



(Original Signature of Member)

117TH CONGRESS
2D SESSION

H. R. _____

To expand research on cannabidiol and marijuana, and for other purposes.

IN THE HOUSE OF REPRESENTATIVES

Mr. BLUMENAUER introduced the following bill; which was referred to the
Committee on _____

A BILL

To expand research on cannabidiol and marijuana, and for
other purposes.

1 *Be it enacted by the Senate and House of Representa-*
2 *tives of the United States of America in Congress assembled,*

3 **SECTION 1. SHORT TITLE; TABLE OF CONTENTS.**

4 (a) SHORT TITLE.—This Act may be cited as the
5 “Medical Marijuana and Cannabidiol Research Expansion
6 Act”.

7 (b) TABLE OF CONTENTS.—The table of contents for
8 this Act is as follows:

- Sec. 1. Short title; table of contents.
- Sec. 2. Definitions.

TITLE I—REGISTRATIONS FOR MARIJUANA RESEARCH

- Sec. 101. Marijuana research applications.
- Sec. 102. Research protocols.
- Sec. 103. Applications to manufacture marijuana for research.
- Sec. 104. Adequate and uninterrupted supply.
- Sec. 105. Security requirements.
- Sec. 106. Prohibition against reinstating interdisciplinary review process for non-NIH-funded researchers.

TITLE II—DEVELOPMENT OF FDA-APPROVED DRUGS USING CANNABIDIOL AND MARIJUANA

- Sec. 201. Medical research on cannabidiol.
- Sec. 202. Registration for the commercial production and distribution of Food and Drug Administration-approved drugs.

TITLE III—DOCTOR-PATIENT RELATIONSHIP

- Sec. 301. Doctor-patient relationship.

TITLE IV—FEDERAL RESEARCH

- Sec. 401. Federal research.

1 **SEC. 2. DEFINITIONS.**

2 (a) IN GENERAL.—In this Act—

3 (1) the term “appropriately registered” means
4 that an individual or entity is registered under the
5 Controlled Substances Act (21 U.S.C. 801 et seq.)
6 to engage in the type of activity that is carried out
7 by the individual or entity with respect to a con-
8 trolled substance on the schedule that is applicable
9 to cannabidiol or marijuana, as applicable;

10 (2) the term “cannabidiol” means—

11 (A) the substance, cannabidiol, as derived
12 from marijuana that has a delta-9-
13 tetrahydrocannabinol level that is greater than
14 0.3 percent; and

1 (B) the synthetic equivalent of the sub-
2 stance described in subparagraph (A);

3 (3) the terms “controlled substance”, “dis-
4 pense”, “distribute”, “manufacture”, “marijuana”,
5 and “practitioner” have the meanings given such
6 terms in section 102 of the Controlled Substances
7 Act (21 U.S.C. 802), as amended by this Act;

8 (4) the term “covered institution of higher edu-
9 cation” means an institution of higher education (as
10 defined in section 101 of the Higher Education Act
11 of 1965 (20 U.S.C. 1001)) that—

12 (A)(i) has highest or higher research activ-
13 ity, as defined by the Carnegie Classification of
14 Institutions of Higher Education; or

15 (ii) is an accredited medical school or an
16 accredited school of osteopathic medicine; and

17 (B) is appropriately registered under the
18 Controlled Substances Act (21 U.S.C. 801 et
19 seq.);

20 (5) the term “drug” has the meaning given the
21 term in section 201(g)(1) of the Federal Food,
22 Drug, and Cosmetic Act (21 U.S.C. 321(g)(1));

23 (6) the term “medical research for drug devel-
24 opment” means medical research that is—

1 (A) a preclinical study or clinical investiga-
2 tion conducted in accordance with section
3 505(i) of the Federal Food, Drug, and Cos-
4 metic Act (21 U.S.C. 355(i)) or otherwise per-
5 mitted by the Department of Health and
6 Human Services to determine the potential
7 medical benefits of marijuana or cannabidiol as
8 a drug; and

9 (B) conducted by a covered institution of
10 higher education, practitioner, or manufacturer
11 that is appropriately registered under the Con-
12 trolled Substances Act (21 U.S.C. 801 et seq.);
13 and

14 (7) the term “State” means any State of the
15 United States, the District of Columbia, and any
16 territory of the United States.

17 (b) UPDATING TERM.—Section 102(16) of the Con-
18 trolled Substances Act (21 U.S.C. 802(16)) is amended—

19 (1) in subparagraph (A), by striking “the term
20 ‘marihuana’ means” and inserting “the terms ‘mari-
21 huana’ and ‘marijuana’ mean”; and

22 (2) in subparagraph (B), by striking “The term
23 ‘marihuana’ does not” and inserting “The terms
24 ‘marihuana’ and ‘marijuana’ do not”.

1 **TITLE I—REGISTRATIONS FOR**
2 **MARIJUANA RESEARCH**

3 **SEC. 101. MARIJUANA RESEARCH APPLICATIONS.**

4 Section 303(f) of the Controlled Substances Act (21
5 U.S.C. 823(f)) is amended—

6 (1) by redesignating paragraphs (1) through
7 (5) as subparagraphs (A) through (E), respectively;

8 (2) by striking “(f) The Attorney General” and
9 inserting “(f)(1) The Attorney General”;

10 (3) by striking “Registration applications” and
11 inserting the following:

12 “(2)(A) Registration applications”;

13 (4) by striking “Article 7” and inserting the
14 following:

15 “(3) Article 7”; and

16 (5) by inserting after paragraph (2)(A), as so
17 designated, the following:

18 “(B)(i) The Attorney General shall register a practi-
19 tioner to conduct research with marijuana (including any
20 derivative, extract, preparation, and compound thereof)
21 if—

22 “(I) the applicant’s research protocol—

23 “(aa) has been reviewed and allowed—

24 “(AA) by the Secretary of Health and
25 Human Services under section 505(i) of

1 the Federal Food, Drug, and Cosmetic Act
2 (21 U.S.C. 355(i));

3 “(BB) by the National Institutes of
4 Health or another Federal agency that
5 funds scientific research; or

6 “(CC) pursuant to sections 1301.18
7 and 1301.32 of title 21, Code of Federal
8 Regulations, or any successors thereto; and

9 “(II) the applicant has demonstrated to the At-
10 torney General that there are effective procedures in
11 place to adequately safeguard against diversion of
12 the controlled substance for legitimate medical or
13 scientific use pursuant to section 105 of the Medical
14 Marijuana and Cannabidiol Research Expansion Act,
15 including demonstrating that the security measures
16 are adequate for storing the quantity of marijuana
17 the applicant would be authorized to possess.

18 “(ii) The Attorney General may deny an application
19 for registration under this subparagraph only if the Attor-
20 ney General determines that the issuance of the registra-
21 tion would be inconsistent with the public interest. In de-
22 termining the public interest, the Attorney General shall
23 consider the factors listed in—

24 “(I) subparagraphs (B) through (E) of para-
25 graph (1); and

1 “(II) subparagraph (A) of paragraph (1), if the
2 applicable State requires practitioners conducting re-
3 search to register with a board or authority de-
4 scribed in such subparagraph (A).

5 “(iii)(I) Not later than 60 days after the date on
6 which the Attorney General receives a complete applica-
7 tion for registration under this subparagraph, the Attor-
8 ney General shall—

9 “(aa) approve the application; or

10 “(bb) request supplemental information.

11 “(II) For purposes of subclause (I), an application
12 shall be deemed complete when the applicant has sub-
13 mitted documentation showing that the requirements
14 under clause (i) are satisfied.

15 “(iv) Not later than 30 days after the date on which
16 the Attorney General receives supplemental information as
17 described in clause (iii)(I)(bb) in connection with an appli-
18 cation described in this subparagraph, the Attorney Gen-
19 eral shall approve or deny the application.

20 “(v) If an application described in this subparagraph
21 is denied, the Attorney General shall provide a written ex-
22 planation of the basis of denial to the applicant.”.

23 **SEC. 102. RESEARCH PROTOCOLS.**

24 (a) IN GENERAL.—Paragraph (2)(B) of section
25 303(f) of the Controlled Substances Act (21 U.S.C.

1 823(f)), as added by section 101 of this Act, is further
2 amended by adding at the end the following:

3 “(vi)(I) If the Attorney General grants an application
4 for registration under clause (i), the registrant may amend
5 or supplement the research protocol without notification
6 to, or review by, the Drug Enforcement Administration
7 if the registrant does not change—

8 “(aa) the quantity or type of marijuana or
9 cannabidiol (including any derivative, extract, prepara-
10 tion, and compound thereof);

11 “(bb) the source of such marijuana or
12 cannabidiol; or

13 “(cc) the conditions under which such mari-
14 juana or cannabidiol is stored, tracked, or adminis-
15 tered.

16 “(II)(aa) If a registrant under clause (i) seeks to
17 change the type of marijuana or cannabidiol (including
18 any derivative, extract, preparation, and compound there-
19 of), the source of such marijuana or cannabidiol, or the
20 conditions under which such marijuana or cannabidiol is
21 stored, tracked, or administered, the registrant shall notify
22 the Attorney General via registered mail, or an electronic
23 means permitted by the Attorney General, not later than
24 30 days before implementing an amended or supplemental
25 research protocol.

1 “(bb) A registrant may proceed with an amended or
2 supplemental research protocol described in item (aa) if
3 the Attorney General does not explicitly object during the
4 30-day period beginning on the date on which the Attorney
5 General receives the notice under item (aa).

6 “(cc) The Attorney General may only object to an
7 amended or supplemental research protocol under this
8 subclause if additional security measures are needed to
9 safeguard against diversion or abuse.

10 “(dd) If a registrant under clause (i) seeks to address
11 additional security measures identified by the Attorney
12 General under item (cc), the registrant shall notify the At-
13 torney General via registered mail, or an electronic means
14 permitted by the Attorney General, not later than 30 days
15 before implementing an amended or supplemental research
16 protocol.

17 “(ee) A registrant may proceed with an amended or
18 supplemental research protocol described in item (dd) if
19 the Attorney General does not explicitly object during the
20 30-day period beginning on the date on which the Attorney
21 General receives the notice under item (dd).

22 “(III)(aa) If a registrant under clause (i) seeks to
23 change the quantity of marijuana needed for research and
24 the change in quantity does not impact the factors de-
25 scribed in item (bb) or (cc) of subclause (I) of this clause,

1 the registrant shall notify the Attorney General via reg-
2 istered mail or using an electronic means permitted by the
3 Attorney General.

4 “(bb) A notification under item (aa) shall include—

5 “(AA) the Drug Enforcement Administration
6 registration number of the registrant;

7 “(BB) the quantity of marijuana or cannabidiol
8 already obtained;

9 “(CC) the quantity of additional marijuana or
10 cannabidiol needed to complete the research; and

11 “(DD) an attestation that the change in quan-
12 tity does not impact the source of the marijuana or
13 cannabidiol or the conditions under which the mari-
14 juana or cannabidiol is stored, tracked, or adminis-
15 tered.

16 “(cc) The Attorney General shall ensure that—

17 “(AA) any registered mail return receipt with
18 respect to a notification under item (aa) is sub-
19 mitted for delivery to the registrant providing the
20 notification not later than 3 days after receipt of the
21 notification by the Attorney General; and

22 “(BB) notice of receipt of a notification using
23 an electronic means permitted under item (aa) is
24 provided to the registrant providing the notification

1 not later than 3 days after receipt of the notification
2 by the Attorney General.

3 “(dd)(AA) On and after the date described in subitem
4 (BB), a registrant that submits a notification in accord-
5 ance with item (aa) may proceed with the research as if
6 the change in quantity has been approved on such date,
7 unless the Attorney General notifies the registrant of an
8 objection described in item (ee).

9 “(BB) The date described in this subitem is the date
10 on which a registrant submitting a notification under item
11 (aa) receives the registered mail return receipt with re-
12 spect to the notification or the date on which the reg-
13 istrant receives notice that the notification using an elec-
14 tronic means permitted under item (aa) was received by
15 the Attorney General, as the case may be.

16 “(ee) A notification submitted under item (aa) shall
17 be deemed to be approved unless the Attorney General,
18 not later than 10 days after receiving the notification, ex-
19 plicitly objects based on a finding that the change in quan-
20 tity—

21 “(AA) does impact the source of the marijuana
22 or cannabidiol or the conditions under which the
23 marijuana or cannabidiol is stored, tracked, or ad-
24 ministered; or

1 “(BB) necessitates that the registrant imple-
2 ment additional security measures to safeguard
3 against diversion or abuse.

4 “(IV) Nothing in this clause shall limit the authority
5 of the Secretary of Health and Human Services over re-
6 quirements related to research protocols, including
7 changes in—

8 “(aa) the method of administration of mari-
9 juana or cannabidiol;

10 “(bb) the dosing of marijuana or cannabidiol;
11 and

12 “(cc) the number of individuals or patients in-
13 volved in research.”.

14 (b) REGULATIONS.—Not later than 1 year after the
15 date of enactment of this Act, the Attorney General shall
16 promulgate regulations to carry out the amendment made
17 by this section.

18 **SEC. 103. APPLICATIONS TO MANUFACTURE MARIJUANA**
19 **FOR RESEARCH.**

20 (a) IN GENERAL.—Section 303 of the Controlled
21 Substances Act (21 U.S.C. 823), as amended by sections
22 101 and 102 of this Act, is further amended—

23 (1) by redesignating subsections (c) through (k)
24 as subsections (d) through (l), respectively;

1 (2) by inserting after subsection (b) the fol-
2 lowing:

3 “(c)(1)(A) As it relates to applications to manufac-
4 ture marijuana for research purposes, when the Attorney
5 General places a notice in the Federal Register to increase
6 the number of entities registered under this Act to manu-
7 facture marijuana to supply appropriately registered re-
8 searchers in the United States, the Attorney General shall,
9 not later than 60 days after the date on which the Attor-
10 ney General receives a completed application—

11 “(i) approve the application; or

12 “(ii) request supplemental information.

13 “(B) For purposes of subparagraph (A), an applica-
14 tion shall be deemed complete when the applicant has sub-
15 mitted documentation showing each of the following:

16 “(i) The requirements designated in the notice
17 in the Federal Register are satisfied.

18 “(ii) The requirements under this Act are satis-
19 fied.

20 “(iii) The applicant will limit the transfer and
21 sale of any marijuana manufactured under this sub-
22 section—

23 “(I) to researchers who are registered
24 under this Act to conduct research with con-
25 trolled substances in schedule I; and

1 “(II) for purposes of use in preclinical re-
2 search or in a clinical investigation pursuant to
3 an investigational new drug exemption under
4 505(i) of the Federal Food, Drug, and Cos-
5 metic Act (21 U.S.C. 355(i)).

6 “(iv) The applicant will transfer or sell any
7 marijuana manufactured under this subsection only
8 with prior, written consent for the transfer or sale
9 by the Attorney General.

10 “(v) The applicant has completed the applica-
11 tion and review process under subsection (a) for the
12 bulk manufacture of controlled substances in sched-
13 ule I.

14 “(vi) The applicant has established and begun
15 operation of a process for storage and handling of
16 controlled substances in schedule I, including for in-
17 ventory control and monitoring security in accord-
18 ance with section 105 of the Medical Marijuana and
19 Cannabidiol Research Expansion Act.

20 “(vii) The applicant is licensed by each State in
21 which the applicant will conduct operations under
22 this subsection, to manufacture marijuana, if that
23 State requires such a license.

24 “(C) Not later than 30 days after the date on which
25 the Attorney General receives supplemental information

1 requested under subparagraph (A)(ii) with respect to an
2 application, the Attorney General shall approve or deny
3 the application.

4 “(2) If an application described in this subsection is
5 denied, the Attorney General shall provide a written expla-
6 nation of the basis of denial to the applicant.”;

7 (3) in subsection (h)(2), as so redesignated, by
8 striking “subsection (f)” each place it appears and
9 inserting “subsection (g)”;

10 (4) in subsection (j)(1), as so redesignated, by
11 striking “subsection (d)” and inserting “subsection
12 (e)”;

13 (5) in subsection (k), as so redesignated, by
14 striking “subsection (f)” each place it appears and
15 inserting “subsection (g)”.

16 (b) TECHNICAL AND CONFORMING AMENDMENTS.—

17 (1) The Controlled Substances Act (21 U.S.C.
18 801 et seq.) is amended—

19 (A) in section 102 (21 U.S.C. 802)—

20 (i) in paragraph (52)(B)—

21 (I) by striking “303(f)” each
22 place it appears and inserting
23 “303(g)”;

1 (II) in clause (i), by striking
2 “(d), or (e)” and inserting “(e), or
3 (f)”; and

4 (ii) in paragraph (54), by striking
5 “303(f)” each place it appears and insert-
6 ing “303(g)”;

7 (B) in section 302(g)(5)(A)(iii)(I)(bb) (21
8 U.S.C. 822(g)(5)(A)(iii)(I)(bb)), by striking
9 “303(f)” and inserting “303(g)”;

10 (C) in section 304 (21 U.S.C. 824), by
11 striking “303(g)(1)” each place it appears and
12 inserting “303(h)(1)”;

13 (D) in section 307(d)(2) (21 U.S.C.
14 827(d)(2)), by striking “303(f)” and inserting
15 “303(g)”;

16 (E) in section 309A(a)(2) (21 U.S.C.
17 829a(a)(2)), in the matter preceding subpara-
18 graph (A), by striking “303(g)(2)” and insert-
19 ing “303(h)(2)”;

20 (F) in section 311(h) (21 U.S.C. 831(h)),
21 by striking “303(f)” each place it appears and
22 inserting “303(g)”;

23 (G) in section 401(h)(2) (21 U.S.C.
24 841(h)(2)), by striking “303(f)” each place it
25 appears and inserting “303(g)”;

1 (H) in section 403(c)(2)(B) (21 U.S.C.
2 843(c)(2)(B)), by striking “303(f)” and insert-
3 ing “303(g)”; and

4 (I) in section 512(c)(1) (21 U.S.C.
5 882(c)(1)) by striking “303(f)” and inserting
6 “303(g)”.

7 (2) Section 1008(e) of the Controlled Sub-
8 stances Import and Export Act (21 U.S.C. 958(e))
9 is amended—

10 (A) in paragraph (1), by striking “303(d)”
11 and inserting “303(e)”; and

12 (B) in paragraph (2)(B), by striking
13 “303(h)” and inserting “303(i)”.

14 (3) Title V of the Public Health Service Act (42
15 U.S.C. 290aa et seq.) is amended—

16 (A) in section 520E–4(e) (42 U.S.C.
17 290bb–36d(c)), by striking “303(g)(2)(B)” and
18 inserting “303(h)(2)(B)”; and

19 (B) in section 544(a)(3) (42 U.S.C.
20 290dd–3(a)(3)), by striking “303(g)” and in-
21 sserting “303(h)”.

22 (4) Title XVIII of the Social Security Act (42
23 U.S.C. 1395 et seq.) is amended—

1 (A) in section 1833(bb)(3)(B) (42 U.S.C.
2 1395l(bb)(3)(B)), by striking “303(g)” and in-
3 serting “303(h)”;

4 (B) in section 1834(o)(3)(C)(ii) (42 U.S.C.
5 1395m(o)(3)(C)(ii)), by striking “303(g)” and
6 inserting “303(h)”;

7 (C) in section 1866F(e)(3)(C) (42 U.S.C.
8 1395cc-6(e)(3)(C)), by striking “303(g)” and
9 inserting “303(h)”.

10 (5) Section 1903(aa)(2)(C)(ii) of the Social Se-
11 curity Act (42 U.S.C. 1396b(aa)(2)(C)(ii)) is
12 amended by striking “303(g)” each place it appears
13 and inserting “303(h)”.

14 **SEC. 104. ADEQUATE AND UNINTERRUPTED SUPPLY.**

15 (a) IN GENERAL.—On an annual basis, the Attorney
16 General, in consultation with the Secretary of Health and
17 Human Services, shall assess whether there is an adequate
18 and uninterrupted supply of marijuana, including of spe-
19 cific strains, for research purposes.

20 (b) REPORT TO CONGRESS.—If the Attorney Gen-
21 eral, in consultation with the Secretary of Health and
22 Human Services, determines there is an inadequate or in-
23 terrupted supply of marijuana, including of specific strains
24 for research purposes, the Attorney General shall report

1 to Congress within 60 days of the determination on at
2 least—

3 (1) the factors contributing to the inadequate
4 or interrupted supply of marijuana;

5 (2) expected impacts of the inadequate or inter-
6 rupted supply on ongoing research protocols; and

7 (3) specific steps the Attorney General will take
8 to restore an adequate and uninterrupted supply of
9 marijuana, including of specific strains, for research
10 purposes.

11 **SEC. 105. SECURITY REQUIREMENTS.**

12 (a) IN GENERAL.—An individual or entity engaged
13 in researching marijuana or its components shall store it
14 in a securely locked, substantially constructed cabinet.

15 (b) REQUIREMENTS FOR OTHER MEASURES.—Any
16 other security measures required by the Attorney General
17 to safeguard against diversion shall be consistent with
18 those required for practitioners conducting research on
19 other controlled substances in schedules I and II in section
20 202(c) of the Controlled Substances Act (21 U.S.C.
21 812(c)) that have a similar risk of diversion and abuse.

1 **SEC. 106. PROHIBITION AGAINST REINSTATING INTER-**
2 **DISCIPLINARY REVIEW PROCESS FOR NON-**
3 **NIH-FUNDED RESEARCHERS.**

4 The Secretary of Health and Human Services may
5 not—

6 (1) reinstate the Public Health Service inter-
7 disciplinary review process described in the guidance
8 entitled “Guidance on Procedures for the Provision
9 of Marijuana for Medical Research” (issued on May
10 21, 1999); or

11 (2) require another review of scientific protocols
12 that is applicable only to research on marijuana or
13 its components.

14 **TITLE II—DEVELOPMENT OF**
15 **FDA-APPROVED DRUGS**
16 **USING CANNABIDIOL AND**
17 **MARIJUANA**

18 **SEC. 201. MEDICAL RESEARCH ON CANNABIDIOL.**

19 Notwithstanding any provision of the Controlled Sub-
20 stances Act (21 U.S.C. 801 et seq.), the Safe and Drug-
21 Free Schools and Communities Act (20 U.S.C. 7101 et
22 seq.), chapter 81 of title 41, United States Code, or any
23 other Federal law, an appropriately registered covered in-
24 stitution of higher education, practitioner, or manufac-
25 turer may manufacture, distribute, dispense, or possess
26 marijuana or cannabidiol if the marijuana or cannabidiol

1 is manufactured, distributed, dispensed, or possessed, re-
2 spectively, for purposes of medical research for drug devel-
3 opment or subsequent commercial production in accord-
4 ance with section 202.

5 **SEC. 202. REGISTRATION FOR THE COMMERCIAL PRODUC-**
6 **TION AND DISTRIBUTION OF FOOD AND**
7 **DRUG ADMINISTRATION-APPROVED DRUGS.**

8 The Attorney General shall register an applicant to
9 manufacture or distribute cannabidiol or marijuana for
10 the purpose of commercial production of a drug containing
11 or derived from marijuana that is approved by the Sec-
12 retary of Health and Human Services under section 505
13 of the Federal Food, Drug, and Cosmetic Act (21 U.S.C.
14 355), in accordance with the applicable requirements
15 under subsection (a) or (b) of section 303 of the Con-
16 trolled Substances Act (21 U.S.C. 823).

17 **TITLE III—DOCTOR-PATIENT**
18 **RELATIONSHIP**

19 **SEC. 301. DOCTOR-PATIENT RELATIONSHIP.**

20 It shall not be a violation of the Controlled Sub-
21 stances Act (21 U.S.C. 801 et seq.) for a State-licensed
22 physician to discuss—

23 (1) the currently known potential harms and
24 benefits of marijuana derivatives, including
25 cannabidiol, as a treatment with the legal guardian

1 of the patient of the physician if the patient is a
2 child; or

3 (2) the currently known potential harms and
4 benefits of marijuana and marijuana derivatives, in-
5 cluding cannabidiol, as a treatment with the patient
6 or the legal guardian of the patient of the physician
7 if the patient is a legal adult.

8 **TITLE IV—FEDERAL RESEARCH**

9 **SEC. 401. FEDERAL RESEARCH.**

10 (a) IN GENERAL.—Not later than 1 year after the
11 date of enactment of this Act, the Secretary of Health and
12 Human Services, in coordination with the Director of the
13 National Institutes of Health and the heads of other rel-
14 evant Federal agencies, shall submit to the Caucus on
15 International Narcotics Control, the Committee on the Ju-
16 diciary, and the Committee on Health, Education, Labor,
17 and Pensions of the Senate and the Committee on Energy
18 and Commerce and the Committee on the Judiciary of the
19 House of Representatives a report on—

20 (1) the potential therapeutic effects of
21 cannabidiol or marijuana on serious medical condi-
22 tions, including intractable epilepsy;

23 (2) the potential effects of marijuana, includ-
24 ing—

1 (A) the effect of increasing delta-9-
2 tetrahydrocannabinol levels on the human body
3 and developing adolescent brains; and

4 (B) the effect of various delta-9-
5 tetrahydrocannabinol levels on cognitive abili-
6 ties, such as those that are required to operate
7 motor vehicles or other heavy equipment; and

8 (3) the barriers associated with researching
9 marijuana or cannabidiol in States that have legal-
10 ized the use of such substances, which shall in-
11 clude—

12 (A) recommendations as to how such bar-
13 riers might be overcome, including whether pub-
14 lic-private partnerships or Federal-State re-
15 search partnerships may or should be imple-
16 mented to provide researchers with access to
17 additional strains of marijuana and cannabidiol;
18 and

19 (B) recommendations as to what safe-
20 guards must be in place to verify—

21 (i) the levels of tetrahydrocannabinol,
22 cannabidiol, or other cannabinoids con-
23 tained in products obtained from such
24 States is accurate; and

1 (ii) that such products do not contain
2 harmful or toxic components.

3 (b) ACTIVITIES.—To the extent practicable, the Sec-
4 retary of Health and Human Services, either directly or
5 through awarding grants, contacts, or cooperative agree-
6 ments, shall expand and coordinate the activities of the
7 National Institutes of Health and other relevant Federal
8 agencies to better determine the effects of cannabidiol and
9 marijuana, as outlined in the report submitted under para-
10 graphs (1) and (2) of subsection (a).