

Subsidized rotavirus vaccination program in the Kesen area, Iwate

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日本小児科学会

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Vaccination for infant in Japan

Routine vaccination	Voluntary vaccination
<ul style="list-style-type: none"> > Hib > PCV7 > DPT-IPV > BCG > MR(Measles, Rubella) > Japanese encephalitis 	<ul style="list-style-type: none"> > Rotavirus > Hep B > Varicella > Mumps > Influenza



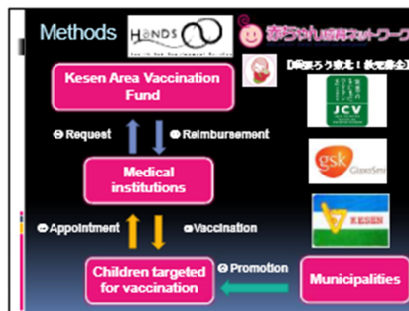
Aims of the free rotavirus vaccination program in the disaster-affected area

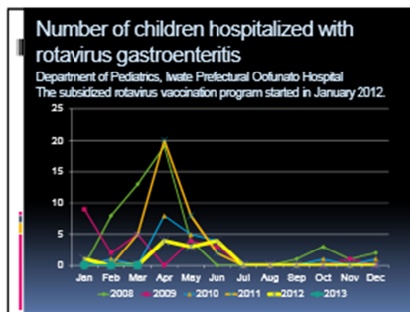
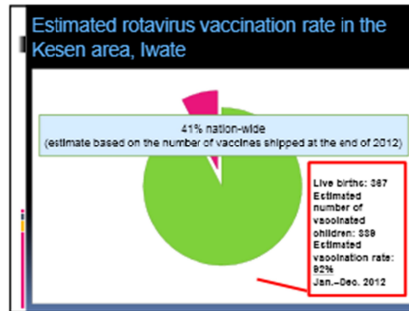
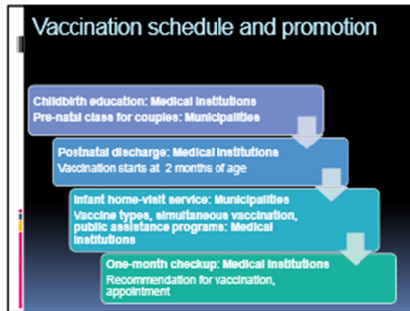
- Prevention of regional outbreaks and aggravation of rotavirus infections
- Child-rearing support
- Reduced burden on medical institutions



ロタウイルスから赤ちゃん守れ

気仙でワクチン無料接種始まる

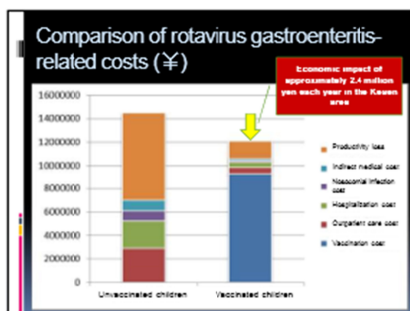




Medical economic analysis

Item	Basic analysis
Aims	To use an economic analysis model to estimate the fiscal policy impact of introducing rotavirus vaccination in the Kesen area. To analyze the cost-effectiveness of rotavirus vaccination.
Target disease	Rotavirus gastroenteritis
Comparison subjects	Vaccinated children vs. rotavirus-unvaccinated children
Model	Markov cohort model (one-month model)
Costs	Vaccine cost Direct medical costs (hospitalization, outpatient care) Indirect medical costs (e.g., hospital visits, diapers, laundry, and oral rehydration solution) Productivity loss (cost of work loss by family members)
Outcomes	Frequency of rotavirus gastroenteritis, number of outpatient visits, number of hospital admissions, frequency of rotavirus gastroenteritis due to nosocomial infection, mortality
Outcomes measure	QALY
Analysis period	2 years

* Vaccination cost per child: Calculated as ¥25,000 (for 2 doses of vaccination)
Direct medical costs: Calculated as ¥120,000 for hospitalization and ¥14,250 for outpatient care
Cost of work loss: Calculated as ¥25,000 for each hospitalization and ¥10,100 for outpatient care
Non-medical expenses: Calculated as ¥2,454 for each hospitalization and ¥2,511 for outpatient care
Quality-adjusted life year



Discussion

- The free rotavirus vaccination program in the Kesen area has achieved a vaccination rate of 92%. This high rate may be attributed to vaccine cost subsidies.
- Since the program's inception, the number of hospitalized children for rotavirus infection in the Kesen area has decreased.
- The program is deemed to be effective in the Kesen area by medical economic analysis.
- Thus, this program may contribute to child-rearing support and reduced burden on medical institutions in disaster-affected areas through protection of children from rotavirus infection.

Conclusion

- I believe that the subsidized rotavirus vaccination program is an effective support measure for areas affected by a disaster.