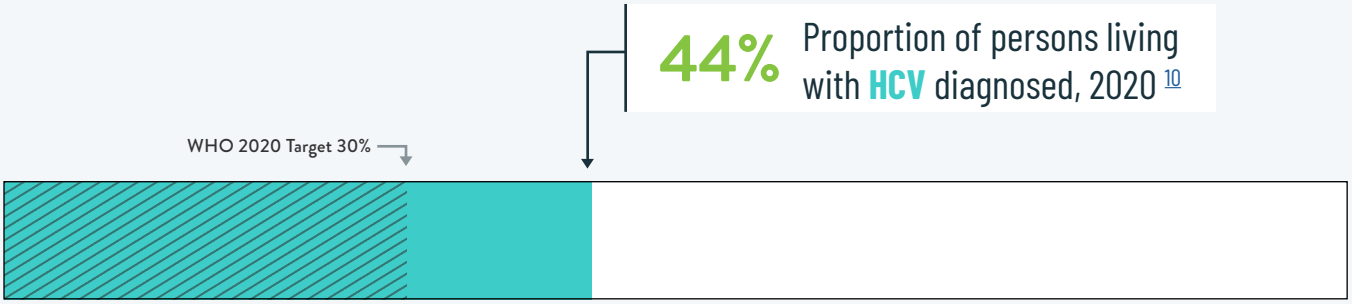
Proportion of diagnosed HBV persons receiving appropriate treatment

NO DATA

For persons who inject drugs (PWID), number of sterile needles-syringes per year, 2020 [9]

WHO 2020 Target 200

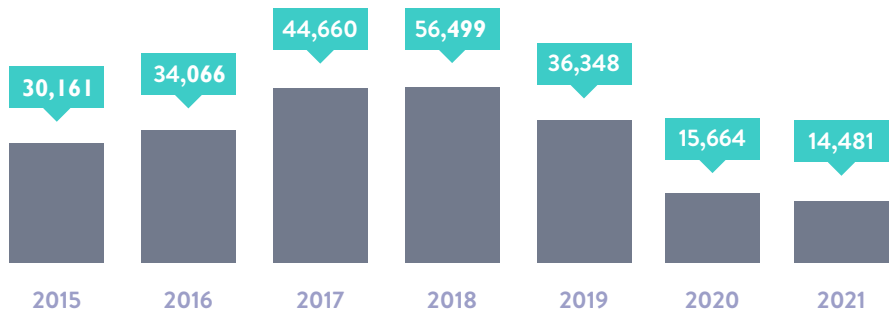
44% Proportion of persons living with **HCV** diagnosed, 2020 [10]



65% Proportion of diagnosed persons who have been cured, 2019 [7]

231,879

Number of persons treated for HCV, 2015-2021 [11]



Note: Discrepancies among the number of treatments per year and the cumulative number 2015-2021 are due to overlap in reporting periods or missing time periods in reported data

POLICY ENVIRONMENT FOR THE ELIMINATION OF HEPATITIS

ACHIEVEMENT | INNOVATIONS | ROADBLOCKS

STRATEGIC INFORMATION

Routine official reports to monitor HBV and HCV [1,13]

- Mortality
- Incidence
- Prevalence

Modelled annually, but there is no national or official registry.

The SEIEVA (Integrated Epidemiological System of Acute Viral Hepatitis) Surveillance system was created in 1985

Estimates of HBV and/or HCV economic burden [14,15,35,36]

Adopted

Monitoring of HBV and HCV diagnosis and treatment [11]

Partially Adopted

The Italian Medicines Agency (AIFA) releases weekly reports of number of persons treated for HCV.

No monitoring data for HBV

ACHIEVEMENTS

The Italian Medicines Agency releases weekly reports on number of HCV treatments prescribed.

Recently, a law decree was established that requires all newly diagnosed acute and chronic hepatitis cases to be reported to the local health authority within 48 hours.[16]

ROADBLOCKS

No system in place for tracking HCV testing Currently no register exists for patients diagnosed with Hepatitis in Italy. [7]

Lack of data to guide policy development for key populations, including migrants and refugees, persons who inject drugs, and persons who are incarcerated.

PREVENTION OF MOTHER TO CHILDREN TRANSMISSION

Policy for hepatitis B vaccination of newborns (within 24 hours, in addition to 3-dose schedule starting at 1 month) [17]	Partially Adopted	Selective HepB birth dose policy only for infants born to HBsAg+ mothers
Recommendations for:		
HBV testing of pregnant women [17]	Adopted	As of 2019, 97.7% coverage of antenatal HBV screening [17]. Mandatory by law since 1991. Following screening, babies born to infected mothers will be treated at birth with HBIG and receive HepB vaccine (monovalent) and then they will receive 3 additional doses of vaccine (hexavalent) at 1, 2 and 12 months. In reality, most of them receive also the dose of hexavalent vaccine at 4 months even if hep B vaccine at that time would not be prescribed.
HCV testing of pregnant women [12]	Adopted	

ACHIEVEMENTS

In January 2020, Italy became one of the first counties in Europe to be validated for achieving the regional hepatitis B countries control targets. [17]

ACCESS AND REGISTRATION OF MEDICINES AND TESTS

HCV: Registration of orginator DAAs [11]	Adopted	
HCV: Eligible for generic DAAs [18]	Not Eligible	
Licensed point-of-care PCR testing to detect HBV and HCV [19]	Partially Adopted	Recommended only for HCV testing among persons who inject drugs in settings where the HCV prevalence has been confirmed to very high.

ROADBLOCKS

Point-of-care PCR testing is not broadly used, limited to only persons who inject drugs in settings that have been confirmed to have a high HCV prevalence.

TESTING TO DIAGNOSE HBV AND HCV INFECTION

Testing recommendations for:

HBV: Risk-based (including pregnant women) [1]	Adopted	
HBV: Birth-Cohort or Universal	Not Adopted	
HCV: Risk-based [1]	Adopted	Risk-based HCV testing policy adopted in 2015 national action plan, including policies for screening migrants.
HCV: Universal [39]	Partially Adopted	
HDV [12]	Partially Adopted	HDV screening is recommended for patients living with HBV but not widely implemented. HDV RNA testing is not free of charge
No patient co-pays for HBsAg and anti-HCV testing [19]	Partially Adopted	No patient co-pays for HCV testing for persons recommended for testing as part of "Milleproroghe Decree." Universally recommended for adults born between1948-1988. The "Milleproroghe Decree" includes free-of-charge HCV screening for the general population born between 1969 and 1989, persons receiving public drug addiction services (SerT), and persons who are incarcerated. Co-pays required for HBsAg testing.

ACHIEVEMENTS

In March 2020, the Italian government approved the "Milleproroghe Decree", allocating €71.5 million for 2020- 2021 to screen at no charge persons born 1969- 1989, persons receiving public drug addiction services (SerT), and persons who are incarcerated.

INNOVATIONS

A number of pilot projects have been underway to explore integration of SARS-CoV-2 testing and/or COVID-19 vaccination with HCV screening. [20,37]

ROADBLOCKS

Screening policies not fully implemented.

Cost-effective screening strategies such as laboratory-based reflex testing are not yet fully implemented [32]. Barriers limit general practitioners because it is defined by the system as two steps proces and it is not changed yet for the lack a clear roadmap in different regions among GP and regional System, but not because of perceptions of additional cost. The cost is the same, but there is not a defined paths in the administrative system of each region

Effective implementation of the Milleproroghe Screening Decree will require additional planning, including investments in raising awareness, and the mapping of public and private affiliated laboratories that will be reimbursed, with the development of specific exemption codes for reimbursement.

Limited implementation of HCV point-of-care testing for key populations, including persons who inject drugs and persons who are incarcerated.

ACCESS TO HBV AND HCV TREATMENT

HBV: National treatment guidelines [21,22]	Partially Developed	
Simplied care: Simplified treatment and monitoring algorithm for primary care providers [22]	Partially Adopted	
Simplified care: No patient treatment co-pays [12]	Adopted	
HCV: National treatment guidelines [23,40]	Developed	
Simplified care algorithm: Less than 2 clinic visits during treatment [23]	Partially Adopted	Monthly dispensing of DAAs with monitoring is required, but no blood tests are needed.
Simplifed care algorithm: Non-specialists can prescribe treatment [22]	Not Adopted	Recommendations on HCV treatment in key populations is forthcoming that will encourage a model of care that leverages telemedicine for initiation of treatment and monitoring by specialists
Simplified care algorithm: No patient treatment co-pays [24]	Adopted	
No fibrosis restrictions [25]	Adopted	
No sobriety restrictions [25]	Adopted	
No genotyping [25]	Not Adopted	
HDV: National treatment guidelines [21]	In Development	

ACHIEVEMENTS

The Italian Association for the Study of the Liver (AISF) and the Italian Society of General Medicine published "Practical guidelines for a model shared management between General Practitioners and Hepatologist Specialist of the patient with hepatitischronic hepatitis B virus and hepatitis C virus."

INNOVATIONS

The HCV Network Sicily is a web-based, hub-and-spoke model connecting 41 clinical centres and 101 specialist physicians (e.g gastroenterologists, hepatologists) managing HCV care. The network strategies for linking specialists with General Practitioners (GPs) include 1) communication of HCV therapeutic innovation to 1180 GPs in collaboration with SIMF 2) a web-based platform for GPs to follow the course of HCV diagnosis and treatment for their patients and 3) of "round tables of specialists and GPs.

Prior to implementation of the national HCV screening program, a structured communication strategy for sensitizing the targeted birth cohort and key populations was developed.

ROADBLOCKS

Italy is divided into twenty regions which have broad discretion in planning, organizing, and financing health care services within their territor, thus additional regional planning for hepatitis elimination is needed. [38]

Only specialists can prescribe hepatitis C treatment.

Additional coordination is needed between general practicioners, reference laboratories, and specialists to improve linkage to care.

In 2019, about 20% of HCV patients in the treatment monitoring registry had cirrhosis, which could suggest the need for early access to HCV testing and prompt linkage to care [5]

HEALTH EQUITY AND ADDRESSING DISPARITIES

National strategy addresses populations most affected [1]	Adopted	
National policy for adult hepatitis B vaccination [6,27]	Adopted	HBV vaccination recommended for health professionals, hospital staff and care personnel, private nursing homes and certain all other groups indicated in the Minsterial Decreee of 4 October 1991. HBV vaccination is available to persons who are incarcerated and persons in drug treatment.
National policy for:		
Harm reduction for persons who inject drugs (PWID) [28]	Developed	The northern regions are estimated to have the largest burden of PWID living with HCV, estimated at a total of 151,296 individuals. [5]
Syringe exchange in federal prisons [28]	Adopted	

Number of needles/syringes per PWID per year	No Data	WHO 2020 Target 200
Number of opioid substitution therapy recipients per 100 PWID	No Data	OST is available in all drug abuse services across the country
Decriminalization of possession of syringes & paraphernalia [29]	Adopted	There are about 150,000 persons receiving opioid agonist therapy nationally. About 54% have been screened and about 40% are anti-HCV positive. Linkage to care remains limited.
Decriminalization of drug use [29]	Adopted	

ACHIEVEMENTS

HCV testing is guaranteed in all Italian prisons by the Essential Level of Assistance (LEA); about 90% of persons who are incarcerated are screened for HCV

INNOVATIONS

Linkage-to-care is high amongst PWID in prisons.

ROADBLOCKS

For PWID diagnosed with HCV in OST programs, linkage to HCV care is limited. In Campania, of the 14,630 patients followed in drug treatment centers, 9,931 (67.9%) had been tested and of these 3,796 (38.2%) were HCV positive. However, among the latter, only 20.7% had been treated [31]

Not all populations with a high burden or at risk of infection were included in the HCV screening law decree, such as men who have sex with men. Until 40 years of age, the entire Italian population is covered free-of-charge hepatitis B vaccination.

FINANCING

Public budget line for HBV and HCV testing and treatment [19]	Adopted	

ACHIEVEMENTS

The government negotiated discounts for affordable HCV medicines.

The initial investment in HCV therapies is estimated to be recovered in 5.5 years. [15]

ROADBLOCKS

The budget for national purchase of HCV therapies expired in April 2020. The lack of a dedicated fund for DAAs could stress overburdened regional budgets.

NEXT STEPS TOWARD ELIMINATION

- Conduct additional epidemiological studies on burden of HBV and HCV in key populations, such as migrants and refugees, persons who inject drugs, and persons who are incarcerated
- Implement and promote recommendations for HCV point-of-care screening for PWID, persons who are incarcerated, and other vulnerable populations
- Expand HCV screening beyond the first investment in age-cohort screening and select high-risk groups
- Strengthen efforts to link newly diagnosed patients to treatment
- Simplify HCV care through broad adoption of reflex testing and removal of barriers for general practitioners to treat their patients for HCV
- Improve HCV testing and linkage to care for PWID, particularly those in OST programs
- Invest in restoring HCV testing and treatment to pre-pandemic levels
- Encourage regions to develop hepatitis elimination implementation plans and funding for HCV treatment
- Explore integration of SARS CoV-2 and HCV screening
- Fully implement current screening recommendations
- Strengthen awareness-building campaigns amongst the public and clinicians for risk factors associated with hepatitis and encourage reflex testing and the promotion of effective screening programs
- Renew the national dedicated fund of the Italian State for “Innovative-Non Oncological-Drugs” for purchase of HCV medications
- Promptly guarantee free-of-charge HCV screening and diagnosis for those in the 1948-1968 birth cohort excluded from the “free-of-charge screening” provided by the Milleproroghe Fund that only currentlycovers the 1969-1989 cohort and key populations

SOURCES

1. Italy Ministry of Health (2015). PIANO NAZIONALE PER LA PREVENZIONE DELLE EPATITI VIRALI da virus B e C (PNEV) https://www.globalhep.org/evidence-base/italy-national-plan-prevention-hepatitis-b-and-c
2. Razavi, H., Sanchez Gonzalez, Y., Yuen, C., & Cornberg, M. (2020). Global timing of hepatitis C virus elimination in high-income countries. Liver international : official journal of the International Association for the Study of the Liver, 40(3), 522–529. https://onlinelibrary.wiley.com/doi/10.1111/liv.14324
3. European Centre for Disease Prevention and Control (2016). Systematic review on hepatitis B and C prevalence in the EU/EEA. Stockholm: ECDC. https://www.ecdc.europa.eu/sites/default/files/media/en/publications/Publications/systematic-review-hepatitis-B-C-prevalence.pdf
4. IHME (2019). Global Burden of Disease Study 2019. Estimates from July 2020. https://vizhub.healthdata.org/gbd-results/
5. Kondili LA, Andreoni M, Alberti A et al (2022). A mathematical model by route of transmission and fibrosis progression to estimate undiagnosed individuals with HCV in different Italian regions. BMC Infect Dis 22, 58. https://bmcinfectdis.biomedcentral.com/articles/10.1186/s12879-022 -07042-w#citeas
6. European Monitoring Center for Drugs and Drug Addiction (EMCDDA) (2021). Elimination barometer on viral hepatitis among people who inject drugs in Europe. https://www.emcdda.europa.eu/publications/html/viral-hepatitis-elimination-barometer_en
7. Gardini, I., Bartoli, M., Conforti, M., et al. (2019). Estimation of the number of HCV-positive patients in Italy. PloS one, 14(10), e0223668. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6822946/
8. WHO/UNICEF (2021). Hepatitis B vaccination coverage. Last accessed 10 December 2021. http://immunizationdata.who.int/pages/coverage/hepb.html
9. Kondili L. HCV screening in Italy: Why and How. EASL Liver Foundation. https://easl-ilf.org/wp-content/uploads/2020/07/Kondili_HCV-Screening-in-Italy-Why-and-How.pdf
10. CDA Foundation. Polaris Observatory Country Dashboard: Italy. Last accessed 27 April 2022.
11. Agenzia Italiana el Farmaco (2022). Aggiornamento dati Registri AIFA DAAs - Epatite C cronica. https://www.aifa.gov.it/documents/20142/847506/Aggiornamento_dati_Registri_AIFA_DAAs-07-02-2022.pdf/31ea5b14-7cf9-8c79-a2a4-c14b06491079?t=1644228499529
12. Communication with Dr. Loreta Kondili, Istituto Superiore di Sanità Rome, on 8 February 2022.
13. EpiCentro - Istituto Superiore di Sanità (2021). Sistema epidemiologico integrato dell'epatite virale acuta (SEIEVA). https://www.epicentro.iss.it/epatite/dati-seieva#c https://www.epicentro.iss.it/epatite/dati-seieva#b
14. Boccalini, S., Taddei, C., Ceccherini, V., et al. (2013). Economic analysis of the first 20 years of universal hepatitis B vaccination program in Italy: an a posteriori evaluation and forecast of future benefits. Human vaccines & immunotherapeutics, 9(5), 1119–1128. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3899148/
15. Marcellusi, A., Viti, R., Kondili, L.A. et al (2019). Economic Consequences of Investing in Anti-HCV Antiviral Treatment from the Italian NHS Perspective: A Real-World-Based Analysis of PITER Data. PharmacoEconomics; 37: 255–266. https://link.springer.com/article/10.1007%2Fs40273-018-0733-3
16. Ministero della Salute. Decreto 7 marzo 2022: Revisione del sistema di segnalazione delle malattie infettive (PREMAL). (22A02179) (GU Serie Generale n.82 del 07-04-2022). Last accessed 3 June 2022. https://www.gazzettaufficiale.it/eli/id/2022/04/07/22A02179/SG
17. Khetsuriani N., Mosina L., Van Damme P., et al (2021). Progress Toward Hepatitis B Control — World Health Organization European Region, 2016–2019. MMWR Morb Mortal Wkly Rep;70:1029–1035 https://www.cdc.gov/mmwr/volumes/70/wr/mm7030a1.htm?s_cid=mm7030a1_w
18. Medicines Patent Pool. MedsPaL. Last accessed 10 December 2021. https://www.medspal.org/?page=1
19. Kondili, L. A., Aghemo, A., Andreoni, M., et al. (2022). Milestones to reach Hepatitis C Virus (HCV) elimination in Italy: From free-of-charge screening to regional roadmaps for an HCV-free nation. Digestive and liver disease : official journal of the Italian Society of Gastroenterology and the Italian Association for the Study of the Liver, 54(2), 237–242. https://www.sciencedirect.com/science/article/pii/S1590865821001420#bib0035
20. Coppola, C., Masarone, M., Bartoli, M., et al. (2022). Associated screening for HCV and SARS-Cov2 infection in an urban area of Southern Italy: A cohort study. Journal of viral hepatitis, 29(2), 171–173. https://doi.org/10.1111/jvh.13623 https://onlinelibrary.wiley.com/doi/full/10.1111/jvh.13623
21. Associazione Italiana Studio del Fegato (AISF) (2017). Gestione Clinica Della Epatite B Negli Immunocompromessi Aggiornamento Italiano 2017. https://www.webaisf.org/wp-content/uploads/2019/02/gestione_clinica_della_epatite_b_negli_immunocompromessi.2017.pdf
22. Associazione Italiana Studio del Fegato (AISF) and Società Italiana di Medicina Generale e delle Cure Primarie (SIMG) (2015). Indicazioni pratiche per un modello di gestione condivisa tra Medico di Medicina Generale e Specialista Epatologo del paziente con epatite cronica da virus dell'epatite B e virus dell'epatite C. https://www.webaisf.org/wp-content/uploads/2019/02/epatite_web-1.pdf
23. Associazione Italiana Studio del Fegato (AISF) (2020). Documento di indirizzo dell'Associazione Italiana per lo Studio del Fegato per l'uso razionale dei farmaci anti-HCV disponibili in Italia. https://www.webaisf.org/wp-content/uploads/2020/12/DOCUMENTO-

HCV-14_12_20.pdf
24. Croce, D., Bonfanti, M., & Restelli, U. (2016). Financial and feasibility implications of the treatment of hepatitis C virus in Italy: scenarios and perspectives. ClinicoEconomics and outcomes research : CEOR, 8, 377–385. https://www.dovepress.com/getfile.php?fileID=31780
25. AIFA, Italian Medicines Agency. Registri AIFA per il monitoraggio dei farmaci anti-HCV. Last accessed 11 May 2022. https://www.aifa.gov.it/en/aggiornamento-epatite-c
26. Marascio, N., Liberto, M.C., Barreca, G.S. et al (2014). Update on epidemiology of HCV in Italy: focus on the Calabria Region. BMC Infect Dis 14, S2. https://bmcinfectdis.biomedcentral.com/articles/10.1186/1471-2334-14-S5-S2
27. Luzi M. and Suligoi B (2017). Nuove Linee di indirizzo per lo screening e la diagnosi delle principali patologie infettive correlate all'uso di sostanze nei Servizi per le Dipendenze. https://www.salute.gov.it/imgs/C_17_pubblicazioni_2767_allegato.pdf
28. Riduzione del Danno e Limitazione dei Rischi nei LEA: Verso un processo di innovazione nelle politiche italiane dei servizi." Fuori Luogo: Droghe & Diritti. Last accessed 11 May 2022. https://www.fuoriluogo.it/forum_droghe/documenti_e_approfondimenti/riduzione-del-danno-e-limitazione-dei-rischi-nei-lea/#.YnvqltrML-t
29. Altalex (2022). Penale: Testo unico sulla droga. Last accessed 11 May 2022. https://www.altalex.com/documents/codici-altalex/2014/06/04/testo-unico-sulla-droga-ed-aprile-2014
30. Communication with Dr. Alessio Agehmo, Associazione Italiana Studio del Fegato (AISF), on 22 February 2022.
31. Andreone P., Di Marco V., Gaeta G. B., et al. (2019). Current and forthcoming perspectives in linkage to care of hepatitis C virus infection: Assessment of an Italian focus group. Digestive and liver disease : official journal of the Italian Society of Gastroenterology and the Italian Association for the Study of the Liver, 51(7), 915–921. https://www.dldjournalonline.com/article/S1590-8658(19)30540-7/fulltext
32. Marcellusi A., Mennini F. S., Ruf M., et al. (2022). Optimizing diagnostic algorithms to advance Hepatitis C elimination in Italy: A cost effectiveness evaluation. Liver international : official journal of the International Association for the Study of the Liver, 42(1), 26–37. https://onlinelibrary.wiley.com/doi/10.1111/liv.15070
33. Fiore V, De Vito A, Pontali E, Lucania L, Madeddu G, Babudieri S (2021). Chronic Viral Hepatitis in the Italian Prison Setting: Prevalence, Outcomes, Literature Needs and Perspectives. Healthcare (Basel);9(9):1186. Published 2021 Sep 9.
34. Kondil LA, Andreoni M, Alberti A, Lobello S, Babudieri S, Roscini AS, Merolla R, Marrocco W, & Craxì A (2021). Estimated prevalence of undiagnosed HCV infected individuals in Italy: A mathematical model by route of transmission and fibrosis progression. Epidemics, 34, 100442.
35. Marcellusi A., Simonelli C, Mennini FS et al (2022). Economic Consequences of Anti-HCV Treatment of Patients Diagnosed Through Screening in Italy: A Prospective Modelling Analysis. Appl Health Econ Health Policy 20, 133–143.
36. Mennini FS, Marcellusi A, Robbins Scott S, Montilla S, Craxi A, Buti M, Gheorghe L, Ryder S, & Kondili LA (2021). The impact of direct acting antivirals on hepatitis C virus disease burden and associated costs in four european countries. Liver international : official journal of the International Association for the Study of the Liver, 41(5), 934–948.
37. Kondili LA, Craxì L, Andreoni M, Mennini FS, & Razavi H. (2022). Opportunistic co-screening for HCV and COVID-19-related services: A creative response with a need for thoughtful reflection. Liver international : official journal of the International Association for the Study of the Liver, 42(5), 960–962.
38. Kondili LA, Agehmo A, & Andreoni A (2021). Challenges on the achievement of World Health Organization goals for HCV elimination in Italy: need for a Regional programmatic approach on screening and linkage to care; 57(3):201-204. https://annali.iss.it/index.php/anna/article/view/1396/757
39. Kondili LA, Gamkrelidze I, Blach S, et al (2020). Optimization of hepatitis C virus screening strategies by birth cohort in Italy. Liver Int; 40(7):1545-1555. doi:10.1111/liv.14408
40. Ministero della Salute, Direzione Generale Della Prevenzione Sanitaria. Bozza di intesa sul documento recante "Linee di indirizzo nazionali sui percorsi diagnostico terapeutici assistenziali per l'infezione da virus dell'epatite C". https://www.quotidianosanita.it/allegati/allegato7403086.pdf

WORKING TOGETHER, WE WILL ACHIEVE ELIMINATION.

COALITION FOR GLOBAL HEPATITIS ELIMINATION

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