

## How Often Does *Shabbat Machar Chodesh* Occur?

Analysis by Dr. Irv Bromberg, Toronto, Canada <<http://individual.utoronto.ca/kalendis/hebrew/>>.

*Shabbat Machar Chodesh* can only fall on the 29<sup>th</sup> day of a Hebrew calendar month (except *Elul*), but *Shabbat Shekalim* and *Shabbat HaChodesh* override it.

Hebrew Date	Frequency	x Years	# in Cycle	% of Years
29 Nisan	3020 / 10773	689472	193280	28.03%
29 Iyar	2 / 7	689472	196992	28.57%
29 Sivan	Never	689472		
29 Tammuz	Never	689472		
29 Av	<i>Consolation</i>	689472		
29 Tishrei	2 / 7	689472	196992	28.57%
29 Cheshvan	73277 / 229824	689472	219831	31.88%
29 Kislev	Never	689472		
29 Tevet	Never	689472		
29 Shevat / common years	<i>Shekalim</i>	435456		
29 Shevat / leap years	2 / 7	254016	72576	10.53%
29 Adar / common years	<i>HaChodesh</i>	435456		
29 Adar Rishon / leap years	<i>Shekalim</i>	254016		
29 Adar Sheini / leap years	<i>HaChodesh</i>	254016		

Total ***Shabbat Machar Chodesh*** Days: 879671

Common Years Per Cycle: 435456 years  
 + Leap Years Per Cycle: 254016 years  
 = Hebrew Years per Cycle: 689472 years

Average # of *Shabbat Machar Chodesh* per Year: 1.2758618

Hebrew Months per Cycle: 8527680 months  
 Average *Shabbat Machar Chodesh* Interval: 9.6941698 months  
 % of Months that have a *Shabbat Machar Chodesh*: 10.3155%

Weeks per Cycle: 35975351 weeks  
 Average *Shabbat Machar Chodesh* Interval: 40.89637 weeks  
 % of Weeks that End on *Shabbat Machar Chodesh*: 2.4452%

“Never” means that that date is never *Shabbat*, so it can't be *Shabbat Machar Chodesh*.

*Shabbat* on the 29<sup>th</sup> of Av is always *parshat Re'eh*, having the *haftorah* of consolation *Oniya So'ara*, which most congregations give priority to over *Machar Chodesh*.

The 29<sup>th</sup> of *Elul* is never *Shabbat*, and the next day is *Rosh Hashanah*.

When *Machar Chodesh* is displaced, many chant its first and last sentences instead.