

Implementation of Postpartum Immunization Against Pertussis

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Background: In 2006, the ACIP recommended tetanus, diphtheria, acellular pertussis (Tdap) booster immunization of family members and caregivers (cocooning) to prevent severe pertussis infants < age 6 months. Immunizing postpartum women, the source of ~33% of pertussis cases in young infants, prior to hospital discharge is the cornerstone of this strategy. We have implemented postpartum Tdap immunization in predominantly Hispanic, medically underserved and uninsured women at a Houston hospital.

Methods: Pertussis education was provided to obstetrical healthcare personnel through in-services, Grand Rounds, and educational materials. Posters and flyers regarding Tdap vaccine were provided for all postpartum women. A standing order for postpartum Tdap immunization was initiated. The demographics of vaccinees and reasons for Tdap refusal were recorded.

Results: From Jan 7 - Apr 21, 2008, 1024 of 1280 (80%) post-partum women received Tdap vaccine; 952 (93%) were of Hispanic ethnicity; the remainder were black (4.7%), white (1%), Asian (1%), Native American (0.15%) and other (0.15%). The majority (~55%) was aged 20-29 yrs; 11% were 10-19 yrs and eligible for Tdap under the Vaccines for Children program. Four percent received concurrent rubella vaccine. No significant adverse events were reported. Where Tdap was not given, the most common reason was receipt of Td vaccine during pregnancy (approx. 80%) or within the prior 2 yrs (approx. 10%). 3 women also received Tdap after spontaneous abortion and 5 and 1 after a stillbirth or C-section wound infection, respectively. Since the program began, Td vaccination during pregnancy is deferred in favor of post-partum Tdap, where possible.

Conclusions: Postpartum Tdap immunization was well accepted and successfully implemented in a high-risk population of postpartum women through a standing order protocol.

1=Tdinpreg, 2=Tdin2y, 3=allergy, 4=othershotinpreg, 5=othershotin2y, 6=declined, 7=no order, 8=unknown *
 1=hispanic, 2=white, 3=Black, 4=Asian, 5=Native America, 6=other Crosstabulation

Count

	1=hispanic, 2=white, 3=Black, 4=Asian, 5=Native America, 6=other						Total
	.00	1.00	2.00	3.00	4.00	6.00	.00
1=Tdinpreg, 2=Tdin2y, 1.00	0	55	0	1	0	0	56
3=allergy, 2.00	0	11	0	0	0	0	11
4=othershotinpreg, 3.00	0	1	0	0	0	0	1
5=othershotin2y, 4.00	0	25	1	3	0	0	29
6=declined, 7=no order, 8=unknown 8.00	1	239	2	35	6	2	285
Total	1	331	3	39	6	2	382

1=Tdinpreg, 2=Tdin2y, 3=allergy, 4=othershotinpreg, 5=othershotin2y, 6=declined, 7=no order, 8=unknown *
 Rubimm Crosstabulation

Count

	Rubimm		Total
	.00	1.00	.00
1=Tdinpreg, 2=Tdin2y, 1.00	2	51	53
3=allergy, 2.00	0	10	10
4=othershotinpreg, 3.00	0	1	1
5=othershotin2y, 4.00	1	28	29
6=declined, 7=no order, 8=unknown 8.00	18	266	284
Total	21	356	377

Case Summaries

	Momage
1=Tdinpreg, 1.00 1	21.00
2=Tdin2y, 3=allergy, 2	21.00
4=othershotinpreg, 3	33.00
5=othershotin2y, 4	32.00
6=declined, 7=no order, 8=unknown 5	18.00
6	33.00
7	20.00
8	30.00
9	36.00
10	21.00
11	20.00
12	37.00
13	28.00
14	32.00
15	35.00
16	23.00
17	25.00
18	21.00
19	21.00

	20		40.00
	21		28.00
	22		24.00
	23		25.00
	24		31.00
	25		24.00
	26		25.00
	27		27.00
	28		22.00
	29		33.00
	30		42.00
	31		23.00
	32		23.00
	33		25.00
	34		25.00
	35		19.00
	36		29.00
	37		29.00
	38		33.00
	39		23.00
	40		22.00
	41		23.00
	42		28.00
	43		38.00
	44		28.00
	45		21.00
	46		23.00
	47		23.00
	48		26.00
	49		31.00
	50		39.00
	51		26.00
	52		33.00
	53		21.00
	54		21.00
	55		35.00
	56		27.00
	Total	Minimum	18.00
		Maximum	42.00
		Mean	27.1786
		Median	25.5000
2.00	1		30.00
	2		24.00
	3		31.00
	4		34.00
	5		28.00
	6		30.00

	7		20.00
	8		20.00
	9		16.00
	10		27.00
	11		16.00
	Total	Minimum	16.00
		Maximum	34.00
		Mean	25.0909
		Median	27.0000
3.00	1		36.00
	Total	Minimum	36.00
		Maximum	36.00
		Mean	36.0000
		Median	36.0000
4.00	1		33.00
	2		39.00
	3		20.00
	4		34.00
	5		27.00
	6		26.00
	7		32.00
	8		22.00
	9		27.00
	10		19.00
	11		32.00
	12		30.00
	13		17.00
	14		34.00
	15		39.00
	16		22.00
	17		20.00
	18		23.00
	19		22.00
	20		38.00
	21		30.00
	22		32.00
	23		39.00
	24		33.00
	25		17.00
	26		30.00
	27		25.00
	28		26.00
	29		25.00
	Total	Minimum	17.00
		Maximum	39.00
		Mean	28.0345
		Median	27.0000

8.00	1	35.00
	2	31.00
	3	21.00
	4	31.00
	5	31.00
	6	21.00
	7	27.00
	8	40.00
	9	41.00
	10	32.00
	11	28.00
	12	25.00
	13	31.00
	14	31.00
	15	23.00
	16	27.00
	17	33.00
	18	30.00
	19	22.00
	20	37.00
	21	20.00
	22	32.00
	23	33.00
	24	23.00
	25	27.00
	26	27.00
	27	32.00
	28	29.00
	29	27.00
	30	19.00
	31	33.00
	32	37.00
	33	26.00
	34	38.00
	35	29.00
	36	35.00
	37	28.00
	38	35.00
	39	30.00
	40	25.00
	41	29.00
	42	28.00
	43	31.00
	44	25.00
	45	40.00
	46	28.00
	47	34.00

48	32.00
49	26.00
50	26.00
51	34.00
52	23.00
53	44.00
54	24.00
55	30.00
56	27.00
57	29.00
58	31.00
59	26.00
60	21.00
61	38.00
62	26.00
63	25.00
64	22.00
65	31.00
66	38.00
67	25.00
68	30.00
69	17.00
70	36.00
71	34.00
72	33.00
73	22.00
74	17.00
75	32.00
76	19.00
77	35.00
78	24.00
79	27.00
80	29.00
81	32.00
82	18.00
83	34.00
84	36.00
85	21.00
86	36.00
87	37.00
88	30.00
89	20.00
90	29.00
91	29.00
92	40.00
93	23.00
94	18.00

95	37.00
96	28.00
97	28.00
98	27.00
99	28.00
100	41.00
101	16.00
102	22.00
103	34.00
104	24.00
105	26.00
106	40.00
107	29.00
108	35.00
109	34.00
110	38.00
111	27.00
112	33.00
113	20.00
114	25.00
115	17.00
116	28.00
117	15.00
118	38.00
119	39.00
120	17.00
121	26.00
122	32.00
123	32.00
124	32.00
125	32.00
126	28.00
127	33.00
128	21.00
129	35.00
130	34.00
131	17.00
132	16.00
133	30.00
134	32.00
135	17.00
136	25.00
137	35.00
138	27.00
139	30.00
140	22.00
141	40.00

142	29.00
143	32.00
144	20.00
145	34.00
146	20.00
147	30.00
148	21.00
149	23.00
150	33.00
151	33.00
152	31.00
153	24.00
154	31.00
155	21.00
156	17.00
157	20.00
158	21.00
159	32.00
160	29.00
161	24.00
162	22.00
163	28.00
164	37.00
165	32.00
166	22.00
167	33.00
168	36.00
169	17.00
170	18.00
171	33.00
172	25.00
173	21.00
174	33.00
175	36.00
176	46.00
177	36.00
178	17.00
179	28.00
180	34.00
181	20.00
182	27.00
183	28.00
184	23.00
185	22.00
186	23.00
187	37.00
188	26.00

189	25.00
190	19.00
191	36.00
192	22.00
193	28.00
194	22.00
195	31.00
196	27.00
197	23.00
198	24.00
199	27.00
200	36.00
201	31.00
202	26.00
203	20.00
204	26.00
205	33.00
206	36.00
207	31.00
208	30.00
209	28.00
210	37.00
211	21.00
212	32.00
213	23.00
214	22.00
215	33.00
216	34.00
217	26.00
218	19.00
219	24.00
220	24.00
221	21.00
222	31.00
223	23.00
224	31.00
225	36.00
226	32.00
227	29.00
228	32.00
229	16.00
230	33.00
231	28.00
232	28.00
233	28.00
234	32.00
235	31.00

236	26.00
237	33.00
238	31.00
239	30.00
240	14.00
241	30.00
242	31.00
243	20.00
244	23.00
245	31.00
246	38.00
247	25.00
248	34.00
249	37.00
250	31.00
251	29.00
252	25.00
253	26.00
254	29.00
255	32.00
256	22.00
257	21.00
258	25.00
259	20.00
260	24.00
261	29.00
262	30.00
263	22.00
264	19.00
265	31.00
266	26.00
267	23.00
268	21.00
269	33.00
270	21.00
271	25.00
272	17.00
273	35.00
274	17.00
275	25.00
276	24.00
277	15.00
278	18.00
279	30.00
280	34.00
281	32.00
282	34.00

	283		26.00
	284		21.00
	285		20.00
	Total	Minimum	14.00
		Maximum	46.00
		Mean	28.0070
		Median	28.0000
Total	Minimum		14.00
	Maximum		46.00
	Mean		27.8246
	Median		28.0000