

**Communicable Diseases and Health Analysis (CHA)
Health Information and Analysis (CHA/HA)**

**Epidemiological Calendar¹ 2016:
A basic element for the use of the time variable in health surveillance**

The uses of surveillance data include the description and comparison of disease patterns using the person, place, and time variables. In particular, examples of the use of the time variable can be found in the earliest known epidemiological studies. For example, in a report on the 1847 influenza epidemic in London, William Farr presented data collected by week and easily calculated the excess of mortality due to influenza in different periods of the year².

The discussion among statisticians from various disciplines on the use of specific time units seems to have been a constant at the beginning of the 20th century. In May 1925, a document was presented to the British Royal Statistical Society, which argues for the first time that a period of time shorter than the calendar month (the week) is necessary as a “principle of division” of the year for purposes of vital statistics analysis³.

Today, there is an international consensus about the use of a standard time period to group deaths or other epidemiological events. This period is generally the week and is known as the epidemiological week. The division of the 365 days of the year in 52 or 53 epidemiological weeks is known as the epidemiological calendar. It is a way to standardize the time variable for the purpose of epidemiological surveillance.

The importance of this division and above all of the use of the epidemiological week relies on the fact that it allows for the comparison of epidemiological events that occurred in a given year or period of a year, with that of previous years. It also facilitates the comparison between countries.

Epidemiological weeks start on a Sunday and end on a Saturday; The first epidemiological week of the year ends, by definition, on the first Saturday of January, as long as it falls at least four days into the month, even if it means that this first week starts in December.

The first week of the 2016 Epidemiological Calendar begins on Sunday, 3 January 2016 and is presented below.

References

¹ Adapted from Pan American Health Organization (PAHO) Epidemiological Bulletin, Volume 28, No. 4, 2009.

² Langmuir AD. William Farr: Founder of Modern Concepts of Surveillance. International Journal of Epidemiology 1976; 5(1):13-18.

³ Watkins H. Time counts: the story of the calendar. New York, Philosophical Library. 1954.

EPIDEMIOLOGICAL WEEKS 2016

EW	Month	Sun	Mon	Tue	Wed	Thur	Fri	Sat	Month
1	Jan	3	4	5	6	7	8	9	Jan
2	Jan	10	11	12	13	14	15	16	Jan
3	Jan	17	18	19	20	21	22	23	Jan
4	Jan	24	25	26	27	28	29	30	Jan
5	Jan	31	1	2	3	4	5	6	Feb
6	Feb	7	8	9	10	11	12	13	Feb
7	Feb	14	15	16	17	18	19	20	Feb
8	Feb	21	22	23	24	25	26	27	Feb
9	Feb	28	29	1	2	3	4	5	Mar
10	Mar	6	7	8	9	10	11	12	Mar
11	Mar	13	14	15	16	17	18	19	Mar
12	Mar	20	21	22	23	24	25	26	Mar
13	Mar	27	28	29	30	31	1	2	Apr
14	Apr	3	4	5	6	7	8	9	Apr
15	Apr	10	11	12	13	14	15	16	Apr
16	Apr	17	18	19	20	21	22	23	Apr
17	Apr	24	25	26	27	28	29	30	Apr
18	May	1	2	3	4	5	6	7	May
19	May	8	9	10	11	12	13	14	May
20	May	15	16	17	18	19	20	21	May
21	May	22	23	24	25	26	27	28	May
22	May	29	30	31	1	2	3	4	Jun
23	Jun	5	6	7	8	9	10	11	Jun
24	Jun	12	13	14	15	16	17	18	Jun
25	Jun	19	20	21	22	23	24	25	Jun
26	Jun	26	27	28	29	30	1	2	Jul
27	Jul	3	4	5	6	7	8	9	Jul
28	Jul	10	11	12	13	14	15	16	Jul
29	Jul	17	18	19	20	21	22	23	Jul
30	Jul	24	25	26	27	28	29	30	Jul
31	Jul	31	1	2	3	4	5	6	Aug
32	Aug	7	8	9	10	11	12	13	Aug
33	Aug	14	15	16	17	18	19	20	Aug
34	Aug	21	22	23	24	25	26	27	Aug
35	Aug	28	29	30	31	1	2	3	Sep
36	Sep	4	5	6	7	8	9	10	Sep
37	Sep	11	12	13	14	15	16	17	Sep
38	Sep	18	19	20	21	22	23	24	Sep
39	Sep	25	26	27	28	29	30	1	Oct
40	Oct	2	3	4	5	6	7	8	Oct
41	Oct	9	10	11	12	13	14	15	Oct
42	Oct	16	17	18	19	20	21	22	Oct
43	Oct	23	24	25	26	27	28	29	Oct
44	Oct	30	31	1	2	3	4	5	Nov
45	Nov	6	7	8	9	10	11	12	Nov
46	Nov	13	14	15	16	17	18	19	Nov
47	Nov	20	21	22	23	24	25	26	Nov
48	Nov	27	28	29	30	1	2	3	Dec
49	Dec	4	5	6	7	8	9	10	Dec
50	Dec	11	12	13	14	15	16	17	Dec
51	Dec	18	19	20	21	22	23	24	Dec
52	Dec	25	26	27	28	29	30	31	Dec