

ASSEMBLY JOINT RESOLUTION

No. 107

STATE OF NEW JERSEY

219th LEGISLATURE

INTRODUCED FEBRUARY 20, 2020

Sponsored by:

Assemblywoman PAMELA R. LAMPITT

District 6 (Burlington and Camden)

SYNOPSIS

Designates July 22 of each year as “Fragile X Awareness Day.”

CURRENT VERSION OF TEXT

As introduced.



1 **A JOINT RESOLUTION** designating July 22 of each year as “Fragile
2 X Awareness Day.”
3
4 **WHEREAS**, Fragile X-associated Disorders (FXD) is a family of three
5 genetic conditions, called trionucleotide repeat disorders, all caused
6 by changes in the FMR1 gene, that can be passed on unknowingly
7 by carriers who do not exhibit symptoms of any of the disorders;
8 and
9 **WHEREAS**, Approximately one million Americans carry the Fragile X
10 mutation and are therefore at risk for developing an FXD; and
11 **WHEREAS**, Fragile X Syndrome is a genetic disorder involving
12 changes in part of the X chromosome, caused by a full mutation of
13 the FMR1 gene, which makes a protein necessary for proper brain
14 growth; and
15 **WHEREAS**, Although males and females can be affected by FXD,
16 since males only have one X chromosome, a single fragile X is
17 likely to affect males more severely; and
18 **WHEREAS**, Approximately one in 3,600 to 4,000 males in the world
19 are born with the full mutation for Fragile X, with the vast majority
20 having Fragile X Syndrome, and it is the most common form of
21 inherited intellectual disability in males; and
22 **WHEREAS**, One in 4,000 to 6,000 females in the world are born with
23 the full mutation for Fragile X, and approximately 50 percent of
24 these females exhibit some features or symptoms of Fragile X
25 Syndrome; and
26 **WHEREAS**, Fragile X Syndrome is the most common known genetic
27 cause of autism, with two to six percent of children with autism
28 being diagnosed with Fragile X Syndrome, and autism is much
29 more common in males with Fragile X Syndrome than in females
30 with Fragile X Syndrome; and
31 **WHEREAS**, Problems associated with Fragile X Syndrome are
32 developmental delays, hyperactive or impulsive behavior, hand
33 clapping or hand biting, intellectual disability, speech and language
34 delay and a tendency to avoid eye contact; and
35 **WHEREAS**, Fragile X-associated tremor/ataxia syndrome (FXTAS), a
36 progressive disorder caused by premutation in the FMR1 gene, and
37 characterized by problems with movement and cognition, is a late-
38 onset disorder, usually occurring after the age of 50; and
39 **WHEREAS**, One in 450 males has the genetic change that leads to
40 FXTAS, but the condition occurs in only 40 percent of those males,
41 and one in 200 females has the genetic change that leads to FXTAS,
42 but the condition occurs in only 16 percent of those females; and
43 **WHEREAS**, Characteristic features of FXTAS are intention tremor,
44 which is the trembling of a limb when trying to perform a voluntary
45 movement, and problems with coordination and balance; and
46 **WHEREAS**, Fragile X-associated primary ovarian insufficiency
47 (FXPOI), a condition in which the ovaries are not functioning at
48 full capacity in a female FMR1 premutation carrier, is characterized

1 by absent or irregular menstrual periods, symptoms of menopause
 2 (such as hot flashes), early menopause and infertility; and
 3 **WHEREAS**, FXPOI occurs in approximately 20 to 25 percent of adults
 4 female FMR1 premutation carriers, and less commonly is reported
 5 in teenagers who are carriers; and
 6 **WHEREAS**, While the gene mutation responsible for FXDs is known,
 7 there is presently no cure for any of the three conditions, and
 8 increased awareness of these disorders may lead to more varied and
 9 superior treatment and prevention options; and
 10 **WHEREAS**, It is altogether fitting and proper, as a matter of public
 11 health, to designate July 22 of each year as “Fragile X Awareness
 12 Day”; now, therefore,

13
 14 **BE IT RESOLVED** *by the Senate and General Assembly of the*
 15 *State of New Jersey:*

16
 17 1. July 22 of each year is designated “Fragile X Awareness
 18 Day” to promote awareness and improve diagnosis, treatment and
 19 scientific research of this genetic disorder.

20
 21 2. The Governor shall annually issue a proclamation and call
 22 upon public officials, and all citizens of this State, to observe
 23 “Fragile X Awareness Day” with appropriate programs and
 24 activities.

25
 26 3. This joint resolution shall take effect immediately.

27
 28
 29 STATEMENT

30
 31 This resolution designates July 22 of each year as “Fragile X
 32 Awareness Day.” Fragile X-associated Disorders (FXD) is a family
 33 of three conditions caused by changes in the gene FMR1.

34 Although FXDs can occur in males and females, because the
 35 disorder is related to the X chromosome, males are generally more
 36 severely affected. Fragile X Syndrome is a full mutation of FMR1,
 37 and is characterized by developmental delays, hyperactive or
 38 impulsive behavior, hand clapping or hand biting, intellectual
 39 disability, speech and language delay and a tendency to avoid eye
 40 contact. It is the most common form of inherited intellectual
 41 disability in males, and is the most common known genetic cause of
 42 autism.

43 Fragile X-associated tremor/ataxia syndrome (FXTAS), a
 44 disorder caused by a FMR1 gene premutation, usually occurs after
 45 the age of 50. Characteristic features of FXTAS are intention
 46 tremor, which is the trembling of a limb when trying to perform a
 47 voluntary movement, and problems with coordination and balance,
 48 and the disorder is progressive over time.

1 Fragile X-associated primary ovarian insufficiency (FXPOI), is
2 characterized by absent or irregular menstrual periods, symptoms of
3 menopause (such as hot flashes), early menopause and infertility.

4 Although the gene mutation of FMR1 causing these disorders is
5 known, there is no known cure for any of these conditions.
6 Research is needed to develop superior treatment options, as well as
7 potential cures and prevention.

8 It is the sponsor's hope that the designation of July 22 as
9 "Fragile X Awareness Day" raises awareness of these genetic
10 disorders.