What is considered proof of immunity?

- Measles proof of immunity includes at least one of the following:
  1. Documentation (legible and in English) of age-appropriate vaccination with a live measles virus-containing vaccine:
     a. Preschool-aged children: 1 dose
     i. School-aged children (grades K-12): 2 doses
        The first dose of MMR vaccine should be administered at age ≥12 months;
     ii. The second dose of measles- or mumps-containing vaccine should be administered no earlier than 28 days after the first dose
     b. Adults not at high risk: 1 dose**
     c. Adults at high risk include students in post-high school educational institutions
        (This does not include Middlebury summer programs per Vermont Department of Health), health-care personnel, and international travelers.
  2. Laboratory evidence of immunity, or
  3. Laboratory confirmation of disease, or
  4. Born before 1957

** Individuals who were vaccinated prior to 1968 with either inactivated (killed) measles vaccine or measles vaccine of unknown type should be revaccinated with at least one dose of live attenuated measles vaccine. This recommendation is intended to protect those who may have received killed measles vaccine, which was available in 1963-1967 and was not effective.

- While health care workers and undergraduate students are required to have 2 doses of MMR vaccine, the Vermont Department of Health has clarified that Middlebury summer program students would only need to meet the criteria for routine immunization (i.e. 1 dose of live MMR vaccine) if other criteria such as born before 1957 or lab evidence of immunity could not be provided.

- The table below can be found at: https://www.cdc.gov/mmwr/preview/mmwrhtml/rr6204a1.htm, and also includes information for mumps and rubella viruses, which are included in the MMR vaccine.
<table>
<thead>
<tr>
<th>Routine</th>
<th>Students at post-high school educational institutions</th>
<th>Health-care personnel</th>
<th>International travelers</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Measles</strong></td>
<td>(1) Documentation of age-appropriate vaccination with a live measles virus-containing vaccine; preschool-aged children: 1 dose; school-aged children (grades K-12): 2 doses; adults not at high risk: 1 dose, or (2) Laboratory evidence of immunity, or (3) Laboratory confirmation of disease, or (4) Born before 1957</td>
<td>(1) Documentation of vaccination with 2 doses of live measles virus-containing vaccine, or (2) Laboratory evidence of immunity, or (3) Laboratory confirmation of disease, or (4) Born before 1957</td>
<td>(1) Documentation of age-appropriate vaccination with a live measles virus-containing vaccine; infants aged 6–11 months: 1 dose; persons aged ≥12 months: 2 doses, or (2) Laboratory evidence of immunity, or (3) Laboratory confirmation of disease, or (4) Born before 1957 <strong>+</strong></td>
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<tr>
<td><strong>Rubella</strong></td>
<td>(1) Documentation of vaccination with 1 dose of live rubella virus-containing vaccine; or (2) Laboratory evidence of immunity, or (3) Laboratory confirmation of disease, or (4) Born before 1957 (except women of childbearing age who could become pregnant <strong>+</strong></td>
<td>(1) Documentation of vaccination with 1 dose of live rubella virus-containing vaccine, or (2) Laboratory evidence of immunity, or (3) Laboratory confirmation of disease, or (4) Born before 1957 (except women of childbearing age who could become pregnant <strong>+</strong></td>
<td>(1) Documentation of vaccination with 1 dose of live rubella virus-containing vaccine, or (2) Laboratory evidence of immunity, or (3) Laboratory confirmation of disease, or (4) Born before 1957 (except women of childbearing age who could become pregnant <strong>+</strong></td>
</tr>
<tr>
<td><strong>Mumps</strong></td>
<td>(1) Documentation of age-appropriate vaccination with a live mumps virus-containing vaccine; preschool-aged children: 1 dose; school-aged children (grades K-12): 2 doses; adults not at high risk: 1 dose, or (2) Laboratory evidence of immunity, or (3) Laboratory confirmation of disease, or (4) Born before 1957</td>
<td>(1) Documentation of vaccination with 2 doses of live mumps virus-containing vaccine, or (2) Laboratory evidence of immunity, or (3) Laboratory confirmation of disease, or (4) Born before 1957</td>
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</tbody>
</table>

**+** Can vary depending on current state or local requirements.

**+** Health-care personnel include all paid and unpaid persons working in health-care settings who have the potential for exposure to patients and/or to infectious materials, including body substances, contaminated medical supplies and equipment, contaminated environmental surfaces, or contaminated air.

**+** The first dose of MMR vaccine should be administered at age ≥12 months; the second dose of measles- or mumps-containing vaccine should be administered no earlier than 28 days after the first dose.

**+** Measles, rubella, or mumps immunoglobulin (IgG) in serum: equivocal results should be considered negative.

**+** Children who receive a dose of MMR vaccine at age <12 months should be revaccinated with 2 doses of MMR vaccine, the first of which should be administered when the child is aged 12 through 15 months and the second at least 28 days later. If the child remains in an area where disease risk is high, the first dose should be administered at age 12 months.

**+** For unvaccinated personnel born before 1957 who lack laboratory evidence of measles, rubella, or mumps immunity or laboratory confirmation of disease, health-care facilities should consider vaccinating personnel with 2 doses of MMR vaccine at the appropriate interval (for measles and mumps) and 1 dose of MMR vaccine (for rubella), respectively.

**+** Women of childbearing age are adolescent girls and premenopausal adult women. Because rubella can occur in some persons born before 1957 and because congenital rubella and congenital rubella syndrome can occur in the offspring of women infected with rubella virus during pregnancy, birth before 1957 is not acceptable evidence of rubella immunity for women who could become pregnant.

**+** Adults at high risk include students in post-high school educational institutions, health-care personnel, and international travelers.