| Country      | Vaccine               | Schedule           | Comments                                      |
|--------------|-----------------------|--------------------|-----------------------------------------------|
| **The Americas** |                       |                    |                                               |
| Argentina    | MenACWY conjugate     | 3, 5, 15 mo of age | 11 y of age                                   |
| Bahamas      | MenACWY conjugate     | First contact      | College students                              |
| Brazil       | MenC conjugate        | 3, 5 mo of age     | 12 mo–4 y of age                              |
|              |                       |                    | 11–14 y of age                                |
| Chile        | MenACWY conjugate     | 1 y of age         |                                               |
| Colombia     | MenACWY conjugate     | 2, 4, 6 mo of age  | Only in case of outbreak                      |
| Cuba         | MenBC                 | 3, 5 mo of age     |                                               |
| Guyana       | MenACWY conjugate     | First contact      | For travelers                                 |
| Panama       | MenACWY conjugate     | 1 y of age         | For outbreak response                         |
| Paraguay     | MenACWY conjugate     | First contact      | For at-risk groups                            |
| Suriname     | MenACWY conjugate     | First contact      | For travelers                                 |
| Trinidad and | MenACWY conjugate     | First contact      | Travelers to high-risk areas; individuals with |
| Tobago       |                       |                    | sickle cell disease                           |
| Venezuela    | MenBC                 | First contact, >2 mo| For outbreaks and at-risk groups              |
### Asia

| Country          | Vaccine          | Age/Group                  | Notes                      |
|------------------|------------------|----------------------------|----------------------------|
| China            | MenA polysaccharide | 6, 9 mo of age            |                            |
|                  | MenAC polysaccharide |                            |                            |
| Malaysia         | MenACWY conjugate | Hajj pilgrims only        |                            |
| Maldives         | MenACWY conjugate | ≥15 y of age              | For travelers              |
| Marshall Islands | MenC conjugate   | 11–12 y                   | Students                   |

Men=meningococcal serogroup.

Current as of May 29, 2019.
Table S2. Summary of Source and Methodology to Determine Carriage in Low and Middle Income Countries of the Americas

| Reference        | Source                           | Methodology                                                                                                                                                                                                 |
|------------------|----------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| **Brazil**       |                                  |                                                                                                                                                                                                            |
| Nunes et al.     | Posterior pharyngeal wall        | Swabs were sent to the laboratory within 4 h after swabbing and stored at –80°C until analysis.                                                                                                             |
| 2016 [33]        |                                  | For analysis, plates were incubated at 37°C + 5% CO₂ for 24 ± 48 h.                                                                                                                                       |
| Moura et al.     | behind uvula                     | Colonies with characteristics of *Neisseria* species were subcultured on blood agar medium for species identification (ie, via Gram staining, oxidase reaction, and carbohydrate utilization tests). |
| 2017 [34]        |                                  |                                                                                                                                                                                                            |
| Cassio de Moraes et al. | Oropharynx | Swabs were sent to the laboratory within 4–5 h after swabbing.                                                                                                                                           |
| 2015 [35]        |                                  | For analysis, swabs inoculated in STGG were plated and incubated for 24 and 48 h at 37°C + 5% CO₂.                                                                                                           |
|                   |                                  | For identification, meningococcus-like colonies were subcultured on blood agar medium to species identification by Gram staining, oxidase reaction, and carbohydrate utilization tests. |
| Weckx et al.     | Posterior pharyngeal wall        | Swabs were sent to the laboratory at 20°C–26°C within 5 h of swabbing.                                                                                                                                     |
| 2017 [36]        |                                  | For analysis, samples were inoculated and latex agglutination was used for species identification.                                                                                                          |
| Author(s)               | Site                  | Methodology                                                                 |
|------------------------|-----------------------|-----------------------------------------------------------------------------|
| Coch Gioia et al. 2015 | Posterior oropharyngeal area | Swabs were plated immediately after collection and incubated for 48 h at 37°C + 5% CO₂. Suspected *N meningitidis* colonies were identified by biochemical tests. |
| Safadi et al. 2014     | Oropharynx            | Samples were sent to the laboratory within 4–5 h of collection, where they were stored until use. For analysis, samples were inoculated for 24–48 h at 37°C + 5% CO₂. For identification, suspected *N meningitidis* colonies were subcultured on blood agar medium for species identification. |
| Barroso 1999           | Throat                | NS                                                                          |
| Chile                  |                       |                                                                             |
| Rubilar et al. 2018    |                       | As described by Diaz et al. 2016 [42]                                      |
| Diaz et al. 2016       | Posterior pharynx     | Samples were sent to the laboratory within 4 h of collection.               |
|                        |                       | Samples were inoculated and incubated for 48 h at 35°C + 5% CO₂.         |
Gram staining was performed locally for isolates grown in Thayer Martin agar, and Gram-negative species were assessed at the reference laboratory; identification of presumptive *N. meningitidis* was by carbohydrate utilization testing.

- **Rodriguez et al. 2014**
  - Posterior pharynx and tonsils
  - Samples were sent to the laboratory within 5 h of collection.
  - Samples were inoculated and incubated for 24–48 h at 37°C + 5% CO₂.
  - Colonies were identified by standard methods.

- **Colombia**
  - Moreno et al. 2015
  - Posterior oropharyngeal wall
  - Samples were sent to the laboratory within 4 h of collection.
  - Samples were inoculated and incubated for 72 h at 37°C + 5% CO₂.
  - Following morphologic evaluation of colonies, 1 subcultured colony was identified by standard methods (eg, colony morphology, Gram staining, oxidase).

- **Cuba**
  - Climent et al. 2010
  - Posterior nasopharynx and larynx
  - Samples were immediately inoculated and transferred in a 37°C incubator within 2 h of collection.
  - Samples were incubated at 37°C + 5% CO₂ and readings were taken at 24 and 48 h.
  - Bacterial taxonomic identification was performed by standard methods.
| Country         | Site                      | Procedure                                                                 |
|-----------------|---------------------------|---------------------------------------------------------------------------|
| Mexico          | Nasopharynx               | - Swabs were inserted into Aimes transport medium and sent to the laboratory. |
|                 |                           | - Samples were inoculated and incubated for 24 h at 37°C + 5% CO₂.        |
|                 |                           | - Colonies with typical Neisseria morphology were chosen based on colony and microscopic morphology characteristics, as well as the differential tests to identify *N meningitidis*. |
| Paraguay        | Oropharyngeal             | - Samples were inserted into AMIES medium with activated charcoal and sent to the laboratory at room temperature. |
|                 |                           | - Samples were processed within 4 h of collection.                        |
|                 |                           | - Swabs were incubated at 35°C + 5% CO₂ for up to 72 h.                   |

NS=not specified; STGG=skim milk–tryptone–glucose–glycerol transport medium.
Table S3. Summary of Source and Methodology to Determine Carriage in Low and Middle Income Countries of Asia

| Reference         | Source         | Methodology                                                                                                                                 |
|-------------------|----------------|---------------------------------------------------------------------------------------------------------------------------------------------|
| **China**         |                |                                                                                                                                             |
| Zhang et al.      | Pharynx        | ▪ Swabs were inoculated onto plates and transferred to CO₂ incubator.                                                                       |
| 2013 [53]         |                |                                                                                                                                             |
| Zhou et al.       | Throat         | ▪ Identification was by Gram stain, oxidase reaction, and standard biochemical tests.                                                       |
| 2012 [51]         |                |                                                                                                                                             |
| **India**         |                |                                                                                                                                             |
| Jha et al.        | Throat         | ▪ Swabs were inoculated and immediately transferred to the laboratory for 24-h incubation at 37°C.                                            |
| 1995 [54]         |                | ▪ Identification was by standard methods.                                                                                                    |
| Ichhpujani et al. | Nasopharynx    | ▪ Swabs were immediately inoculated and incubated for 18–24 h at 37°C.                                                                     |
| 1990 [55]         |                | ▪ Identification was by standard methods (ie, Gram staining, oxidase test, biochemical test).                                                |
| Paul et al.       | Posterior      | ▪ Swabs were transported to the laboratory within 1–2 h of collection.                                                                      |
| 1987 [56]         | nasopharynx    | ▪ Inoculated samples were incubated for 24–48 h at 37°C + 5%–10% CO₂.                                                                       |
|                   |                | ▪ Identification was by Gram staining, oxidase test, and biochemical tests on serum sugars.                                                 |
| Country   | Location                     | Methodology                                                                                                                                 |
|-----------|------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------|
| Malaysia  | Throat and anterior nasal    | Samples were inoculated directly onto modified Thayer Martin medium and transferred to the laboratory in a reduced-oxygen container. Identification was by standard methods (ie, Gram stain, oxidase and aminopeptidase activity, and carbohydrate degradation tests). |
| Nepal     | Posterior pharyngeal wall and tonsils | Samples were inoculated on the same day as collection. Inoculation was conducted overnight at 37°C + 5%–10% CO₂. Identification was by examination for type of growth. |
| Philippines | Tonsils and posterior pharyngeal wall posterior to the uvula | Samples were immediately plated and incubated at 35°C + 3%–7% CO₂. Plates were examined at 24 and 72 h after inoculation for *Neisseria meningitidis*-suspected colonies; Gram stain was performed. |

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**Note:** The laboratory techniques mentioned are standard methods for identifying bacterial and fungal organisms, including Gram staining, oxidase and aminopeptidase activity, and carbohydrate degradation tests.
| Author(s)       | Throat Study                                                                 |
|-----------------|-------------------------------------------------------------------------------|
| Danchaivijitr   | Samples were immediately inoculated, kept in candle jars, and transferred to |
| et al. 1988     | the laboratory.                                                               |
| [59]            | Inoculated samples were incubated for 16–18 h at 37°C.                       |
|                 | Identification was based on colony morphology, Gram staining, oxidase testing,|
|                 | and sugar fermentation.                                                      |