A Study of the Contents of Cannabis Joints 2019

Peter Collins - February 2019

Introduction

This study aims to give guidance in relation to the amount of cannabis in a joint. This will be of particular interest to drug experts working within the United Kingdom.

Cannabis continues to be the most commonly used drug in the United Kingdom, with nearly three quarters (72%) of all drugs seized during the year 2017/2018 being cannabis. (Home Office Bulletin 26/18 p6)(Drug Misuse Findings p4)

This equates to a total seizure weight of 28.66 metric tonnes. (Home Office Bulletin 26/18 p7)

The estimated amount of cannabis consumed annually in the United Kingdom is estimated at 255 metric tonnes. Based on a street value of £10 per gram, this puts the UK cannabis market as having a value of £2.55 billion per year. (IEA paper 90 p21 & 24)

It is clear to see that Law Enforcement seizures are only 11% of the total estimated use in the UK.

In the 2017 Global Drug Survey, 71.7% of respondents reported that smoking cannabis in a joint was their preferred method of consuming the drug. This figure compares to 0.2% consuming it in a liquid and 1.7% within food. (GDS2017 p33)

In the United Kingdom, 77.0% of respondents reported mixing cannabis with tobacco to consume it by way of smoking. (GDS2017 p34)

41.2% of respondents reported making between three and four joints per gram of cannabis.

The survey reported a mean of 4.3 joints being made when tobacco was used and 2.7 joints when tobacco was not used. (GDS2017 p35)

These figures would show that each joint would contain 232 milligrams of cannabis when mixed with tobacco. (1000 milligrams in one gram divided by 4.3 joints = 232.55 milligrams of cannabis per joint)

There is historic research into the content of cannabis joints showing it is generally the decision of the user as to how much cannabis the joint contains.

This paper will show how much cannabis is mixed with tobacco in a joint, based on the data gathered.

Cannabis Joints

A cannabis joint is typically a "roll up cigarette" that involves mixing cannabis and tobacco in rolling paper with a form of mouthpiece, roach or filter. During my research, the joints consisted of between one and three papers. Large rolling papers are available for sale and 91% of the joints were made with a single large paper. Almost all (95%) of the joints were found to have a rolled up piece of cardboard as the roach.

Previous Research

There is little research on the subject within the United Kingdom, as there is a requirement to possess the cannabis joints in order to carry out the research.

In a UK article in 1991, it showed that of 242 unsmoked joints, 188 contained an average of 137 milligrams of cannabis resin and 54 contained an average of 197 milligrams of cannabis flowering top. (JOFS 1982 22 p291-292)

A USA article in 2016 suggested that the average weight of marijuana (cannabis) in a joint, is estimated to be 0.32 grams. (Drug and Alcohol Dependence - Volume 165 p175-180)

A USA article in 2017 suggested that the average weight of marijuana (cannabis) in a joint is estimated to be 0.25 grams. (Drug and Alcohol Dependence - Volume 176 p109-116)

In the 2017 Global Drug Survey, 41.2% of respondents reported making between three and four joints per gram of cannabis with a mean of 4.3 joints being made when tobacco was used. (GDS2017 p35)

Data Collection

My research is based on the analysis of 202 unsmoked randomly selected cannabis joints, recovered by the Police between September 2015 and August 2018 (91% were recovered in 2017 & 2018). They are made up of seizures from persons and amnesty bins at festivals within the UK.

The following data was recorded for each of the 202 joints: seizure date, date of inspection, total joint weight, total joint length, cannabis content weight, tobacco content weight, total content weight, the presence and type of roach used & the type of cannabis contained within the joint (resin/flowering top).

It was not always possible to remove absolutely every single piece of cannabis from the tobacco. Care was taken to remove as much as possible, so in reality, the cannabis content would be very slightly more than the figures quoted.

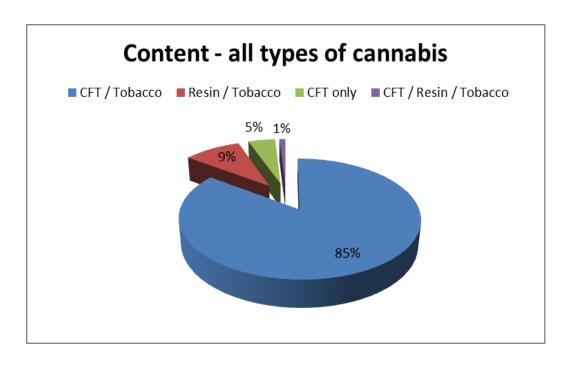
Home Office data on cannabis seizures in the UK report all cannabis (except plants & resin) as herbal cannabis with no distinction between flowering top and bush. (Home Office Bulletin 26/18)

Having inspected each of the 202 joints and although most of the joints contained cannabis flowering top, it was not always possible to differentiate categorically between cannabis flowering top or cannabis bush, being the content of each joint. For this reason a decision was made not to distinguish between the two, during the data collection.

As a guide within the Avon and Somerset Force area during the financial year 2017/2018, seizures of cannabis flowering top amounted to more than 95% of seizures in weight, as opposed to 4.919% being identified as herbal cannabis (bush). Based on this, all cannabis (except resin) will be referred to as cannabis flowering top.

Data Analysis

172	Joints contained cannabis flowering top mixed with tobacco
9	Joints contained cannabis flowering top with no tobacco
19	Joints contained cannabis resin mixed with tobacco
2	Joints contained cannabis resin and cannabis flowering top mixed with tobacco

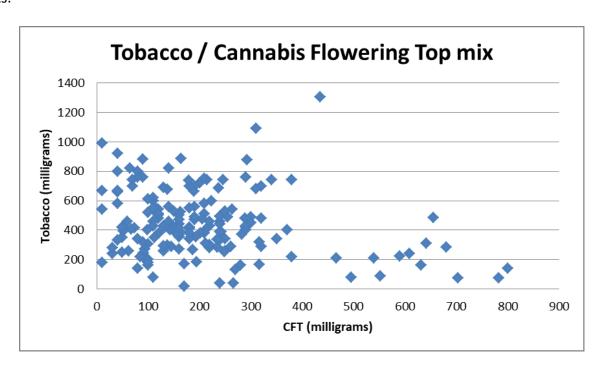


How much cannabis is mixed with tobacco in a joint?

Of the 202 joints inspected, 172 of them contained cannabis flowering top (CFT) mixed with tobacco. The average weight of CFT in these 172 joints was 207.93 milligrams.

The highest amount of CFT was 800 milligrams, and the lowest amount of CFT, was 10 milligrams.

The below chart shows all joints plotted against their cannabis flowering top content and their tobacco contents.



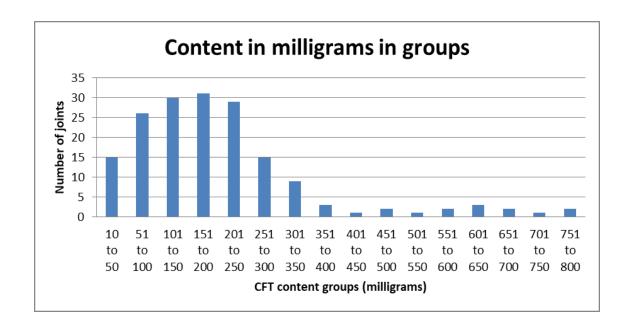
The below image is used as a visual example of a joint which contained cannabis flowering top mixed with tobacco. This joint was recovered at Glastonbury Festival in June 2017. It was made from a single paper with a card roach. It contained 250 milligrams of CFT and 340 milligrams of tobacco. (Reference Glasto 24 inspected on 26/07/2017)



Of the 172 joints inspected which contained cannabis flowering top mixed with tobacco, 85% of them contained between 10 milligrams and 300 milligrams of CFT.

The below chart shows all joints containing a mix of cannabis flowering top and tobacco in groups based on the content of CFT in milligrams.

For example, there were fifteen joints that contained between 10 milligrams and 50 milligrams of CFT.

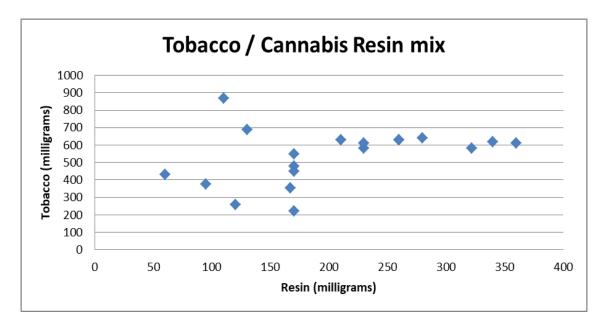


Of the 202 joints inspected 19 contained cannabis resin mixed with tobacco.

The average weight of cannabis resin in these 19 joints was 202.84 milligrams.

The highest amount of resin was 360 milligrams and the lowest amount of resin was 60 milligrams.

The below chart shows all joints plotted against their cannabis resin content and their tobacco content.



The below image is used as a visual example of a joint which contained cannabis resin mixed with tobacco. This joint was recovered in Central Bristol in March 2018. It was made from two papers with a card roach. It contained 322 milligrams of cannabis resin and 580 milligrams of tobacco. (Reference 8667 inspected on 25/10/2018)



Of the 202 joints inspected 9 of them contained just cannabis flowering top with no tobacco. The average weight of CFT in these 19 joints was 551.33 milligrams.

The highest amount of CFT was 821 milligrams and the lowest amount of CFT was 328 milligrams.

Conclusion

Mixing cannabis flowering top with tobacco is the most common method of consuming cannabis in a joint.

It is common for joints with cannabis mixed with tobacco to contain in the region of 200 milligrams of cannabis flowering top.

These results are important when considering the question of consumption. With a cannabis joint containing in the region of 200 milligrams, then one gram of cannabis flowering top would be able to make five joints.

It is common for cannabis joints to be made with a single large paper and a roach made from card.

It is also interesting to note that, regardless of whether the joint contains cannabis resin or cannabis flowering top the weight of the cannabis in the joint is in the region of 200 milligrams.

References

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