

# Prioritizing the Research Agenda for Measles and Rubella

SAGE Working Group on Measles and Rubella

# Objective

Identify gaps in essential evidence and programme barriers to achieving measles and rubella/CRS elimination targets

and present SAGE with proposed areas for operational or basic science research.

# Prioritization Criteria

Relevance

Importance

Urgency

Chances of success

Impact

# Broad Categories

## 24 Research Areas

1. High levels of population immunity (6)
2. Monitoring and surveillance (3)
3. Outbreak preparedness and response (4)
4. Public confidence and demand (2)
5. Pathogenesis, vaccines and diagnosis (4)
6. Rubella specific issues (4)
7. Integration with polio eradication (1)

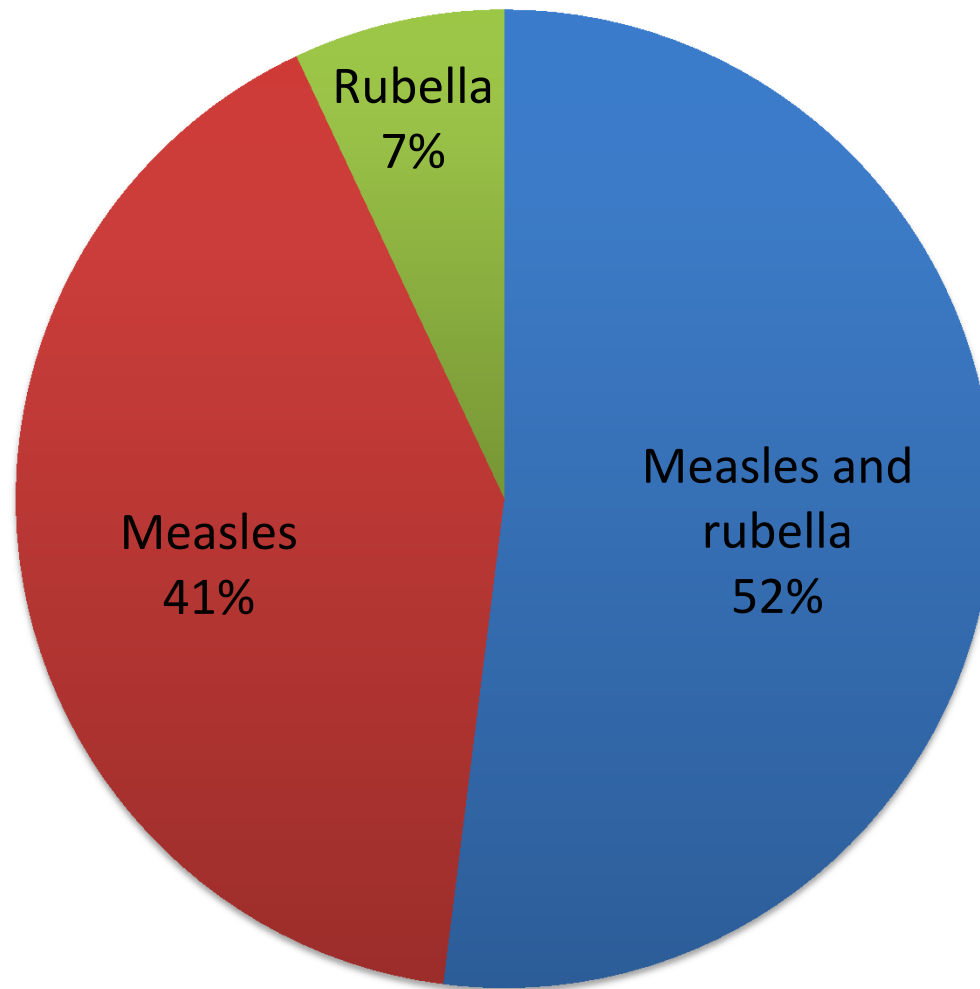
# Respondents

Sent to 158 individuals

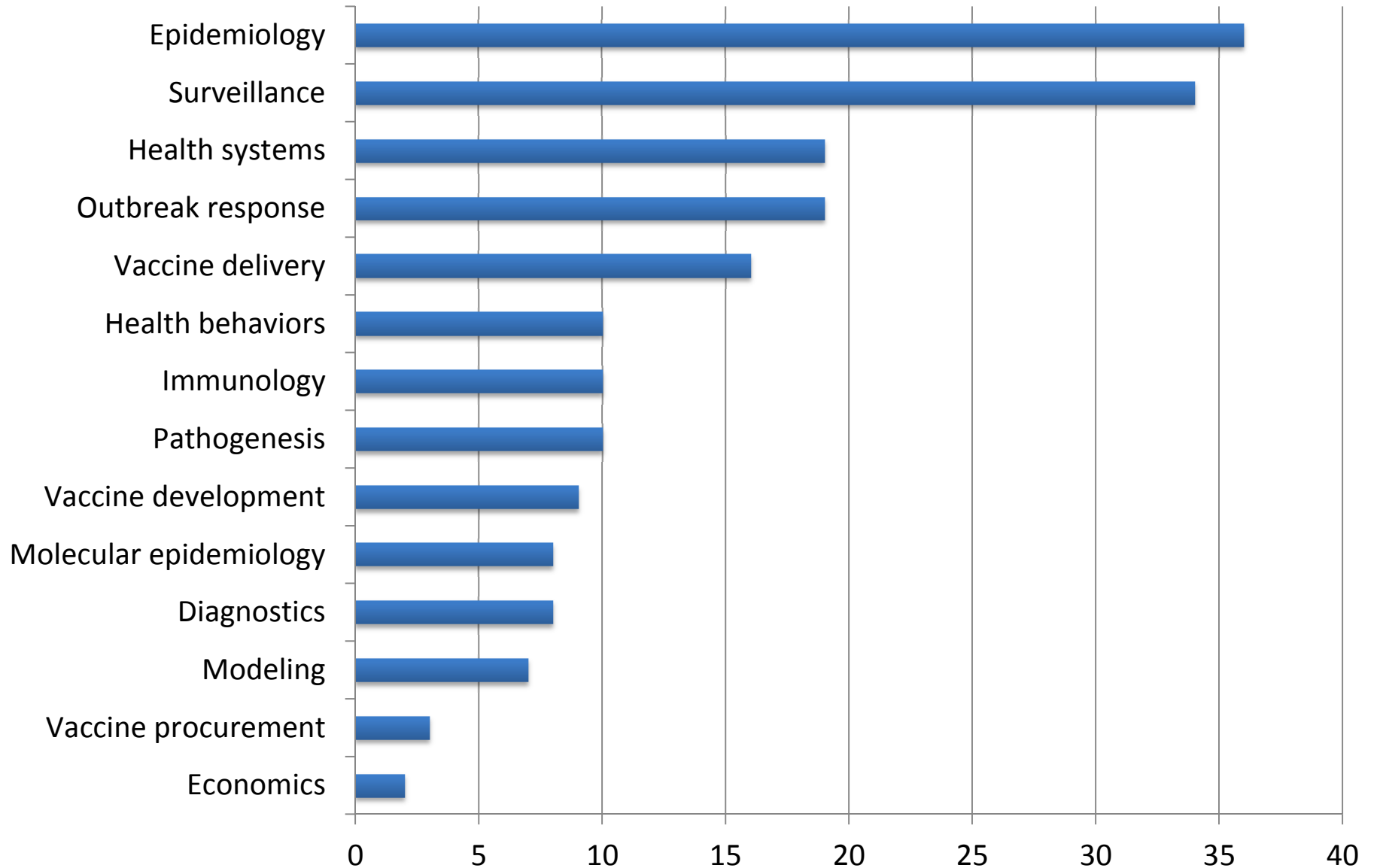
71 (45%) started the survey

55 (35%) completed the survey

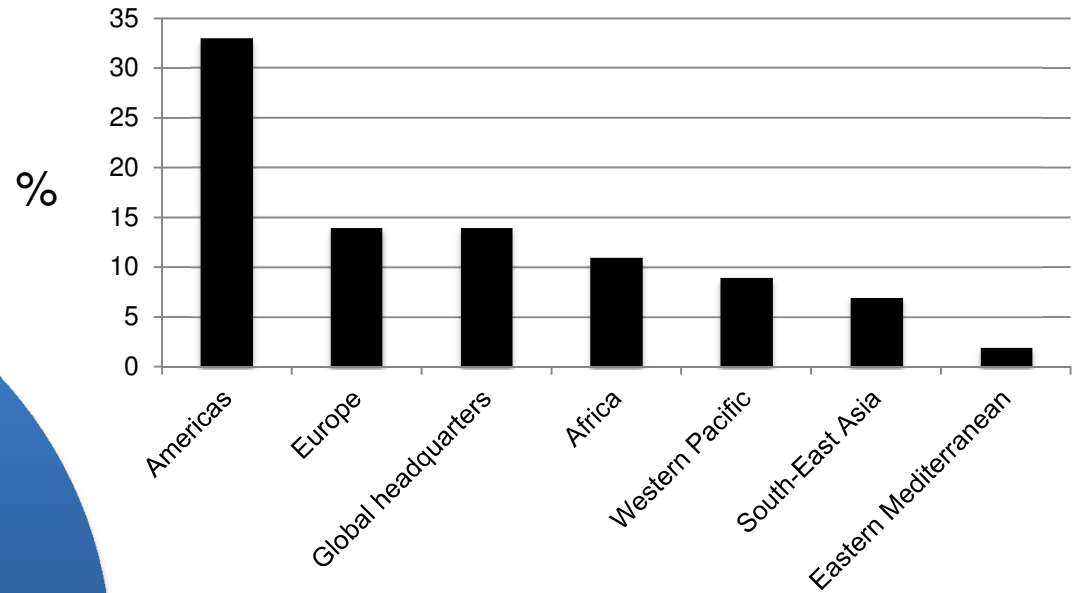
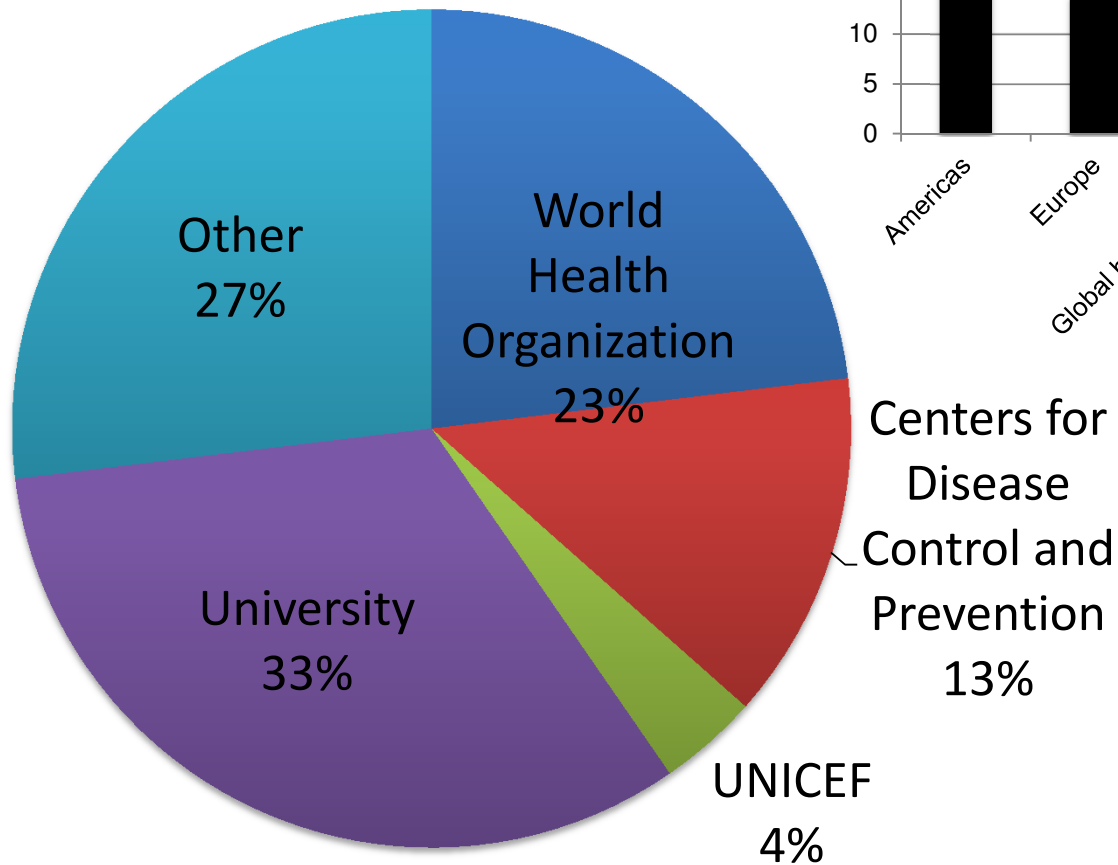
# Measles and Rubella Expertise



# Primary Areas of Expertise



# Organizations

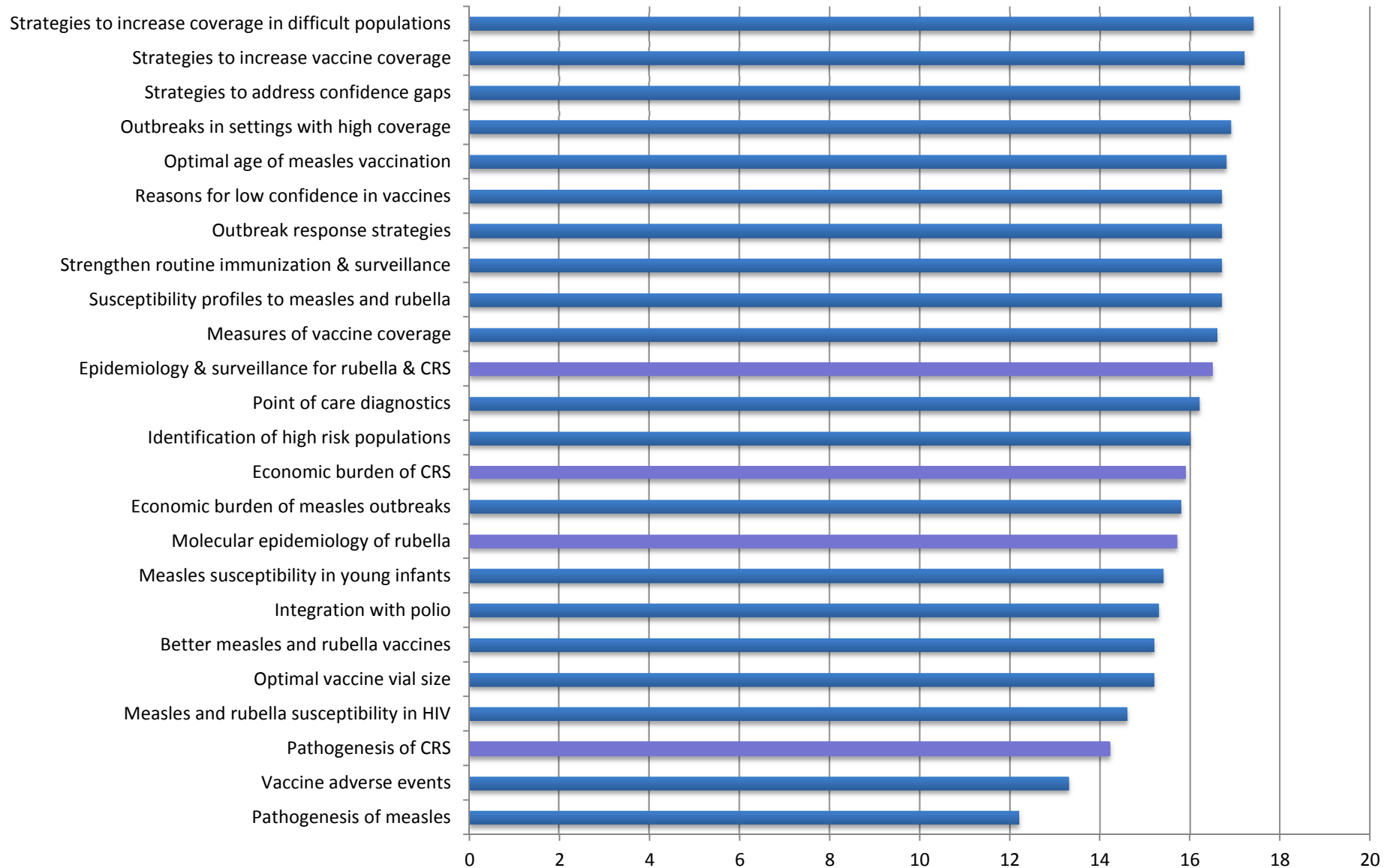




# Survey Results

# Overall Score

Range: 12.2 – 17.4



# Overall Score: Top Half

1. Strategies to increase coverage in difficult populations
2. Novel strategies to increase vaccine coverage
3. Strategies to address confidence gaps
4. Outbreaks in settings with high coverage
5. Optimal age of measles vaccination
6. Reasons for low confidence in vaccines
7. Outbreak response strategies
8. Strengthen routine immunization & surveillance
9. Susceptibility profiles to measles and rubella
10. Measures of vaccine coverage
11. Epidemiology & surveillance for rubella & CRS
12. Point of care diagnostics

# Overall Score: Lower Half

13. Identification of high risk populations
14. Economic burden of CRS
15. Economic burden of measles outbreaks
16. Molecular epidemiology of rubella
17. Measles susceptibility in young infants
18. Integration with polio
19. Better measles and rubella vaccines
20. Optimal vaccine vial size
21. Measles and rubella susceptibility in HIV
22. Pathogenesis of congenital rubella syndrome
23. Vaccine adverse events
24. Pathogenesis of measles

# Prioritization Scores

	<b>Median</b>	<b>IQR</b>	<b>Range</b>
Overall score	16.1	15.3, 16.7	12.2, 17.4
Relevance	3.2	3.1, 3.3	2.3, 3.5
Importance	3.3	3.1, 3.5	2.4, 3.6
Urgency	2.7	2.6, 3.1	1.7, 3.3
Impact	3.3	3.1, 3.4	2.5, 3.7
Chances of success	3.4	3.3, 3.4	2.9, 3.6

# Limitations

1. Prioritization criteria adapted but not independently validated
2. Research areas not exhaustive and broadly framed
3. No systematic sampling of measles and rubella experts
4. Burdensome survey
5. Poor discriminatory power

# Conclusions

Measles and rubella research priorities endorsed by SAGE

Top 3 research areas address how to optimize immunization coverage

Six of the top 12 research areas address how to optimize immunization coverage