

Research workbook

France - 2016

2016 National report (2015 data) to the EMCDDA by the French Reitox National Focal Point

Supervision: François Beck

Coordination and editorial: Aurélie Lermenier-Jeannet and Anne de l'Eprevier

Contribution to the workbooks

- 1.1 *Drug Policy:* Cristina Díaz-Gómez
- 1.2 *Legal Framework:* Caroline Protais, Cristina Díaz-Gómez
- 2 *Drugs:* Olivier Le Nézet, Agnès Cadet-Taïrou, Magali Martinez, Eric Janssen
- 3.1 *Prevention:* Carine Mutatayi, Caroline Protais
- 3.2 *Treatment:* Christophe Palle, Anne-Claire Brisacier
- 3.3 *Best Practice:* Carine Mutatayi
- 3.4 *Harms and Harm Reduction:* Anne-Claire Brisacier, Cristina Díaz-Gómez, Maitena Milhet
- 4 *Drug Market and Crime:* Michel Gandilhon, Magali Martinez, Thomas Néfau, Caroline Protais, Cristina Díaz-Gómez
- 5.1 *Prison:* Caroline Protais
- 5.2 *Research:* Isabelle Michot, Maitena Milhet

Proofreading (French version)

Julie-Émilie Adès, François Beck, Aurélie Lermenier-Jeannet, Marie-Line Tovar (OFDT)

Danièle Jourdain Menninger, president of the Interministerial Mission for Combating Drugs and Addictive Behaviours, and the project managers of the MILDECA

Proofreading (English version)

Anne de l'Eprevier, François Beck

Documentation: Isabelle Michot

Legal references: Anne de l'Eprevier

The EMCDDA is investigating how the submission of the workbooks could be made easier through the use of technology. In the first instance, a pilot using templates in Word with defined fields to distinguish the answers to questions is being tried. The outcome of the pilot will be to evaluate the usefulness of this tool and establish the parameters of any future IT project.

Templates have been constructed for the workbooks being completed this year. The templates for the pre-filled workbooks were piloted in the EMCDDA.

1. The principle is that a template is produced for each workbook, and one version of this is provided to each country, in some instances pre-filled.
2. Answers to the questions should be entered into the "fields" in the template. The fields have been named with the question number (e.g. T.2.1). It will be possible to extract the contents of the fields using the field names.
3. Fields are usually displayed within a border, and indicated by "Click here to enter text". Fields have been set up so that they cannot be deleted (their contents can be deleted). They grow in size automatically.
4. The completed template/workbook represents the working document between the NFP and the EMCDDA. Comments can be used to enhance the dialogue between the EMCDDA and the NFP. Track changes are implemented to develop a commonly understood text and to avoid duplication of work.

Table of Contents

T0. Summary	4
T1. Drug-related research	5
T2. Trends	8
T3. New developments	8
T4. Additional information	19
T5. Notes and queries	19
T6. Sources and methodology.....	20

T0. Summary

Please provide an abstract of this workbook (target: 500 words) under the following headings:

- National profile

National profile

In France, the Ministry of National Education, Higher Education and Research (MENESR) designs, coordinates and implements national policy on research and innovation. Two primary academic organisations, the National Centre for Scientific Research (CNRS) and the National Institute for Health and Medical Research (INSERM), cover a wide range of research areas, from neurosciences, through public health and clinical research to social sciences. The French National Focal Point (OFDT) is the main body involved in drug-related data collection, studies and network development. It collaborates extensively with national and European drug-related research teams. Dissemination of data and research results are also part of its mandate, together with publishing in national and international scientific journals, and promoting the use of research results in practice and policymaking. The Interministerial Mission for the Fight Against Drugs and Addictive Behaviours (MILDECA) is the central structure responsible to the Prime Minister for coordinating governmental action in the drugs field. Part of its role is to promote and fund drug-related research. In line with the Government Plan for Combating Drugs and Addictive Behaviours 2013–17 (MILDT 2013), the MILDECA supports calls for proposals and extended collaboration with research organisations/universities and with the French Research Agency (ANR). It also promotes clinical research networks and dissemination initiatives towards the scientific community and policymakers. Today, research on drugs and addictive behaviours is also on the agenda of the strategic priorities of thematic research alliances¹.

View '[Drug-related research](#)' for additional information.

¹ In the framework of the 2009 National Research and Innovation Strategy, the main institutional public players were brought together in alliances, in order to focus on priority areas: Health, care, nutrition and biotechnology; Environmental urgency and eco-technology; Information, communication and nanotechnology.

- New developments

New developments (including a description of research priorities, if available)

Like previous ones, the 2013-2017 government plan reiterates the will to base the fight against drugs and addictive behaviours on research and training. Public authorities are committed to supporting research and monitoring and identified the following key priorities:

- to progress in the understanding of addictive behaviours: supporting multidisciplinary work, epidemiological research on health and social effects of use among young people in France, by strengthening monitoring schemes and surveillance networks on addictive behaviour.
- to strengthen clinical research in the field of addictions, in particular the work on innovative drug treatments and new therapeutic strategies.
- to develop research on prevention.
- to develop evaluation research.
- to improve the interface between researchers and policymakers.

T1. Drug-related research¹

The purpose of this section is to:

- Describe the organization of drug-related research in your country
- Provide a summary of specific resources on drug-related research available in your country
- Update the available information already provided to the EMCDDA (workbook will be pre-filled).

Please structure your answers around the following questions.

T1.1.1 Please update the main drug-related research institutions/associations/bodies (public or private) in your country.

Please provide links, also to pages in English, if available.

- Centre National de la Recherche Scientifique (CNRS):
<http://www.cnrs.fr/index.php>
- Conservatoire National des Arts et Métiers (CNAM):
<http://the.cnam.eu/>
- École des Hautes Études en Santé Publique (EHESP):
<http://www.ehesp.fr/en/>
- École des Hautes Études en Sciences Sociales (EHESS):
<https://www.ehess.fr/fr/recherche>
- Fédération Nationale des Observatoires Régionaux de la Santé (FNORS):
<http://www.fnors.org/Fnors/Ors/Coord.htm>
- Fondation Nationale des Sciences Politiques (FNSP):
<http://www.sciencespo.fr/en/home>
- Institut de Recherche en Santé Publique (GIS-IRéSP):
<http://www.iresp.net/>
- Institut de Recherche pour le Développement (IRD):
<http://en.ird.fr/ird.fr>
- Institut National de la Recherche Agronomique (INRA):
<http://www.inra.fr/en>
- Institut National de la Santé et de la Recherche Médicale (INSERM):
<http://english.inserm.fr/>
- Observatoire Français des Drogues et des Toxicomanies (OFDT):
<http://en.ofdt.fr/>
- Santé publique France
Santé publique France is a new entity created in 2016 which brings together the (French) Institute for public health surveillance (InVS), the institution for preparing and responding to health emergencies (EPRUS) and the (French) National institute for prevention and health education (INPES)
<http://www.santepubliquefrance.fr/Infos/About-Sante-publique-France>

¹“Drug-related research involves performing a study on illicit drugs, which may involve a range of disciplines, through the use of scientifically accepted methods and procedures, in order to test a hypothesis or answer a specific question.” (EMCDDA, 2012 [Drug-related research in Europe: recent developments and future perspectives](#))

T1.1.2 Please update the main institutions/associations/bodies/programmes (public or private) funding drug-related research in your country.
Please provide links, also to pages in English, if available.

- The Interministerial Mission for Combating Drugs and Addictive Behaviours (MILDECA: <http://www.droques.gouv.fr/page-simple/mildeca-interministerial-mission-combating-drugs-and-addictive-behaviours>) is the central structure responsible to the Prime Minister for coordinating governmental action in the drugs field. Part of his role is to promote and fund drug related research. In line with the last Plan 2013–17 (MILDT 2013), the MILDECA supported new annual [calls for proposals](#) and extended collaborations with research organizations/universities and with the ANR. It also promoted clinical research networks and dissemination initiatives towards the scientific community and policy makers. The Ministry of Research together with the MILDECA also supported the ERANID research network gathering major academic research centres (INSERM, CNRS) and agencies including the national focal point itself.
- The Ministry of National Education, Higher Education and Research (MENESR: <http://www.education.gouv.fr/>) designs, coordinates and implements national policy on research and innovation. A large scope of research areas ranging from neurosciences, through public health and clinical research to social sciences is mainly covered by two major academic operators: the National Centre for Scientific Research (CNRS) and the National Institute for Health and Medical Research (INSERM).
- The French Research Agency (*Agence Nationale de la Recherche* – ANR: <http://www.agence-nationale-recherche.fr/en/project-based-funding-to-advance-french-research/>) is in charge of programming national research and innovation. The agency establishes the thematic priorities of research and allocates the resources. Every year, the agency launches calls for tenders covering a large spectrum of scientific areas.
- The Ministry of Health (<http://www.sante.gouv.fr/>) funds, in specific years, clinical projects on addiction treatment in hospitals (under the programme “*Programme Hospitalier de Recherche Clinique*” - PHRC). It also funds studies on specific populations of drug users, interventions (prevention, treatment, harm reduction) or legal disposition.
- The National Research Agency on AIDS (*Agence Nationale de Recherche sur le Sida* – ANRS: <http://www.anrs.fr/>) and the Institute for Public Health Surveillance (*Institut de Veille Sanitaire* – InVS: <http://invs.santepubliquefrance.fr/en>) implement regular surveys and research projects on the links between injecting drug use and infectious diseases (mainly HIV and HCV).
- The French National Cancer Institute (*Institut national du cancer* – INCa: <http://en.e-cancer.fr/>) is the preeminent health and science agency in charge of cancer control in France, created in 2004. It reports to the ministries for Health and for Research. About half of its budget (€100 million) is allocated to research funding. Each year, the Institute organises more than fifteen competitive calls for proposals in the areas of research, public health, cancer care organisation and patient information.
- NGOs and foundations (such as the *Fondation de France*) representing practitioners, users and companies (alcohol suppliers, tobacco industry and pharmaceutical laboratories) also regularly fund surveys and research project in these areas.

T1.1.3 Please update the list of the main national scientific journals where drug-related research is published in your country.
Please provide links, also to pages in English, if available.

Name	Topic	Language(s)	Abstract
Alcoologie et Addictologie http://www.sfalcoologie.asso.fr/page.php?choix=B3-GB&PHPSESSID=9f11067128dbabb15e27b66f913d0b8b	Treatment	French, English	English
Archives des Maladies Professionnelles et de l'Environnement http://www.sciencedirect.com/science/journal/17758785	Treatment	French	English
Toxicologie Analytique et Clinique http://www.sciencedirect.com/science/journal/23520078	Toxicology	French, English	English
Bulletin Épidémiologique Hebdomadaire http://invs.santepubliquefrance.fr//Publications-et-outils/BEH-Bulletin-epidemiologique-hebdomadaire	Epidemiology and public health	French	English
Le Courrier des Addictions http://www.edimark.fr/courrier-addictions	Addiction all topics	French	French
Déviance et Société http://www.cairn-int.info/revue.php?ID_REVUE=E_DS	Sociology and political science	French	English
L'Encéphale http://www.sciencedirect.com/science/journal/00137006	Treatment	French	English
Médecine/sciences http://www.medecinesciences.org/	Health	French	French
Psychotropes, Revue internationale des toxicomanies et des addictions http://www.cairn.info/revue-psychotropes.htm	Treatment	French	English
Revue d'Épidémiologie et de Santé Publique http://www.journals.elsevier.com/revue-depidemiologie-et-de-sante-publique/	Epidemiology and public health	French, English	English
Revue Française des Affaires Sociales http://www.cairn.info/revue-francaise-des-affaires-sociales.htm	Human and social sciences	French	English
Revue Française de Sociologie http://www.cairn-int.info/revue.php?ID_REVUE=E_RFS	Sociology	English, French	English
La Santé en Action http://inpes.santepubliquefrance.fr/SLH/default.asp	Public Health	French	French
Santé Publique http://www.sfsp.fr/santepublique/accueil.php	Epidemiology and public health	French	English

Sciences Sociales et Santé http://www.jle.com/en/revues/sante_pub/sss/sommaire.md	Human and social sciences	French, English	English
Sociétés Contemporaines http://www.pressessciencespo.fr/en/revues/societes-contemporaines/	Sociology	French	English
Sociologie http://www.cairn-int.info/revue.php?ID_REVUE=E_SOCIO	Sociology	French	English
Swaps http://www.pistes.fr/swaps/index.htm	Addiction in all fields	French	French
Thérapie http://www.journal-therapie.org/	Treatment	French, English	English

T1.1.4 Please update the list of drug-related research relevant websites/resources you would like us to include in your research country profile.
Please provide links, also to pages in English, if available.

In addition to the websites of the main bodies and organisations that conduct and/or finance regularly or occasionally research on addictive behaviour (see T1.1.1 and T1.1.2), three references may be cited: the National Agency for the Quality Assessment of Health and Social Care Organizations and Services (ANESM: <http://www.anesm.sante.gouv.fr/>), the Research and Safety National Institute for the Prevention of Occupational Accidents and Diseases (INRS: <http://en.inrs.fr/>) and the National Agency for Medicines and Health Products Safety (ANSM: <http://ansm.sante.fr/>).

T2. Trends

Not applicable for this workbook.

T3. New developments

The purpose of this section is to provide information on any notable or topical developments observed in drug-related research in your country **since your last report**.

T1 is used to establish the baseline of the topic in your country. Please focus on any new developments here.

If information on recent notable developments have been included as part of the baseline information for your country, please make reference to that section here. It is not necessary to repeat the information.

Please structure your answers around the following question.

T3.1 Please update the list of the main drug-related, recent/on-going (current/last year) studies/research projects in your country.

Please provide links, also to pages in English, if available.

If possible, classify each study/research project under one of the following categories:

- (1) Basic biological, neurobiological and behavioural research (including aetiological and addictive behaviour research);
- (2) Population based and clinical epidemiology (including site surveys, ethnographic studies and acute toxicity studies);
- (3) Demand reduction (including prevention, treatment, harm reduction, reintegration and clinical treatment research);
- (4) Supply, supply reduction and crime;
- (5) Drug policy (including laws, economic issues and strategies);
- (6) Other topics.

If it is not possible to identify the main drug-related on-going studies/research projects in your country, please provide a list of the most relevant current bibliographic references.

Bibliography 2015-1st quarter 2016

(1) Basic biological, neurobiological and behavioural research (including aetiological and addictive behaviour research)

Alvarez, S. (2015). Do some addictions interfere with fertility? Fertility and Sterility 103 (1) 22-26.

Ayranci, G., Befort, K., Lalanne, L., Kieffer, B.L. and Lutz, P.E. (2015). Dissociation of heroin-induced emotional dysfunction from psychomotor activation and physical dependence among inbred mouse strains. Psychopharmacology 232 (11) 1957-1971.

Békaert, J. and Podevin, G. (2015). Psychopathologie des mésusages du Subutex® : le syndrome de Popeye [Psychopathology of the misuse of Subutex®: The Popeye syndrome]. L'Encéphale 41 (3) 229-237.

Bodeau, S., Bennis, Y., Knapp, A., Mayer, C., Alvarez, J.-C., Bricca, G. *et al.* (2015). Hallucinations sous Datura : le piège atropinique. Toxicologie Analytique et Clinique 27 (4) 246-250.

Bretaudeau Deguigne, M., Férec, S., Lelièvre, B., Bruneau, C., Diquet, B., Harry, P. *et al.* (2015). Report of five cases of 2,5-dimethoxy-4-(n)-propylphenethylamine (2C-P) intoxication following recreational use. Toxicologie Analytique et Clinique 27 (2) 99-104.

Cathala, A., Devroye, C., Maitre, M., Piazza, P.V., Abrous, D.N., Revest, J.M. *et al.* (2015). Serotonin2C receptors modulate dopamine transmission in the nucleus accumbens independently of dopamine release: behavioral, neurochemical and molecular studies with cocaine. Addiction Biology 20 (3) 445-457.

Chabrol, H., Melioli, T. and Goutaudier, N. (2015). Association between personality disorders traits and problematic cannabis use in adolescents. Substance Use and Misuse 50 (5) 552-556.

David, H.N., Dhilly, M., Degoulet, M., Poisnel, G., Meckler, C., Vallee, N. *et al.* (2015). Argon blocks the expression of locomotor sensitization to amphetamine through

antagonism at the vesicular monoamine transporter-2 and mu-opioid receptor in the nucleus accumbens. Translational Psychiatry 5 e594.

Desrosiers, N.A., Ramaekers, J.G., Chauchard, E., Gorelick, D.A. and Huestis, M.A. (2015). Smoked cannabis' psychomotor and neurocognitive effects in occasional and frequent smokers. Journal of Analytical Toxicology 39 (4) 251-261.

Devroye, C., Cathala, A., Di Marco, B., Caraci, F., Drago, F., Piazza, P.V. *et al.* (2015). Central serotonin(2B) receptor blockade inhibits cocaine-induced hyperlocomotion independently of changes of subcortical dopamine outflow. Neuropharmacology 97 329-337.

Devroye, C., Cathala, A., Maitre, M., Piazza, P.V., Abrous, D.N., Revest, J.M. *et al.* (2015). Serotonin(2C) receptor stimulation inhibits cocaine-induced Fos expression and DARPP-32 phosphorylation in the rat striatum independently of dopamine outflow. Neuropharmacology 89 375-381.

Feng, J., Shao, N., Szulwach, K.E., Vialou, V., Huynh, J., Zhong, C. *et al.* (2015). Role of Tet1 and 5-hydroxymethylcytosine in cocaine action. Nature Neuroscience 18 (4) 536-544.

Ghosn, J., Fouquet, B., Quertainmont, Y., Salmon, D., Sahali, S., Rioux, C. *et al.* (2015). Claudin-1 gene variants and susceptibility to hepatitis C infection in HIV-1 infected intravenous drug users (an ANRS case-control study). Journal of Medical Virology 87 (4) 619-624.

Godino, A., Jayanthi, S. and Cadet, J.L. (2015). Epigenetic landscape of amphetamine and methamphetamine addiction in rodents. Epigenetics 10 (7) 574-580.

Grebot, E., Dardard, J. and Briet, G. (2016). Schémas précoces inadaptés, croyances addictives et styles défensifs chez des étudiants consommateurs de cannabis. Annales Médico-Psychologiques : Revue psychiatrique 174 (2) 93-99.

Guillem, E., Arbabzadeh-Bouchez, S., Vorspan, F. and Bellivier, F. (2015). Comorbidités chez 207 usagers de cannabis en consultation jeunes consommateurs [Comorbidity in 207 cannabis users in a specific outpatient setting]. L'Encéphale 41 (Suppl.1) S7-S12.

Hachem-Delaunay, S., Fournier, M.L., Cohen, C., Bonneau, N., Cador, M., Baunez, C. *et al.* (2015). Subthalamic nucleus high-frequency stimulation modulates neuronal reactivity to cocaine within the reward circuit. Neurobiology of Disease 80 54-62.

Helfer, A.G., Turcant, A., Boels, D., Ferec, S., Lelièvre, B., Welter, J. *et al.* (2015). Elucidation of the metabolites of the novel psychoactive substance 4-methyl-N-ethyl-cathinone (4-MEC) in human urine and pooled liver microsomes by GC-MS and LC-HR-MS/MS techniques and of its detectability by GC-MS or LC-MSn standard screening approaches. Drug Testing and Analysis 7 (5) 368-375.

Icick, R., Peoc'h, K., Karsinti, E., Ksouda, K., Hajj, A., Bloch, V. *et al.* (2015). A cannabinoid receptor 1 polymorphism is protective against major depressive disorder in methadone-maintained outpatients. American Journal on Addictions 24 (7) 613-620.

Jamey, C., Kintz, P. and Raul, J.-S. (2016). Lévomisole et cocaïne : une association à surveiller [Levamisole and cocaine: An association to follow-up]. Toxicologie Analytique et Clinique 28 (1) 64-70.

- Karila, L., Megarbane, B., Cottencin, O. and Lejoyeux, M. (2015). Synthetic cathinones: A new public health problem. Current Neuropharmacology 13 (1) 12-20.
- Karila, L., Leroy, C., Dubol, M., Trichard, C., Mabondo, A., Marill, C. *et al.* (2016). Dopamine Transporter Correlates and Occupancy by Modafinil in Cocaine-Dependent Patients: A Controlled Study with High-Resolution PET and [C]-PE2I. Neuropsychopharmacology 10.1038/npp.2016.28.
- Karsinti, E., Jarroir, M., Zerdazi, E.-H., Bloch, V., Dupuy, G., Belforte, B. *et al.* (2015). Childhood trauma are not associated with the intensity of transient cocaine induced psychotic symptoms. Psychiatry Research 228 (3) 941-944.
- Kintz, P. (2015). Contribution of in utero drug exposure when interpreting hair results in young children. Forensic Science International 249 314-317.
- Koo, J.W., Mazei-Robison, M.S., LaPlant, Q., Egervari, G., Braunscheidel, K.M., Adank, D.N. *et al.* (2015). Epigenetic basis of opiate suppression of Bdnf gene expression in the ventral tegmental area. Nature Neuroscience 18 (3) 415-422.
- Laguerre, C.E., Vavassori, D. and Fernandez, L. (2015). Parental contributions and separation anxiety on adolescents' cannabis use: a preliminary study based on French high school students. Journal of Addictions Nursing 26 (1) 3-7.
- Laprevote, V., Gambier, N., Cridlig, J., Savenkoff, B., Scala-Bertola, J., Hingray, C. *et al.* (2015). Early withdrawal effects in a heavy cannabis smoker during hemodialysis. Biological Psychiatry 77 (5) e25-26.
- Lorvellec, A., Thiriet, L., Andrianjafy, C., Gervaise, A., Seigne, A.L. and Rey, P. (2015). Pancréatite aiguë récidivante au cannabis [Recurrent cannabis-induced acute pancreatitis]. La Presse Médicale 44 (4 Pt 1) 468-471.
- Luquiens, A., Lourenco, N., Benyamina, A. and Aubin, H.J. (2015). Self-medication of achalasia with cannabis, complicated by a cannabis use disorder. World Journal of Gastroenterology 21 (20) 6381-6383.
- Maublanc, J., Dulaurent, S., Morichon, J., Lachâtre, G. and Gaulier, J.-m. (2015). Identification and quantification of 35 psychotropic drugs and metabolites in hair by LC-MS/MS: application in forensic toxicology. International Journal of Legal Medicine 129 (2) 259-268.
- May, M.T., Justice, A.C., Birnie, K., Ingle, S.M., Smit, C., Smith, C. *et al.* (2015). Injection Drug Use and Hepatitis C as Risk Factors for Mortality in HIV-Infected Individuals: The Antiretroviral Therapy Cohort Collaboration. Journal of Acquired Immune Deficiency Syndromes 69 (3) 348-354.
- Mayet, A., Legleye, S., Attaiaa, L.A., Beck, F., Khlát, M., Falissard, B. *et al.* (2015). Théorie de l'escalade ou propension commune aux addictions ? Étude des séquences d'initiations à des drogues et de leur retentissement clinique [Gateway theory or common liability model? Main results of our research about initiation sequences of different drugs and their clinical consequences]. Le Courrier des Addictions 17 (2) 15-18.
- Mayet, A., Legleye, S., Beck, F., Falissard, B. and Chau, N. (2016). The gateway hypothesis, common liability to addictions or the route of administration model a

modelling process linking the three theories. European Addiction Research 22 (2) 107-117.

Mazoyer, C., Carlier, J., Sastre, C. and Di Fazio, V. (2015). Cannabinoïdes de synthèse : méthodes analytiques. Toxicologie Analytique et Clinique 27 (3) 184-194.

Meye, F.J., Valentinova, K., Lecca, S., Marion-Poll, L., Maroteaux, M.J., Musardo, S. *et al.* (2015). Cocaine-evoked negative symptoms require AMPA receptor trafficking in the lateral habenula. Nature Neuroscience 18 (3) 376-378.

Moisset, X., Sia, M.A., Perie, M., Ferrier, A. and Bourgois, N. (2015). Embolic stroke associated with intra-carotid injection of buprenorphine. Revue Neurologique 171 (5) 450-451.

Mouly, S., Bloch, V., Peoc'h, K., Houze, P., Labat, L., Ksouda, K. *et al.* (2015). Methadone dose in heroin-dependent patients: role of clinical factors, comedications, genetic polymorphisms and enzyme activity. British Journal of Clinical Pharmacology 79 (6) 967-977.

Murray, J.E., Belin-Rauscent, A., Simon, M., Giuliano, C., Benoit-Marand, M., Everitt, B.J. *et al.* (2015) Basolateral and central amygdala differentially recruit and maintain dorsolateral striatum-dependent cocaine-seeking habits. Nature Communications 6, 10088, 10.1038/ncomms10088.

Navailles, S., Guillem, K., Vouillac-Mendoza, C. and Ahmed, S.H. (2015). Coordinated recruitment of cortical-subcortical circuits and ascending dopamine and serotonin neurons during inhibitory control of cocaine seeking in rats. Cerebral Cortex 25 (9) 3167-3181.

Néfau, T., Charpentier, E., Elyasmino, N., Duplessy-Garson, C., Levi, Y. and Karolak, S. (2015). Drug analysis of residual content of used syringes: A new approach for improving knowledge of injected drugs and drug user practices. International Journal of Drug Policy 26 (4) 412-419.

Nordmann, S., Néfau, T., Micallef, J., Duplessy, C., Catusse, J.C. and Frauger, E. (2015). Analyse des seringues usagées : un reflet de la consommation de substances psychoactives par les usagers de drogues par voie intraveineuse ? [Which psychoactives substances are found in used syringes? Objective]. Thérapie 10.2515/therapie/2015054.

Pape, E., Scala-Bertola, J., Jouzeau, J.Y., Laprevote, V., Gibaja, V., Paille, F. *et al.* (2015). Criblage de 7 cannabinoïdes de synthèse et 2 métabolites dans l'urine [Screening of 7 synthetic cannabinoids and 2 metabolites in urine]. Toxicologie Analytique et Clinique 27 (4) 239-245.

Patissier, C., Akdhar, M., Manin, C., Rosellini, D., Tambat, A., Tiprez, C. *et al.* (2015). A propos de 8 cas d'intoxication accidentelle au cannabis chez des nourrissons [Intoxication from accidental ingestion of cannabis: analysis of eight cases]. Archives de Pédiatrie 22 (1) 43-46.

Pelloux, Y., Murray, J.E. and Everitt, B.J. (2015). Differential vulnerability to the punishment of cocaine related behaviours: effects of locus of punishment, cocaine taking history and alternative reinforcer availability. Psychopharmacology 232 (1) 125-134.

- Peretti, P. (2015). Du voyage toxicomane comme épreuve de l'exil : vers la construction d'un rapport de suppléance ? [From an addictive trip as experience of exile: Towards the construction of a substitute report?]. L'Evolution Psychiatrique 80 (3) 479-488.
- Rappeneau, V., Morel, A.L., El Yacoubi, M., Vaugeois, J.M., Denoroy, L. and Berod, A. (2015). Enhanced cocaine-associated contextual learning in female H/Rouen mice selectively bred for depressive-like behaviors: molecular and neuronal correlates. International Journal of Neuropsychopharmacology 18 (8) pyv022.
- Tesone-Coelho, C., Morel, L.J., Bhatt, J., Estevez, L., Naudon, L., Giros, B. *et al.* (2015). Vulnerability to opiate intake in maternally deprived rats: implication of MeCP2 and of histone acetylation. Addiction Biology 20 (1) 120-131.
- Torrents, R., Picot, C., Glaizal, M., Courne, M.A., Schmitt, C., Richard, N. *et al.* (2015). Child poisonings with methadone in France: A 6-year prospective national survey since the availability of capsules in 2008. Clinical Toxicology 53 (8) 819-822.
- Valentinova, K., Tchenio, A., Meye, F.J., Lecca, S. and Mameli, M. (2015). L'enfer après le plaisir - Contribution de l'habénula latérale aux symptômes dépressifs des drogues [Hell after the pleasure: drug-induced negative symptoms involve lateral habenula]. Médecine Sciences 31 (5) 478-481.
- Vanhille, N., Belin-Rauscent, A., Mar, A.C., Ducret, E. and Belin, D. (2015). High locomotor reactivity to novelty is associated with an increased propensity to choose saccharin over cocaine: new insights into the vulnerability to addiction. Neuropsychopharmacology 40 (3) 577-589.
- Wainstein, L., Bernier, C., Gerardin, M., Bouquie, R., Espitia, O., Mussini, J.M. *et al.* (2015). Livedo-like dermatitis and necrotic lesions after high-dose buprenorphine injections: a national French survey. British Journal of Dermatology 172 (5) 1412-1414.
- Wolff, V., Schlagowski, A.I., Rouyer, O., Charles, A.L., Singh, F., Auger, C. *et al.* (2015). Tetrahydrocannabinol induces brain mitochondrial respiratory chain dysfunction and increases oxidative stress: a potential mechanism involved in cannabis-related stroke. BioMed Research International 2015, 323706, 10.1155/2015/323706.

(2) Population based and clinical epidemiology (including site surveys, ethnographic studies and acute toxicity studies)

- Attaiaa, L.-A., Beck, F., Richard, J.-B., Marimoutou, C. and Mayet, A. (2016). Relationships between substance initiation sequence and further substance use: A French nationwide retrospective study. Addictive Behaviors 57 1-5.
- Baggio, S., Spilka, S., Studer, J., Iglesias, K. and Gmel, G. (2016). Trajectories of drug use among French young people: Prototypical stages of involvement in illicit drug use. Journal of Substance Use 21 (5) 485-490.
- Batisse, A., Grégoire, M., Marillier, M., Fortias, M. and Djeddar, S. (2016) Usage de cathinones à Paris [Cathinones use in Paris]. L'Encéphale 10.1016/j.encep.2015.09.002.
- Beck, F., Richard, J.-B., Guignard, R., Le Nézet, O. and Spilka, S. (2015). Les niveaux d'usage des drogues en France en 2014 [Levels of drug use in France in 2014]. Tendances. OFDT (99).

- Boyd, A., Van de Velde, S., Pivette, M., ten Have, M., Florescu, S., O'Neill, S. *et al.* (2015). Gender differences in psychotropic use across Europe: Results from a large cross-sectional, population-based study. European Psychiatry 30 (6) 778-788.
- Cadet-Taïrou, A. (2015). Précarité des usagers des CAARUD : ce que disent les chiffres. Swaps (78) 8-12.
- Cadet-Taïrou, A., Gandilhon, M., Martinez, M. and Néfau, T. (2015). Substances psychoactives en France : tendances récentes (2014-2015) [Alcohol, tobacco and cannabis use during "the collège years" in 2014]. Tendances. OFDT (105).
- Cadet-Taïrou, A., Saïd, S. and Martinez, M. (2015). Profils et pratiques des usagers des CAARUD en 2012 [CAARUD client profiles and practices in 2012]. Tendances. OFDT (98).
- Cazein, F., Pillonel, J., Le Strat, Y., Pinget, R., Le Vu, S., Brunet, S. *et al.* (2015). Découvertes de séropositivité VIH et de sida, France, 2003-2013 [New HIV and AIDS diagnoses, France, 2003-2013]. BEH - Bulletin Épidémiologique Hebdomadaire (9-10) 152-161.
- Chavant, F., Boucher, A., Le Boisselier, R., Deheul, S. and Debruyne, D. (2015). Nouvelles drogues de synthèse en addictovigilance [New synthetic drugs in addictovigilance]. Thérapie 70 (2) 167-178.
- Copin, N., Geslain, C., Vol, S., Errard, G., Lepinay, P., Gusto, G. *et al.* (2015). Cannabis et jeunes consultants de centres d'examens de santé [Cannabis and young people who consult health examination centres]. Alcoologie et Addictologie 37 (2) 125-135.
- Cousien, A., Tran, V.C., Deuffic-Burban, S., Jauffret-Roustide, M., Dhersin, J.S. and Yazdanpanah, Y. (2015). Dynamic modelling of hepatitis C virus transmission among people who inject drugs: a methodological review. Journal of Viral Hepatitis 22 (3) 213-229.
- Crespin, R. (2015). Le sens des mesures. Usages et circulation des chiffres dans la définition du problème public des drogues au travail [The significance of measures. Circulation and appropriation of numbers in the framing process of occupational drug use problem]. Psychotropes 21 (1) 35-54.
- Devault, D.A., Néfau, T., Levi, Y. and Karolak, S. (2016). The removal of illicit drugs and morphine in two waste water treatment plants (WWTPs) under tropical conditions. Environmental Science and Pollution Research 10.1007/s11356-015-6032-z.
- du Roscoät, E., Legleye, S., Guignard, R., Husky, M. and Beck, F. (2016). Risk factors for suicide attempts and hospitalizations in a sample of 39,542 French adolescents. Journal of Affective Disorders 190 517-521.
- Dujourdy, L., Charvoz, C., Dalmasso, M. and Dufour, A.-B. (2015). What a validation strategy means for the quantitation of cocaine and heroin? Forensic Science International 251 32-39.
- Gandilhon, M. and Cadet-Taïrou, A. (2015). Les usages de drogues en espace rural. Populations, marchés, réponse publique. Tendances. OFDT (104).

- Jouanjus, E., Gibaja, V., Kahn, J.-P., Haramburu, F. and Daveluy, A. (2015). Comment identifier un signal en addictovigilance ? [Signal identification in addictovigilance: The functioning of the French system]. Thérapie 70 (2) 113-122.
- Lapeyre-Mestre, M. and Dupui, M. (2015). Système de surveillance en addictovigilance : quelles données pharmacoépidémiologiques à l'échelle de l'Europe ? Thérapie 70 (2) 147-156.
- Lapeyre-Mestre, M. and Dupui, M. (2015). Drug abuse monitoring: Which pharmacoepidemiological resources at the European level? Thérapie 70 (2) 157-165.
- Laporte, A., Le Mener, E., Detrez, M.A., Douay, C., Le Strat, Y., Vandentorren, S. *et al.* (2015). La santé mentale et les addictions chez les personnes sans logement personnel en Île-de-France : l'enquête Samenta de 2009 [Mental health and addictions among homeless in the Paris metropolitan area: the SAMENTA survey in 2009]. BEH - Bulletin Épidémiologique Hebdomadaire (36-37) 693-697.
- Le Nézet, O., Gauduchon, T. and Spilka, S. (2015). Les drogues à 17 ans : analyse régionale de l'enquête ESCAPAD 2014. Tendances. OFDT (102).
- Le Roux, G., Bruneau, C., Lelièvre, B., Bretaudeau Deguigne, M., Turcant, A., Harry, P. *et al.* (2015). Recreational phenethylamine poisonings reported to a French poison control center. Drug and Alcohol Dependence 154 46-53.
- Le Strat, Y., Dubertret, C. and Le Foll, B. (2015). Impact of age at onset of cannabis use on cannabis dependence and driving under the influence in the United States. Accident Analysis and Prevention 76 1-5.
- Le Talec, J.Y. and Linard, F. (2015). Plaisirs chimiques : sexualité et usage de drogues chez des hommes gais séropositifs [Chemical pleasures: Sex and drug use among HIV-positive gay men]. Psychotropes 21 (2-3) 157-182.
- Legleye, S., Guignard, G., Richard, J.-B., Kraus, L., Pabst, A. and Beck, F. (2015). Psychometric and screening properties of the Cannabis Abuse Screening Test (CAST) in the general population. International Journal of Methods in Psychiatric Research 24 (2) 170-183.
- Lemaître, F. (2015). L'appropriation du paradigme addictologique à la SNCF : entre réceptions négociées et usages détournés. Psychotropes 21 (1) 55-76.
- Leprêtre, A., Ba, I., Lacombe, K., Maynard, M., Toufik, A., Ndiaye, O. *et al.* (2015). Prevalence and behavioural risks for HIV and HCV infections in a population of drug users of Dakar, Senegal: the ANRS 12243 UDSen study. Journal of the International AIDS Society 18 19888.
- Lutz, G. (2015). Pratiques addictives en milieu de travail : impasses du concept et nouvelles perspectives [Addictive practices in the workplace: reconceptualization and new perspectives]. Psychotropes 21 (1) 13-34.
- Mayet, A., Lions, C., Roux, P., Mora, M., Maradan, G., Morel, A. *et al.* (2015). Variations in cannabis use level and correlates in opiate-users on methadone maintenance treatment: A French prospective study. Journal of Substance Abuse Treatment 58 100-105.

- Melchior, M., Chollet, A., Elidemir, G., Galera, C. and Younes, N. (2015). Unemployment and substance use in young adults: Does educational attainment modify the association? European Addiction Research 21 (3) 115-123.
- Michel, L., Lions, C., Van Malderen, S., Schiltz, J., Vanderplasschen, W., Holm, K. *et al.* (2015). Insufficient access to harm reduction measures in prisons in 5 countries (PRIDE Europe): a shared European public health concern. BMC Public Health 15 (1093).
- Ngo Nguene, M.R. (2015). Les formes différenciées d'usages de produits psychoactifs au travail : les cas des bars-restaurants et des chantiers du bâtiment [Differentiated forms of drug use at work: The case of restaurants, bars and building sites]. Psychotropes 21 (1) 77-95.
- Petit, E. and Combaluzier, S. (2015). Conduites à risques des jeunes adultes. Impact des variables dispositionnelles émotionnelles et de personnalité [Risk-taking behaviors in young adults. Impact of dispositional emotional and personality variables]. Alcoologie et Addictologie 37 (3) 233-243.
- Roussel, O., Carlin, M.G., Bouvot, X. and Tensorer, L. (2015). The emergence of synthetic cannabinoids in Mayotte. Toxicologie Analytique et Clinique 27 (1) 18-22.
- Sahed, I. (2016). Influence des amis dans la consommation de cigarettes, de cannabis et d'alcool. Sensibiliser les jeunes : premiers résultats de l'expérimentation de l'outil Ageven [Suggestion of a toll to sensitize young people to their friends' social influence on tobacco, cannabis and alcohol consumption. First results of the Ageven tool experimentation among young adults]. Alcoologie et Addictologie 38 (1) 57-69.
- Sauvage, C., Pascal, X., Weill-Barillet, L., Molinier, M., Pillonel, J., Leon, L. *et al.* (2015). Prévalence de l'antigène HBs dans deux populations exposées : les usagers de drogues (ANRS-Coquelicot 2011-2013) et les hommes ayant des relations sexuelles avec des hommes (Prevagay 2009) à Paris, France [Prevalence of Hepatitis B surface antigen in two exposed populations: drug users (ANRS-Coquelicot 2011-2013) and men who have sex with men (Prevagay 2009) in Paris, France]. BEH - Bulletin Épidémiologique Hebdomadaire (19-20) 353-359.
- Schlegel, V. (2015). Les usages de drogues dans les marges du travail : le cas de sans-abri lillois [Drug use in the margins of work: the case of homeless people in Lille]. Psychotropes 21 (1) 97-111.
- Spilka, S., Le Nézet, O., Ngantcha, M. and Beck, F. (2015). Les drogues à 17 ans : analyse de l'enquête ESCAPAD 2014 [Drug use in 17-year-olds: analysis of the ESCAPAD survey]. Tendances. OFDT (100).
- Vorspan, F., Mehtelli, W., Dupuy, G., Bloch, V. and Lepine, J.P. (2015). Anxiety and substance use disorders: co-occurrence and clinical issues. Current Psychiatry Reports 17 (2) 4.
- Weill-Barillet, L., Pillonel, J., Semaille, C., Léon, L., Le Strat, Y., Pascal, X. *et al.* (2016). Hepatitis C virus and HIV seroprevalences, sociodemographic characteristics, behaviors and access to syringes among drug users, a comparison of geographical areas in France, ANRS-Coquelicot 2011 survey. Revue d'Epidémiologie et de Santé Publique 10.1016/j.respe.2015.10.003.

(3) Demand reduction (including prevention, treatment, harm reduction, reintegration and clinical treatment research)

- Boucherie, Q., Frauger, E., Thirion, X., Mallaret, M. and Micallef, J. (2015). Méthadone gélule : résultats de 5 années d'utilisation en France [New methadone formulation in France: results from 5 years of utilization]. Thérapie 70 (2) 223-228.
- Chauchard, E., Goutaudier, N., Heishman, S.J., Gorelick, D.A. and Chabrol, H. (2015). Validation of the French version of the marijuana craving questionnaire (MCQ) generates a two-factor model. American Journal of Drug and Alcohol Abuse 41 (1) 82-87.
- Collins, G.T., Gerak, L.R., Javors, M.A. and France, C.P. (2016). Lorcaserin reduces the discriminative stimulus and reinforcing effects of cocaine in Rhesus Monkeys. Journal of Pharmacology and Experimental Therapeutics 356 (1) 85-95.
- Cousien, A., Tran, V.C., Deuffic-Burban, S., Jauffret-Roustide, M., Dhersin, J.-S. and Yazdanpanah, Y. (2016). Hepatitis C treatment as prevention of viral transmission and liver-related morbidity in persons who inject drugs. Hepatology 63 (4) 1090-1101.
- David, F., Vandevivere, T., Cortes-Lebon, M.A., Bernard, V., Tisserand, L. and Danel, T. (2015). Sevrage ambulatoire du cannabis. Soins. Psychiatrie 36 (296) 37-40.
- Diot, C., Eiden, C., Leglise, Y., Donnadieu-Rigole, H. and Peyriere, H. (2015). Role of methadone in induction and/or exacerbation of cluster headache in patients treated for opioid addiction. Thérapie 70 (3) 305-307.
- du Roscoät, E., Cogordan, C., Guignard, R., Wilquin, J.L. and Beck, F. (2015). Déterminants des intentions de rester non-consommateur ou de réduire ses consommations d'alcool, de tabac ou de cannabis chez les 15-25 ans [Determinants of the intention to abstain from or reduce alcohol, tobacco or cannabis use among 15-25 year-olds]. Santé Publique 27 (5) 641-651.
- Grammatico-Guillon, L., Arnault, E., Rollier, S., Bonnemaïson, G., Dubois, F. and Rusch, E. (2015). Dépister hors les murs d'un centre de dépistage : une expérience mobilisatrice pour des usagers de drogues [Community-based screening: a motivating experience for drug users]. Santé Publique 27 (5) 633-639.
- Guillou Landreat, M., Rozaire, C., Guillet, J.y., Victorri Vigneau, C., Le Reste, J.Y. and Grall Bronnec, M. (2015). French experience with buprenorphine: Do physicians follow the guidelines? PLoS One 10 (10) e0137708.
- Imaine, S. (2015). Prévenir la consommation de substances psychoactives à l'adolescence. Proposition et mise à l'essai de la méthode par l'autoréflexion et de l'outil Ageven [Preventing psychoactive substance consumption during adolescence: proposition and experimentation of the "self-reflection" method and the AGEVEN sheet]. Psychotropes 21 (2-3) 133-156.
- Lascaux, M. and Couteron, J.-P. (2015). Nouvelles pratiques au sein d'une société addictogène. Adolescence 33 (1) 165-176.
- Lascaux, M. and Phan, O. (2015). Comparaison de thérapies européennes pour adolescents présentant une addiction au cannabis [Comparison of European

therapies for cannabis addiction among adolescents]. L'Encéphale 41 (Suppl.1) S21-S28.

Michaud, P., Lécallier, D. and Hadj-Slimane, F. (2015). Prévention secondaire des dommages liés aux substances psychoactives chez les jeunes Français [Secondary prevention of damage related to psychoactive substances among French youth]. Drogues, santé et société 14 (1) 1-15.

Michel, L., Lions, C., Van Malderen, S., Schiltz, J., Vanderplasschen, W., Holm, K. *et al.* (2015). Insufficient access to harm reduction measures in prisons in 5 countries (PRIDE Europe): a shared European public health concern. BMC Public Health 15 (1093).

Obradovic, I. (2015). Dix ans d'activité des "consultations jeunes consommateurs". Tendances. OFDT (101).

Polomeni, P., Bronner, C., Fry, F., Ravoninjatovo, B. and Fatseas, M. (2015). The management of opiate use disorders in France: results of an observational survey of general practitioners. Addiction Science and Clinical Practice 10 (16).

Roux, P., Lions, C. and Carrieri, M.P. (2015). Increasing access to opioid maintenance treatment: The role of primary care in France [Viewpoint]. International Journal of Drug Policy 26 (4) 434-435.

Roux, P., Le Gall, J.M., Debrus, M., Protopopescu, C., Ndiaye, K., Demoulin, B. *et al.* (2016). Innovative community-based educational face-to-face intervention to reduce HIV, hepatitis C virus and other blood-borne infectious risks in difficult-to-reach people who inject drugs: results from the ANRS-AERLI intervention study. Addiction 111 (1) 94-106.

Vic, P., Ramé, E., Robert-Dehault, A., Henry, S., Le Moigno, L. and Hébert, J. (2015). Repérage des conduites à risque et des symptômes dépressifs chez les adolescents admis en service d'accueil des urgences [Adolescents in the Pediatric Emergency Department: Detection of risk behavior and depression]. Archives de Pédiatrie 22 (6) 580-594.

(4) Supply, supply reduction and crime

Afsahi, K. and Chouvy, P.-A. (2015). Le haschich marocain, du kif aux hybrides. Drogues, enjeux internationaux. OFDT (8).

Desseigne, J. (2015). Éradiquer les drogues vs réduire les risques liés à leur usage : une position française qui ne veut pas trancher. Cahiers de la Sécurité et de la Justice (32) 137-152.

Dumestre Toulet, V. (2015). Cannabinoïdes de synthèse et Internet : un jeu de souris ! [Synthetic cannabis on the web: A mouse game!]. Toxicologie Analytique et Clinique 27 (1) 45-47.

Lahaie, E., Janssen, E. and Cadet-Taïrou, A. (2015). Determinants of heroin retail prices in metropolitan France: Discounts, purity and local markets. Drug and Alcohol Review 10.1111/dar.12355 20151214.

Toutin, T. (2015). L'opium et ses conséquences, des plaines d'Afghanistan aux banlieues Françaises. Revue Internationale de Criminologie et de Police Technique et Scientifique 68 (1) 89-96.

(5) Drug policy (including laws, economic issues and strategies)

Afsahi, K. (2015). Pas de culture de cannabis sans les femmes. Le cas du Rif au Maroc [No cannabis cultivation without women. The case of Rif in Morocco]. Déviance et Société 39 (1) 73-97.

Obradovic, I. (2015). Trente ans de réponse pénale à l'usage de stupéfiants. Tendances. OFDT (103).

Ogrodnik, M., Kopp, P., Bongaerts, X. and Tecco, J.M. (2015). An economic analysis of different cannabis decriminalization scenarios. Psychiatria Danubina 27 (Suppl.1) S309-S314.

(6) Other topics

No reference.

T4. Additional information

The purpose of this section is to provide additional information important to drug-related research in your country that has not been provided elsewhere.

Please structure your answers around the following questions.

T4.1 Optional. Please describe any additional important sources of information, specific studies or data on drug-related research. Where possible, please provide references and/or links.

T4.2 Optional. Please describe any other important aspect of drug-related research that has not been covered in the specific questions above. This may be additional information, a reference to an organisation in your country that monitors national drug-related research, the availability of a bibliography of recent studies or new areas of specific importance for your country.

T5. Notes and queries

The purpose of this section is to highlight areas of specific interest for possible future elaboration. Detailed answers are not required.

Please structure your answers around the following questions.

Yes/No answers required. If yes please provide brief additional information.

No current questions.

T6. Sources and methodology

The purpose of this section is to collect sources for the information provided above, including brief descriptions of studies and their methodology where appropriate.

Please structure your answers around the following questions.

T6.1 Please list notable sources for the information provided above.

Please note that this workbook was pre-filled in using the information provided through the bibliography of your national report. If you used other sources while reviewing/correcting it, please list them here

Source

MILDT (2013). Government plan for combating drugs and addictive behaviours 2013-2017. MILDT, Paris.

T.6.2 Where studies or surveys have been used please list them and where appropriate describe the methodology

No study reference. Data collected through specific investigation.