Covid-19 Schema Examples

Building on the initial [covid-19 schema changes](#) at Schema.org, some examples.

When the content stabilizes, this can be published (HTML, PDF etc.) on Schema.org and elsewhere. For now, we are using Google Docs for collaboration.

Status: Public examples for collaboration. The markup will be contributed into Schema.org and is available also for use in other guideline docs. We can expand the list of examples to cover any areas of uncertainty and to capture common patterns. [Version 7.01](#) of Schema.org was published March 22nd including improvements developed here.

Contacts: Dan Brickley <danbri@google.com> (Timezone: GMT), R.V.Guha <guha@google.com (Timezone: PST)

Examples

https://schema.org/SpecialAnnouncement is quite general; specific examples are needed. Note that all examples are illustrative only, even if real places are mentioned. The draft next release version is at http://webschemas.org/SpecialAnnouncement and currently has 3 rather than two examples.

EG1: Drive-through testing example

An announcement e.g. from a drive-through testing centre such as http://med.stanford.edu/news/all-news/2020/03/stanford-offers-drive-through-coronavirus-test.html

(current 1st example on schema.org/SpecialAnnouncement)

```
{
    "@context": "http://schema.org",
    "@type": "SpecialAnnouncement",
    "name": "Stanford announce COVID-19 testing facility",
    "text": "Stanford Health Care's same-day primary care program is
offering drive-through testing, by appointment, for SARS-CoV-2, the
```

```
coronavirus that causes COVID-19.",
    "datePosted": "2020-03-16",
    "url":
"http://med.stanford.edu/news/all-news/2020/03/stanford-offers-driv
e-through-coronavirus-test.html",
    "category": "https://www.wikidata.org/wiki/Q81068910",
    "about" : {
        "@type": "CovidTestingFacility",
        "name": "Stanford Health Care",
        "url": "https://stanfordhealthcare.org/"
    }
}
```

EG2 - Closure notice (school, college, etc.)

An announcement showing school closure information.

(current 2nd example)

```
{
    "@context": "http://schema.org",
    "@type": "SpecialAnnouncement",
    "name": "School Closure information for Eastergate School",
    "text": "School closure information has been published.",
    "datePosted": "2020-03-17",
    "expires": "2020-03-24",
    "category": "https://www.wikidata.org/wiki/Q81068910",
    "schoolClosuresInfo":
"http://example.org/schools/school/eastergate-cofe-primary-school/c
losures",
    "webFeed": {
      "@type": "DataFeed",
      "url":
"http://example.org/schools/school/eastergate-cofe-primary-school/c
losures",
      "encodingFormat": "application/rss+atom"
    },
    "about" : {
        "@type": "School",
        "name": "Eastergate School",
        "url":
"http://example.org/schools/school/eastergate-cofe-primary-school/"
```

```
,
        "location": "..."
    }
}
```

EG3: An announcement of shelter-in-place for a number of administrative areas.

Queued up as 3rd example on webschemas, the drafting site for next release.

```
{
  "@context": "http://schema.org",
  "@type": "SpecialAnnouncement",
  "name": "Shelter-in-place for 6 California counties",
  "text": "Shelter-in-place for 6 California counties",
  "datePosted": "2020-03-17",
  "category": "https://www.wikidata.org/wiki/Q81068910",
  "quarantineGuidelines":
"http://example.org/california/shelter-in-place/"
  "spatialCoverage": [
    {
      "type": "AdministrativeArea",
      "name": "San Francisco County, CA"
    },
    {
      "type": "AdministrativeArea",
      "name": "Marin County, CA"
    },
    {
      "type": "AdministrativeArea",
      "name": "Santa Clara County, CA"
    },
    {
      "type": "AdministrativeArea",
      "name": "Santa Cruz County, CA"
    },
    {
      "type": "AdministrativeArea",
      "name": "San Mateo County, CA"
    },
    {
      "type": "AdministrativeArea",
      "name": "Contra Costa County, CA"
```

```
    },
    {
      "type": "AdministrativeArea",
      "name": "Alameda County, CA"
    },
    {
      "type": "City",
      "name": "Fresno, CA"
    }
  ]
}
```

EG4: School Closure based on pausd.org

https://www.pausd.org/school-closure

Text from section of this page:

- Meals for Students During Closure
  - PAUSD will continue to provide nutritious meals to all students who need them during the temporary closure of schools.
  - PAUSD continuara proporcionando comidas nutritivas a todos los estudiantes que las necesiten durante el cierre temporal de las escuelas.
    - More text is provided - we only need a short summary in the schema markup, but a deep link into the correct section of the page is preferred so that uses can be sent to the right place to read the rest.

Notes:

- The notice about PAUSD school meals is made in both English and Spanish; we model that here as two distinct SpecialAnnouncement items
- Ideally each specific translated announcement has a distinct URL (eg. #something on same URL)
- Need to add a /SchoolDistrict type under https://schema.org/AdministrativeArea

```
[ {
    "@context": "http://schema.org",
```

```
    "@type": "SpecialAnnouncement",
    "name": "Meals for Students During Closure",
    "text": "PAUSD will continue to provide nutritious meals to all
students who need them during the temporary closure of schools.",
    "inLanguage": "en",
    "datePosted": "2020-03-17",
    "expires": "2020-03-24",
    "category": "https://www.wikidata.org/wiki/Q81068910",
    "spatialCoverage": {
          "type": "City",
           "name": "Palo Alto, CA"
         },
    "about": {
        "@type": "SchoolDistrict",
        "name": "Palo Alto Unified School District"
        "url": "http://example.org/url/of/announcement/#123_en",
        "location": "..."
    }
},{
    "@context": "http://schema.org",
    "@type": "SpecialAnnouncement",
    "name": "Meals for Students During Closure",
    "text": "PAUSD continuara proporcionando comidas nutritivas a
todos los estudiantes que las necesiten durante el cierre temporal
de las escuelas.",
    "inLanguage": "es",
    "datePosted": "2020-03-17",
    "expires": "2020-03-24",
    "category": "https://www.wikidata.org/wiki/Q81068910",
    "spatialCoverage": {
          "type": "City",
           "name": "Palo Alto, CA"
         },
    "about" : {
        "@type": "SchoolDistrict",
        "name": "Palo Alto Unified School District",
        "url": "http://example.org/url/of/announcement/#123_es",
        "location": "..."
    }
}]
```

EG5: Local government posting disease spread statistics

https://www.doh.wa.gov/emergencies/coronavirus

Snippet of title/metadata and table from this page:

2019 Novel Coronavirus (COVID-19) in Washington
Updated on March 23, 2020 at 3:07 p.m.

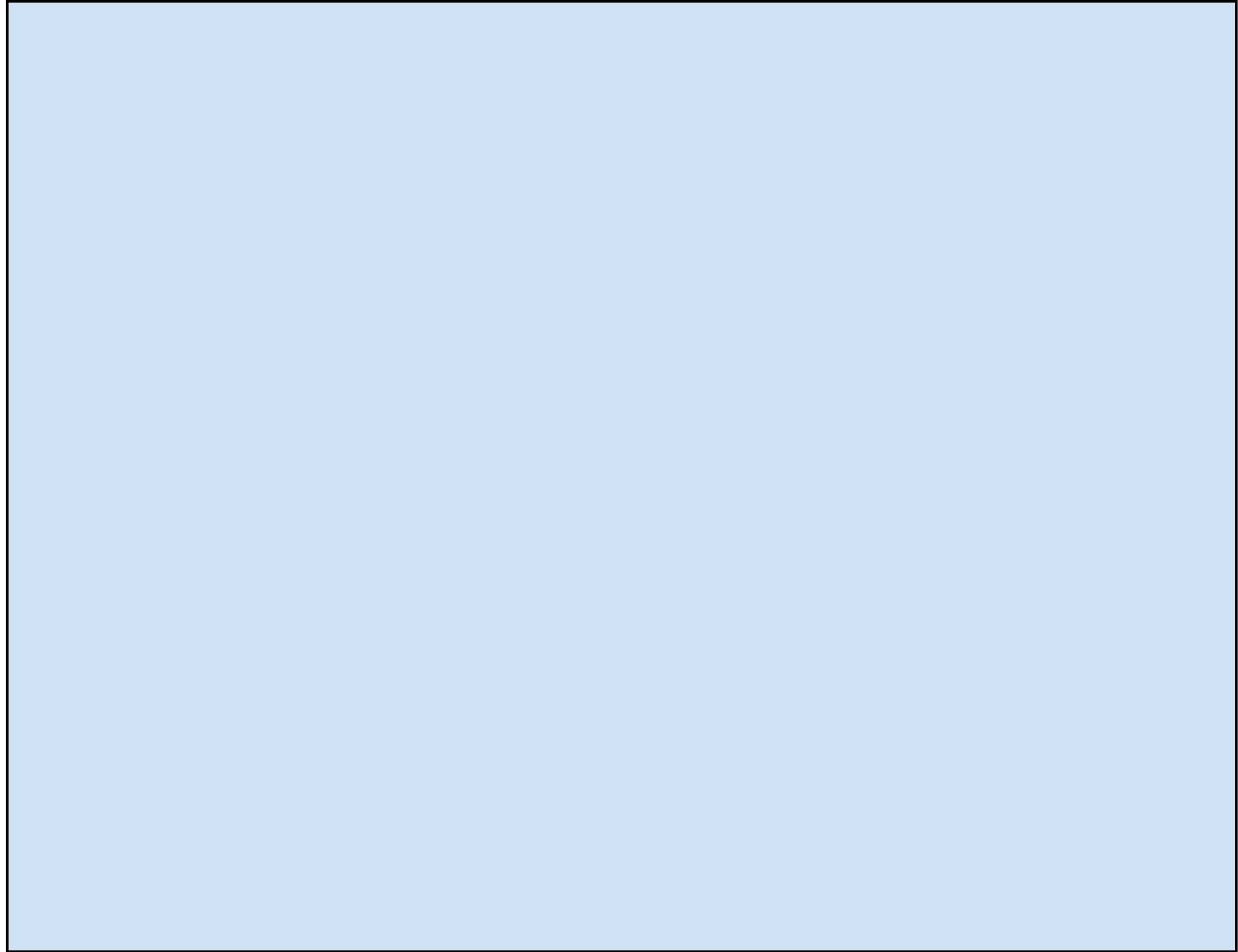Confirmed Cases / Deaths by County

County	Positive/Confirmed Cases	Deaths
Adams	1	0
Benton	7	2

Notes:

- There are several different tables, each with their own notes, titles, metadata, and column headers.
- It feels like a lot to ask for folks to fully describe the statistical population, etc., so maybe we just ask for a label and a link to a CSV for the table.
- These are updated multiple times per day, so it's important to have the time part of datePosted.

```json
{
    "@context": "http://schema.org",
    "@type": "SpecialAnnouncement",
    "name": "2019 Novel Coronavirus (COVID-19) in Washington",
    "datePosted": "2020-03-19T10:00:00Z",
    "url": " https://www.doh.wa.gov/emergencies/coronavirus",
    "category": "https://www.wikidata.org/wiki/Q81068910",
    "spatialCoverage" : {
        "@type": "State",
        "name": "Washington"
    },
    "diseaseSpreadStatistics" : {
        "@type": "Dataset",
        "name" : "Confirmed Cases / Deaths by County",
        "description" : "The number of confirmed cases and deaths
for each county in Washington State.",
        "distribution" : {
            "@type": "DataDownload",
            "contentUrl":
"http://example.gov/coronavirus-cases.csv",
            "encodingFormat" : "text/csv"
        }
    }
}
```

General Notes and FAQs

- Q: Would new updates always override old updates?
- A: Generally, no. You could have an update on Monday "Please stay offsite, phone to arrange visits" and on Tuesday "If you have possessions on site, call the caretaker's office.". In this case the announcements are more blog-like (i.e. rss/atom-style dated items). Furthermore, the expressivity of the schema allows for overlapping updates, so we would need some way to resolve the updates as well.

CDC Hospital reporting Schema

A US-oriented schema has been published (in 7.03), based on a CDC CSV format for hospital reporting. See https://schema.org/docs/cdc-covid.html for details. Comments are welcomed here (or at Github, or directly to the document's editor) on this work.

Ongoing Work

Please suggest further items here, ideally with example URLs for real pages.

- Changed opening hours
  - E.g. or a restaurant which might say they are open for take away orders only
- Case 1. Modified opening hours
- Case 2. Temporary closures (a refinement of 1.)
- Case 3. Special rules related to 1. and 2.
  - E.g. senior citizen times, https://www.lunardis.com/ https://locations.traderjoes.com/ca/campbell/73/
- TODO: Changed timings/rules for essential services (e.g., groceries)
- TODO: Hospital instructions / testing site
- TODO: Telemedicine offered (True/False)

….

Appendix: Notes

Possible changes / improvements emerging from this:

- Add SchoolDistrict under AdministrativeArea
  - done: https://github.com/schemaorg/schemaorg/issues/2500
    i. drafted at http://webschemas.org/SchoolDistrict
  - Published: https://schema.org/docs/releases.html#v7.01
- ...